

Preliminary, to be revised

Pension Reform in Japan

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1 Introduction

Japan has already had the oldest population in the world. The latest official population projections were published in January 2002. The update makes the future picture look even darker. More stresses will be put on financing social security, since major parts of social security benefits are given to the elderly.

This paper first describes past developments in Japan's social security pensions (Section 2). Japanese pension programs before the 2004 reform are outlined in Section 3. Section 4 explains the main contents of the 2002 population projections, providing financial performance of pensions and cost estimates of social security for future Japan. Section 5 clarifies the major pension issues in Japan. Section 6 describes the gist of the 2004 pension reform, with pointing out remaining difficulties. Section 7 discusses policy options for the future. Section 8 demonstrates the major lessons from Japan's experiences. Section 9 gives concluding remarks.

2 Developments in Japan's Social Security Pension Program¹

Japan currently has five social security pension programs covering different sectors of the population. The earliest plan was established in 1890; the most recent, in 1961. The earliest plan was for military servants. It required no individual contributions, and was totally financed by general revenue. The scheme was then expanded to civil servants. The old-age benefit for military and civil servants was based on the final salary and its level was generous.

The principal program mandatory for private sector employees is the *Kosei Nenkin Hoken* (KNH, Employees Pension Insurance) which was enacted in the wartime in 1942. Old-age pensions of the KNH were forced to be suspended immediately after the end of the war and the KNH contribution rate was reduced from 11% to 3%. The KNH was rebuilt in 1954 shifting from an earnings-related pension to a two-tier benefits system with flat-rate basic benefits.

High-speed Growth Period

In the early stages, the KNH benefit level was not charming yet, and for the old-age retirees at that time a lump-sum retirement benefit provided on a private basis by their employers was often of much more significance. On the other hand, pension benefits for civil servants were considerably higher. This difference induced "gap-decreasing"

¹ Sections 2 and 3 are a revised version of takayama (2003b).

adjustments in benefit levels between private and public sector employees. Drastic improvements in the KNH old-age benefits took place in 1965 and 1973; the replacement ratio in gross wage terms was increased to 40% and then to 60%. In 1973 the updating of past salary together with the benefit indexation made it possible for most people to manage in their old-age with the KNH benefits. In the meantime, there was a sharp decline in the real significance of the lump-sum retirement benefits provided privately by the employers.

Under the KNH, equal percentage contributions are required of employees and their employers. The 3% contribution rate had been gradually increased and the total percentage went up to 7.8% by 1973.

At the outset, the KNH was established as a defined benefit (DB) plan on a fully funded basis. It was initially regarded as a compulsory saving program to prevent inflation. Its finance shifted gradually from funded to pay-as-you-go. Currently the KNH has a reserve fund of about 140 trillion yen² in 2005. KNH contributions have been accumulated in a reserve fund to be invested in social overhead capital for the construction of highways, railways, bridges, airports, and other public projects.³

Before 1961 the self-employed, people engaged in agriculture/forestry/fishery, the unemployed, persons with no occupation, and employees working in small firms were still excluded from the social security pension system. The *Kokumin Nenkin* (KN, National Pension) Law was put into effect in April 1961, embracing all the people previously uncovered, under social security. Participation in the KN became compulsory for everyone (even for the jobless persons) between 20 and 59 years old.

The KN is a defined benefit plan. The basic structure of the KN is a flat-rate basic benefit and a flat-rate contribution on an individual basis. One-third of the KN benefits were (and are) financed by subsidy through general revenue. The full old-age benefit of the KN was payable initially after 25 years of contributions from age 65, although an actuarially reduced or increased benefit could be claimed at any age between 60 and 70. The transitional KN old-age benefit with a special 10-year-contribution requirement began to be paid actually in 1971. A majority of the elderly came to enjoy this special benefit, which contributed to making the public aware

² 1,000 yen = US\$ 9.55 = Euro 7.20 = UK £ 4.97 = Korean won 9,580 as at 28 Feb. 2005.

³ Since 2001, investment from the reserve fund has been drastically changed. It is invested to buy financial products including shares and stocks through financial intermediaries.

of the significant role of social security pensions in old-age income security. “Go and Go” policies were immediately adopted. The benefit formula of the KN had been revised to become more and more generous. Meanwhile indexation of the KN benefit was also enforced in 1973.

Period of Diminished Expectations

The KN started with a very small contribution, which was politically difficult to increase. The KN soon faced severe difficulties in financing benefits. An enormous shift of the population from farmers to salaried-men during the rapid growth period necessitated some cost-sharing scheme between employees’ and non-employees’ pensions. The scheme was established in 1986, and since then, the first-tier basic flat-rate benefits of all the pension systems have been financially integrated. Currently the total annual cost of flat-rate pension benefits is shared by all the systems on a fully pay-as-you-go (PAYG) basis. This cost sharing is in proportion to the number of persons covered. It should be noted that those covered by the KNH (and the other employee pension systems) are not required to make individual contributions to the KN, while the KNH itself is responsible for the financial participation in the integrated first-tier, flat-rate basic pensions.

The 1985/1986 reform has changed some requirements of the KN; the full old-age pension became payable after 40 years of contributions, provided the contributions were made before 60 years of age. Special transitional provisions were introduced for those born after 1926 with at least 25 years of coverage. These people could now receive the maximum pension even with fewer contribution years, provided they had been contributing since 1961.

Since the 1985/1986 reform, if the husband has the contribution deducted from his salary and placed in the KNH, his dependent wife also became automatically entitled in her own name to the flat-rate basic benefits, and she was not required to make any individual payments to the public pension system. With this arrangement, the women’s right for pension has been comprehensively established.

Through the 1986 pension reform, the accrual rate for the earnings-related component of the KNH old-age benefits was to be reduced gradually from 1.0% per year to 0.75% cohort by cohort. The reductions corresponded to the longer average contribution years of the younger cohorts. On average, each cohort was expected to receive 30% of his career average monthly real earnings as the earnings-related component.

The future demographic situation of Japan was getting darker and darker. In the 1990s, when the asset bubble finally burst, the Japanese economy faced a dramatic change. In fiscal 1997, Japan's GDP showed negative growth in real terms, and in fiscal 1998, the economy appeared to have shrunk further, with fiscal deficit around 10% of its GDP. Thus the colorful dreams that Japanese youth had placed in their economy were rapidly destroyed.

Both demographic and economic factors would impose greater stresses on social security pension programs. The biggest political issue in the Japanese pension system was when to start benefit payments. The pension age was 60 years for workers in the 1990s. The government had proposed twice in 1979 and 1989 to raise the eligibility age for all workers to 65. The proposal was turned down by the Diet both times since trade unions and opposition parties were strongly against the bill.

In summer 1993, the political situation changed dramatically. The Liberal Democratic Party, which had been ruling Japan ever since the end of the Second World War, fell from power. It was replaced by a coalition of opposition parties (excluding the Japanese Communist Party). It was this coalition that prepared the 1994 legislation.

The approved legislation guaranteed that the tier-2 earnings-related benefits for retired employees between 60 and 64 would be paid without any reduction. The tier-1 basic benefits for this age group were to be phased out by stages (between 2001 and 2013 for men), and eventually nobody under 65 will receive full basic benefits (the phasing out of basic benefits for *female* employees will be delayed by five years starting only in 2006).

Up to October 1994, benefits were adjusted in line with the hikes in gross wages, but from November 1994, the benefit indexation in *net* wages started.

The 1999/2000 Reform

In December 1998, the Japanese government decided to temporarily freeze increases in social security contribution rates for pensions for some years from fiscal 1999. This freeze was mainly due to the ongoing downturn of the Japanese economy. Also in December 1998, the government decided to increase existing pension benefits in fiscal year 1999 to reflect only changes in the CPI over the previous calendar year, though fiscal year 1999 was previously anticipated as seeing net-wage indexation of existing pension benefits after a five-year interval.

In July 1999, the government submitted the 1999 social security pension reform bill to the parliament, which was passed in March 2000. The purpose of the reform was to reduce aggregate pension benefits by 20 percent by 2025. Following four measures were adopted to attain this purpose.

First, the earnings-related benefits were to be reduced by five percent; more specifically, the former annual accrual rate of 0.75 percent was to be decreased to 0.7125 percent from fiscal year 2000.

Second, both the flat-rate basic benefits and the earnings-related benefits once paid were to be CPI-indexed after age 65 from fiscal year 2000. In Japan, the gap in future increases between wages and CPI is assumed to be 1.0 percent annually. A shift from wage-indexation to CPI-indexation will bring a considerable effect on reducing aggregate pension benefits as years go. The relative level of pensions over wages will continue to decline after receiving benefits. At age 87 the relative level of benefits will be reduced by 20 percent.

Third, an earnings-test for those aged 65 to 69 was newly introduced from fiscal year 2002.

Fourth, the normal pensionable age for earnings-related old-age benefits is to be increased step by step from age 60 to 65 for men from fiscal year 2013 to 2025. The phasing out of earnings-related old-age benefits for *female* employees in their early sixties will be delayed by five years starting only in 2018. In exchange those between 60 and 64 will become eligible for advance payment at a reduced rate out of the earnings related benefits.

Note that the normal pensionable age for the *first-tier*, basic old-age benefit was increased step by step from 60 to 65 for men from fiscal year 2001 to 2013. This was decided by the 1994 pension reform. The 1999/2000 pension reform act raised the normal pensionable age for the *second-tier* benefit from 2013, just after the shift's end of the normal pensionable age of the first-tier benefit (see Table 1).⁴

⁴ Encouraging later retirement is advisable, but there have been little signs for any increases in the male labor force participation rate after age 60 in Japan. In promoting later retirement, it is crucial for older workers to have higher productivity. Training programs should be more freely available. Job re-designing for greater productivity in part-time or flexitime is also required. However, promoting later retirement may induce increased unemployment for young people. Different objectives are often competing.

(Table 1 about here)

By the four measures listed above, the contribution rate of the KNH would peak by 2025 at 27.8 percentage point, instead of 34.5 percentage point anticipated without the 1999/2000 reform (these estimates were based on the 1997 population projections of the NIPSSR).

3 Outline of Japan's Pension Programs before the 2004 Reform

Public Pensions

A: Old-age Benefits

The pension system is based on the 1985/1986 reform. Under the new system, which became effective on 1 April 1986, all sectors of the population receive a common, flat-rate basic benefit. The pensions for different sectors of employees provide a supplement on top of it related to contributions. Although each system has its own contribution and benefit structure, all systems are similar, operating largely like pay-as-you-go defined-benefit systems.

This section will mainly focus on the KNH (see Takayama, 1996a, 1998a, 2001b for more details of Japan's pension system).

The maximum basic benefit is 65,000 yen per month at 1994 prices. The benefit is indexed automatically each fiscal year (from 1 April) to reflect changes in the consumer price index (CPI) of the previous calendar year. The current maximum basic benefit for 2005 fiscal year is 66,207 yen per month. In principle, benefit payments begin at the age of 65, but there was a special legal provision allowing employees to receive the full amount of the basic benefit from age 60. The tier-1 basic benefits were to be phased out by stages between 2001 and 2013 for men in their early 60s. The phasing out for female employees will be delayed by five years starting in 2006. Eventually nobody under 65 will receive *full* basic benefits. In exchange, employees between 60 and 64 will become eligible for advance payments at a reduced rate from the basic benefit.

The rate of reduction is 0.5% by one month (6% by one year). If a person begins to receive the advance payment from age 60, his/her benefit level will be 70% of the normal amount.

Under the KNH, the accrual rate for the 2nd-tier, earnings-related component of old-age benefits is 0.7125% per year. Thus, 40-year contributions would earn 28.5% of the career average monthly real earnings. The career average monthly earnings are calculated over the employee's entire period of coverage, adjusted by a *net* wage index factor, and converted to the current net earnings level. These conversions are carried out at least every five years; after each conversion, benefits are indexed automatically every fiscal year to reflect changes in the CPI.

The full earnings-related portion is currently payable from age 60 to an employee who is fully retired. On reaching age 60, an individual who has not fully retired can receive a reduced pension with the earnings test.

The reduction is based on the individual's current monthly earnings. A 20% cut in benefits is mandatory for anyone who, upon reaching the age of 60, continues to earn a wage. The remaining 80% is added to the worker's monthly pay. If the total is under 220,000 yen, the worker receives all these benefits. If the total exceeds that level, the benefits are reduced by 10,000 yen for each 20,000 yen increment in wages. After monthly wages reach 370,000 yen (a level more or less in line with the average pay of male employees), each additional step up on the wage scale causes benefits to step down by the same amount.

The earnings test changes upon reaching the age of 65, turning into a more generous one as follows. The first-tier, basic benefits are fully paid regardless of salary and wage earnings. There are no reductions in earnings-related benefits until the total monthly sum of the benefits and earnings come up to 370,000 yen. If the total exceeds that level, the earnings related benefits are reduced by 10,000 yen for each 20,000 yen increment in wages.

B: Disability Benefits

A disability pension is payable to any disabled person if he or she has contributed to social security for two-thirds or more of the covered period. Since April 1986, Japan has had a special arrangement for dependent young disabled people. They are eligible for the disability pension benefit from age 20 if they have become disabled before age 20.

The two-tier benefits are provided as disability pensions. The first-tier basic benefit is 65,000 yen per month at 1994 prices. Japan gives the seriously disabled persons a basic disability benefit of 81,250 yen (25% up from the normal amount) per month. The earnings-related component of disability pensions is calculated essentially

in the same way as old-age pensions. There are two differences between the two. One difference is that the covered period for disability pensions is regarded as 30 years if it is less than 30 years. The other is the 25% increase in the level of earnings-related disability benefits for seriously disabled persons.

A medical check for qualifying disability pensions is usually very strict in Japan and it is believed that there are quite few cases of its abuse. The aggregate amount of disability pension benefits was only 4.5% of the total sum of the 1999 pension benefits.

C: Survivor's Benefits

A surviving child (or children) of age less than 18 is eligible for the basic survivor's benefit if the deceased father has contributed to social security for two-thirds or more of the covered period or if the deceased father has contributed for 25 years or more. If the child's (or children's) mother is alive, the basic survivor's benefit is paid in the name of the surviving widow.

The basic survivor's benefit is 65,000 yen per month at 1994 prices. There are additional basic payments for surviving children; the first and the second child receive 18,700 yen per month per each and from the third child he or she receives 6,233 yen per month per each at 1994 prices.

The earnings-related survivor's benefit is payable for the dependent spouse, the dependent parents (or dependent grandparents) of age 60 and over, or the dependent child (children) of age less than 18. The normal amount is three-fourths of the old-age equivalent benefit. If the covered period is less than 30 years, then it is regarded as 30 years. For the surviving dependent widow aged 35 or over with no child, an additional pension benefit is given between ages 40 to 65. Its monthly amount is 48,750 yen at 1994 prices.

Any Japanese is usually eligible for only one pension from old-age, disability and survivor's benefits. One exception is that a survivor can receive his or her own basic old-age benefit and an earnings-related survivor's benefit. For the surviving spouse aged 65 or over of a dual-earner couple, the earnings-related benefit is the best of the following three options: his or her own old-age benefit, three-fourths of the old-age benefit for the deceased partner, or one half of the combined old-age benefits.

D: Contributions

Under the KNH, equal percentage contributions are required of employees and their employers. The contributions have been based on the monthly standard earnings.

The monthly standard earnings base for social security pensions was upgraded to the 98,000 to 620,000 yen range from October 2000. The total percentage in effect since October 1996 had been 17.35%.

Since April 1995, contributions have been deducted from bonuses. The initial rate was 1% of the bonuses, with employees and their employers each contributing half this amount. These contributions were not used for benefit calculation purposes.

The benefit/contribution base has been shifted from monthly standard earnings to annual earnings including semi-annual bonuses from fiscal year 2003. The shift was to be adjusted to induce no changes in aggregate income from contributions in the starting year. The contribution rate of 17.35 percentage point over monthly standard earnings for the KNH was changed to 13.58 percentage point over annual earnings from April 2003. At the same time, the new accrual rate of 0.5481% was applied.

The special 1.0 percentage point contributions for social security pensions from semi-annual bonuses was abolished from April 2003 and instead, the same percentage point of 13.58 was levied on semi-annual bonuses as contributions for social security pensions.

This shift was expected to induce more equitable contributions among different levels of wage and salary earners. One serious problem is that there is a ceiling for the covered bonuses; 1.5 million yen, one time. This ceiling will encourage people to pay bonuses not semi-annually but once annually, especially for high-income earners. For them, the current pay system of basic monthly salaries with semi-annual bonuses will no longer look charming. An alternative system on an annual salaries base (with no bonuses) may even help avoid paying in some of the contributions for social security pensions.

Employers became exempted from paying their share of social security pension contributions for their employees on child-care leave from fiscal year 2000. Employees on child-care leave have already been exempted from their share of contributions since April 1995. Yet, no special transfers from general revenue have been arranged to make up for the loss due to this exemption. Compensations virtually come from contributions from those not on child-care leave. Needless to say, the aim of the above exemption is to give support to child-bearing in the age of the fertility decline.

E: Subsidy from General Revenue

The government covers one-third of the total cost of the flat-rate basic benefits. There is no subsidy for the earnings-related part of the KNH. The government pays administrative expenses, as well.

Occupational Pensions

A: Lump-sum Benefits Mentality

Japanese employees receive occupational pensions and/or lump-sum retirement benefits. Currently the coverage of occupational retirement benefits is close to 90%, although the coverage of occupational *pension* plans is about 50%. Typical in retirement benefits has been a defined-benefit (DB), final pay scheme. Both manual and desk workers within each company are covered by the same plan.

The average lump-sum retirement benefits paid to mandated career male retirees were 25 to 29 million yen in large firms and 11 to 16 million yen in smaller firms in 1999. The main purpose for employers to have occupational *pension* plans is not to pay annuities, but to accumulate funds under favorable tax treatments. In fact, very often, retiring employees choose lump sum retirement benefits, although their employers have a formal pension plan whose basic form is an annuity.

B: Three Major Schemes

There had been three major schemes for employers to prepare for paying retirement benefits.

- 1) Pay-as-you-go schemes with book reserve accounting (started in 1952, similar to those of Germany). Book reserves are tax deductible within certain limits: namely 20% of the benefit liability could be deducted from income tax calculations as a corporate expense. Originally a deduction was permitted on 100% of the liability.⁵
- 2) Tax-qualified plans (started in 1962). The plan must be funded outside through a group annuity contract or a trust agreement. The employers' contributions to a tax qualified plan are 100% tax deductible as a business expense. A special 1.173 percent corporate tax is levied annually on fund assets.⁶ The plan must contain a provision for annuity payments, though a lump sum option is permitted.
- 3) Contracted-out plans (started in 1966) through the *Kosei Nenkin Kikin* (KNK, Employees' Pension Fund). The benefits of the KNK consist of two components:

⁵ This deduction was entirely abolished in 2004. Book reserves were not funded outside, but they had actually been retained as internal profits.

⁶ This tax has been provisionally suspended since 1999.

the equivalent benefit of the earnings-related portion of the social security (excluding the benefit resulting from indexing), and the supplementary benefit. The latter is primarily financed by the employer. It can be received in a lump sum at the discretion of the employee, although in principle it should be in the form of a life annuity. The plan must be funded through a trust fund or an insurance contract. The tax treatment of the contracted-out plan is virtually the same as that of the tax qualified plan, except that the KNK does not pay special taxes on accrued benefit liabilities equal to 2.7 times the equivalent benefit of the earnings-related portion of the State scheme (with only the undynamized benefit).

C: The 2001 Legislation on New DC Plans

A long awaited defined contribution (DC) plan was introduced in Japan from 1 October 2001. There are two types of new DC pension plans: the employer-sponsored type and the individual type. Under the former, the employer pays contributions of the pension plan for its employees (of age 60 or younger), but the employees are not permitted to pay matching contributions. This is similar to money purchase plans in the US. Participants will be fully vested with three years of service or more.

Non-salaried workers can contribute to a DC individual pension plan, if they are paying flat-rate contributions to social security pensions. In the case of a company that does not have a contracted-out DB plan (an employee pension fund), a tax-qualified DB pension plan nor a DC employer-sponsored pension plan, employees can contribute to a DC individual pension plan at their discretion, provided they are 60 years of age or younger. The individual type is similar to the US 401(k) plans or the IRA, but employers cannot make matching contributions to it.

Civil servants and full-time housewives are not eligible to contribute to either of the DC pension plans.

In the case of a DC employer-sponsored pension plan, the employer and the employees have to work out a set of rules agreeable to both parties, and get the approval of the minister concerned. On the other hand, subscription to a DC individual pension plan must be filed through the National Pension Fund Association.

The *monthly* amount (before October 2004) a person can contribute was limited to the amounts set forth below. Any amount in excess of these amounts is not accepted.

1) Employer-sponsored type:

If the employer has no contracted-out DB plan nor a DB tax-qualified pension plan
36,000 yen

If the employer has a contracted-out DB plan or a DB tax-qualified pension plan
18,000 yen

2) Individual type:

Self-employed person (together with the contribution to the DB national pension fund)
68,000 yen

An employee in a private company
15,000 yen

Contributions are fully tax deductible, and investment earnings are tax-deferred. However, the special corporate tax of 1.173 percentage point applies on pension assets annually, as is the case for the existing DB corporate pension plans, though it is suspended until March 31, 2005 under the current adverse investment environments in Japan. Benefits are taxable as a rule. But the generous deduction of income from social security pension benefits and from a lump-sum retirement benefit is applied to benefits paid. Rollovers are tax-free.

There are three types of benefits payable in a lump sum; old-age benefits, disability benefits and death benefits. In principle, people 60 years of age or older are eligible for old-age benefits with over 10 years of participation. This means that at termination of employment, employees cannot receive benefits unless they are 60 years old or more. They are forced to just rollover their account balance to the new employer's DC plan or an individual DC plan before they reach age 60. This completely differs from DC plans of the US.

Participants can start receiving old-age benefits at any time between 60 and 70 years old. When they reach age 70, they have to receive it.

Plan administrators will give planholders instructions on how to invest their pension assets. There should be more than three options, ranging from a capital guaranteed product to bank deposits, bonds, stocks, mutual funds and insurance products. Pension assets can also be invested in individual stocks and shares of the company the planholder is employed by. Planholders can reshuffle the portfolio at least every three months.

D: The 2001/2002 DB Occupational Pension Reform

The Japanese government submitted the DB Occupational Pension Bill to the parliament and the Bill passed it in June 2001. It took effect on 1 April 2002. The main

contents of the 2001/2002 reforms were as follows.

- 1) As stated above, the benefits of the existing contracted-out plans through the KNK consist of two components: the equivalent benefit of the earnings-related portion of social security pensions (excluding the benefit resulting from indexing) and the supplementary benefit. Due to the bad investment performance for the past ten years, most contracted-out plans were seriously suffering from under-funding. They had been forced to pay considerable additional money to compensate for the under-funded portion for the social security equivalent benefit. Managements and trade unions were strongly demanding to abolish the contracted-out or to drastically relax requirements for the contracted-in from contracted-out plans by lowering the set rate of return used in calculating the asset amount to be transferred to social security. The new DB Occupational Pension Reform Act allows a new DB corporate scheme (the Fund Type DB Plan) which excludes the equivalent benefit of the earnings related portion of social security, by relaxing requirements mentioned above.⁷ A separate pension entity from the employer is to be set up, as is the case in existing contracted-out plans.
- 2) Many tax-qualified pension plans have been terminated recently without enough assets to pay benefits. To enhance protection of participants' rights and beneficiaries, some measures were necessary to strengthen the operational rules. The new Act created another new DB scheme (the Contract Type DB Plan) to replace existing tax-qualified plans. The new scheme is not required to set up a separate pension entity from the employer. This is the same as the existing tax-qualified plan. The existing plans have to be terminated by March 2012. Under the new plan, minimum funding rules are to be introduced, with fiduciary duties defined. Disclosure of plan operations to participants will be required, as well.
- 3) Plan termination insurance was not introduced. It is mainly because most employers were reluctant to pay extra money to save unhealthy company's pension plans.
- 4) Designing of benefits was to be liberalized. Hybrid cash balance plans of the US

⁷ The number of the KNKs has been decreasing sharply from 1,883 in March 1997 to 724 in February 2005, due to the contracted-in. The Bush administration proposed a new contracted-out plan from social security pensions in January 2005. The proposal seems to be similar, more or less, to the existing contracted-out in the UK and Japan, which currently turn to be miserable.

type were newly allowed to be set up.

Personal Pensions

The accumulation of private savings in Japan is among the highest in the world. The distribution of monetary asset holding, however, is very much skewed. In the past, the role of personal pension plans was not so great. It has been rapidly growing, however. The household coverage of personal pension plans had risen to about 22% in 2001.

In April 1991, a special defined-benefit type of personal retirement pension accounts, called the *Kokumin Nenkin Kikin* (national pension fund) became available for non-employees and their spouses (aged 20 to 60). A contribution of up to 68,000 yen per *month* per person is now tax-exempt, which is very generous compared with 50,000 yen per *year* (for all) for personal “pension” insurance policy premiums.

4 Demography and Its Impact on Financing Social Security

In January 2002, the Japanese National Institute of Population and Social Security Research (NIPSSR) released its latest population projections. These indicate that the total population will peak at 128 million in 2006 and then begin to fall steadily, decreasing to about 50 per cent of the current number by 2100.

The total fertility rate (TFR) was 1.29 in 2003 and there is little sign that it will stabilize or return to a higher level. Yet, the 2002 *medium variant* projections assume that it will record the historical low of 1.31 in 2006 and will gradually rise to 1.39 around 2050, progressing slowly to 2.07 by 2150. The number of births in 2003 was about 1.12 million and will continue to decrease to less than 1.0 million by 2014, falling further to 0.67 million in 2050.

Because it has the world’s longest life expectancy, Japan is now experiencing a very rapid aging of its population. The number of the elderly (65 years and above) was 24.9 million in 2004. This will increase sharply to reach 34 million by 2018, remaining around 34-36 million thereafter until around 2060. Consequently the proportion of the elderly (65 years and above) will go up very rapidly from 19.5 per cent in 2004 to 25.3 per cent by 2014, rising further to more than 30 per cent by 2033. Japan already has one of the oldest populations in the world.

In Japan, nearly 70 per cent of social security benefits are currently distributed to the elderly. Along with the ailing domestic economy, the rapid population aging will certainly put increased stresses on the financing of social security.

In May 2004 the Ministry of Health, Labor and Welfare published the latest estimates of the cost of social security, using the 2002 population projections of the NIPSSR. According to these estimates, the aggregate cost of social security was 17.2 per cent of GDP in 2004. This is expected to steadily increase to 24.3 per cent by 2025, if the current provisions for benefits remain unchanged.

Of the various social security costs, that of pensions is predominant, amounting to 9.2 per cent of GDP in 2004, with a further expected increase to 11.6 per cent by 2025. The cost for health care is 5.2 per cent in 2004, but is projected to rapidly rise to 8.1 per cent by 2025.

The Japanese economy is still reeling from the effects of the burst in the asset price bubble and the subsequent sharp downturn in economic activity. The expected decline in its population will soon be reflected in a sharp reduction 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.

5 Some Basic Facts on Pensions

Any pension reform proposal must take into account the current basic facts on social security pensions. Of these, the following five are especially crucial.

A persistent deficit in the income statement

Since 2001, the pension scheme for private sector employees (KNH) has been facing an income statement deficit. It recorded a deficit of 700 billion yen in 2001, increasing to 4.2 trillion yen in 2002. It is estimated that this deficit will persist for a long time, unless radical remedies are made in the KNH financing.

Huge excess liabilities in the balance sheet

The KNH balance sheet is shown in Figure 1. In calculating the balance sheet, it was assumed that: the annual increases in wages and the CPI were 2.1 percent and 1.0 percent respectively, nominal, while the discount rate is 3.2 percent annually; and the current contribution rate of the KNH of 13.58 percentage points, would remain unchanged over the projection period (to the year 2100).

Figure 1 indicates that as at the end of March 2005, excess liabilities of the KNH

are estimated at 550 trillion yen, which is a quarter of the total liabilities.⁸

(Figure 1 about here)

The balance sheet set out in Figure 1 has two parts. Part one illustrates the assets and liabilities accrued from past contributions, while part two refers to assets and liabilities accrued from future contributions. It can be seen that as far as part two is concerned, any excess liabilities are almost eliminated. That is, the funding sources of the current provisions will be sufficient to finance future benefits. Here the only task left is to slim down future benefits by 4.5 percent.

But if we look at part one of the balance sheet, things appear quite different. The remaining pension liabilities are estimated to be 800 trillion yen, while pension assets are only 300 trillion yen (comprising a funded reserve of 170 trillion yen plus transfers from general revenue of 130 trillion yen). The difference is quite large, about 500 trillion yen,⁹ which accounts for most of the excess liabilities in the KNH and is equivalent to about 100 percent of GDP of Japan in 2004.

In the past, too many pension promises were made, while sufficient funding sources had not been arranged. As a result, the Japanese have enjoyed a long history of generous social security pensions. However, contributions made in the past were relatively small, resulting in a fairly small funded reserve. Consequently, the focus of the true crisis in Japanese social security pensions is how to handle the excess liabilities of 500 trillion yen representing entitlements from contributions made in the past.

The heavy burden of pension contributions

In Japanese public policy debates, one of the principal issues has been how to cut down personal and corporate income tax. But recently the situation has changed drastically. Social security contributions (for pensions, health care, unemployment, work injury and long-term care) were 55.6 trillion yen (11.2 percent of GDP) for FY2003, more than all tax revenues (43.9 trillion yen) of the central government for the same year. Since 1998, the central government has received more revenue from social security contributions than from tax on incomes; FY2003 revenue from personal income

⁸ Excess liabilities of all social security pension programs in Japan as at the end of March 2005 amounted to around 650 trillion yen, which is equivalent to 1.3 times the year 2004 GDP of Japan.

⁹ The amount of excess liabilities (EL) will vary depending on alternative discount rates. For example, a 2.1 per cent discount rate induces EL of 650 trillion yen, while another 4.0 per cent discount rate produces EL of 420 trillion yen. Part One excess liabilities can be termed as “accrued-to-date net liabilities” or “net termination liabilities”. See Franco (1995) and Holzmann et al. (2004).

tax was 13.8 trillion yen and from corporate income tax 9.1 trillion yen, while revenue from social security pension contributions stood at 29.0 trillion yen. As a result many Japanese now feel that the burden of social security pension contributions is far too heavy and employers have begun to express serious concerns about any further increases in social security contributions.

Overshooting the income transfer between generations

Recent data shows the amazing fact that currently in Japan the elderly are better-off than those aged 30 to 44 in terms of per-capita income after redistribution (see Figure 2). This suggests that current pension benefits may be too generous and there is still room for reduction in benefits provided to the current retired population (which would address the excess liabilities indicated by the balance sheet).

(Figure 2 about here)

An increasing drop-out rate

In the past 20 years, the Japanese government has made repeated changes to the pension program, increasing social security pension contributions and reducing benefits through raising the normal pensionable age while reducing the accrual rate. Similar piece-meal reforms are likely continue into the future.

Many Japanese feel that the government is breaking its promise. As distrust of the government's pension commitment builds up, non-participation is growing.

In 2002 nearly 50 percent of non-salaried workers and persons with no occupations dropped out from the basic level of old-age income protection, owing to exemption or failure to pay contributions (see Figure 3).

(Figure 3 about here)

Also, employers are trying to find ways of avoiding to pay social security pension contributions. Indeed, the aggregate amount of the KNH contributions has been decreasing since 1998, in spite of no change in the contribution rate.¹⁰

Any further escalation in the social security contribution rate will surely induce a higher drop-out rate.¹¹

¹⁰ Part of the lower contributions were also due to reduced contributors under population ageing, however.

¹¹ Contributions to social security pensions operate as “penalties on employment.” Further hikes in the contribution rate will bitterly damage domestic companies which

6 The 2004 Pension Reforms: Main Features and Remaining Difficulties¹²

The administration of Prime Minister Koizumi Jun'ichirō submitted a set of pension reform bills to the National Diet on February 10, 2004. These were enacted on June 5. This section will describe the gist of the approved reforms and explore issues that remain to be addressed.

Increases in contributions

Salaried workers are, as a rule, enrolled in the KNH, which is part of the public pension system. Contributions under this plan had since October 1996 been set at 13.58 per cent of annual income, paid half by the worker and half by the employer. The newly enacted reforms raised this rate by 0.354 percentage points in October 2004. The rate will rise every September thereafter by the same amount until 2017, after which it will remain fixed at 18.30 per cent of annual income. The portion paid by workers will accordingly rise from the current 6.79 per cent of annual income to 9.15 per cent.

For an “average” male company employee earning 360,000 yen a month plus an annual bonus equivalent to 3.6 months’ pay, total contributions will increase by nearly 20,000 yen a year starting from October 2004, and by the time they stop rising in September 2017, they will have reached just under 1.03 million yen a year (of which the share paid by the worker will be just over 514,000 yen or 35 per cent more than the current level of contributions).

Those who are not enrolled in the KNH or other public pension schemes for civil servants are required to participate in the National Pension plan, which provides the so-called basic pension only (the basic pension also forms the first tier of benefits under the KNH and other public pension systems for civil servants). Contributions under this plan will rise by 280 yen each April from the current 13,300 yen per month until they plateau at 16,900 yen (at 2004 prices) in April 2017. The actual rise in National Pension contributions will be adjusted according to increases in general wage levels.

In addition, the government will increase its subsidies for the basic pension. Currently one-third of the cost of basic pension benefits is paid from the national

have been facing the mega-competition on a global scale, thereby exerting negative effects on the economy, inducing a higher unemployment rate, lower economic growth, lower saving rates and so on. Further increases in the contribution rate will be sure to decrease take-home pay of actively working people in real terms, producing lower consumption and lower effective demand.

¹² This section draws heavily on Takayama (2004).

treasury; this share is to be raised in stages until it reaches one-half in 2009.

Reductions in benefits

Benefits under the KNH consist of two tiers; the flat-rate basic pension, which is paid to all public pension plan participants, and a separate earnings-related component. The latter is calculated on the basis of the worker's average preretirement income, converted to current values. Until now, the index used to convert past income to current values was the rate of increase in take-home pay. Under the recently enacted reforms, however, this index will be subject to a negative adjustment over a transition period based on changes in two demographic factors - the decline in the number of participants and the increase in life expectancy. This period of adjustment is expected to last through to 2023.

The application of the first demographic factor means that benefit levels will be cut to reflect the fact that fewer people are supporting the pension system. The actual number of people enrolled in all public pension schemes will be ascertained each year, and the rate of decline will be calculated based on this figure. The average annual decline is projected to be around 0.6 points.

The second demographic factor will adjust for the fact that people are living longer and thus collecting their pensions for more years; the aim is to slow the pace of increase in the total amount of benefits paid as a result of increased longevity. This factor will not be calculated by tracking future movements in life expectancy; instead, it has been set at an annual rate of about 0.3 percentage points on the basis of current demographic projections for the period through 2025. Together, the two demographic factors are thus expected to lead to a negative adjustment of about 0.9 points a year during the period in question.

How will these changes affect people's actual retirement benefits? Let us consider the case of a pair of "typical" KNH beneficiaries as defined by the Ministry of Health, Labor, and Welfare: a 65-year-old man who earned the average wage throughout his 40-year career and his 65-year-old wife who was a full-time homemaker for 40 years from her twentieth birthday. In FY 2004, this typical couple would receive 233,000 yen a month.

How does this amount compare to what employees are currently taking home? The average monthly income of a salaried worker in 2004 was around 360,000 yen, before taxes and social insurance deductions. Assuming that this is supplemented by bonuses totaling an equivalent of 3.6 months' pay, the average annual income is roughly 5.6 million yen. Deducting 16 per cent of this figure for taxes and social insurance payments leaves a figure for annual take-home pay of about 4.7 million yen, or 393,000 yen a month.

The 233,000 yen provided to the typical pensioners is 59.3 per cent of 393,000 yen. However, under the 2004 reforms this percentage, or replacement rate, will gradually decline to an estimated figure of 50.2 per cent by FY 2023 (assuming that consumer prices and nominal wages rise according to government projections by 1.0 per cent and 2.1 per cent a year, respectively). Over the next two decades, then, benefit levels are projected to decline by roughly 15 per cent by comparison with wage levels.

The revised pension legislation stipulates that the income replacement rate is not to fall below 50 per cent for the typical case described above, so the transition period of negative adjustment will come to an end once the replacement rate declines to 50 per cent. This provision was included to alleviate fears that retirement benefits would continue to shrink without limit.

How will the reforms affect those who are already receiving their pensions? Until now, benefits for those 65 years old and over were adjusted for fluctuations in the consumer price index. This ensured that pensioners' real purchasing power remained unchanged and helped ease postretirement worries. But this cost-of-living link will effectively be severed during the transition period, since the application of the demographic factors will pull down real benefits by around 0.9 points a year. In principle, however, nominal benefits are not to be cut unless there has also been a drop in consumer prices. Once the transition period is over, the link to the consumer price index is to be restored.

Changes to provisions for working seniors and divorcees

People aged 60-64 who are receiving pensions and also have wage income have up to now had their benefits reduced by a flat 20 per cent, regardless of how much or little they earn. This rule was abolished in the 2004 reforms so as not to discourage older people from working. However these older workers will still be subject to the current rule that if the sum of wages and pension benefits exceeds 280,000 yen a month (after factoring in annual bonuses), the pension benefits are to be cut by 50 per cent of the amount in excess of this level.

Workers aged 70 and over, meanwhile, have been exempt from paying into the KNH, even if they are still on a company's payroll. And they have not had their benefits reduced no matter how much they earn. Beginning in April 2007, however, their benefits will be reduced if they are high-income earners. Those receiving more than an equivalent of 480,000 yen a month in wages and pension benefits will have their benefits cut by 50 per cent of the amount in excess of this level. This is a rule that currently applies to those aged 65 to 69, and it will be maintained for this age group. The over-70s group will still be entitled to the full amount of the basic pension, and they will continue to be exempt from paying contributions.

Currently divorced wives are not legally entitled to any portion of their former husbands' earnings-related pension benefits, but this will change under the 2004 reforms. Couples who divorce after April 2007 will be able to split the rights to the earnings-related portion of the husband's pension that accrued during their marriage. The wife will be able to receive a share of up to 50 per cent of these rights with the actual share to be determined by agreement between the two. For rights accruing after April 2008, moreover, a full-time homemaker will be able to automatically receive half of her husband's benefits in case of divorce by filing a claim at a social insurance office. Underlying this rule is the assumption that even though the contributions are paid in the husband's name, the wife has provided half of the couple's livelihood through her work as a homemaker.¹³

Improved survivors' benefits and child-raising concessions

Until now widowed spouses younger than 30 and without children under the age of 18 have been entitled to lifelong benefits under the survivor's pension scheme (based on the earnings of the deceased spouse). After April 2007, however, they will receive benefits for no longer than five years.

Workers taking child-care leave are exempt from making pension contributions, and to prevent a decrease in their future benefits due to this period of nonpayment, they are treated as having continued their full payments, even when they have no income. This special exemption can now be claimed for up to one year after childbirth, but starting in April 2005 the period will be extended until the child reaches age three.

Also from April 2005, parents who change their working arrangements to put in shorter hours so as to care for children under age three and who take a corresponding cut in pay will be treated as having worked full time and earned a full salary. Actual contributions during this three-year period, though, will be based on the lower earnings.

Other public and private pension reforms

As a rule, a person cannot simultaneously receive more than one public pension. But the recent reforms have created an exception. People with disabilities who had gainful employment and paid pension contributions will, from April 2006, be entitled to not only their basic disability pension but also the earnings-related component of the old-age pension or survivor's pension. This measure is designed to encourage greater employment among these people.

¹³ The provisions for working husbands and dependent homemaker wives apply conversely in cases where a home-maker husband is dependent on the wife.

Participants in the National Pension plan who have low incomes currently pay either half of the regular contributions or none at all. There will be a finer tuning of payment exemptions starting in July 2006, when low-income earners may also be exempt from paying one-quarter or three-quarters of the regular contributions.

As well, the administrative processes will be improved and streamlined. Under the current setup, pension plan participants can find out how much they will receive in benefits only by going to a social insurance office with their pension pass-books after they have reached age 55. From April 2008, however, such information will be disclosed to all contributors each year, along with their payment records.

The reforms cover private pension plans as well. From October 2004, the upper limit of the amount that can be put aside each month under company-funded defined-contribution pension plans was raised from 36,000 yen to 46,000 yen in cases where there is no other corporate pension plan and from 18,000 yen to 23,000 yen where there is another plan in effect. The ceiling on monthly installments under individually funded defined-contribution plans for salaried workers was raised from 15,000 yen to 18,000 yen where there is no corporate pension coverage, while the cap for the self-employed remained unchanged at 68,000 yen. The higher ceilings for private plans are designed to make up for the anticipated smaller benefits of public old-age schemes.

Are the 2004 reforms incentive-compatible?

Social insurance contributions in Japan already exceed the amount collected in national taxes, and contributions to the pension system are by far the biggest social insurance item. If this already huge sum is increased by more than 1 trillion yen a year, as the government plans, both individuals and companies are very likely to change their behavior. Government projections of revenues and expenditures, though, completely ignore the prospect of such change.

It is possible that companies will reconsider their hiring plans and wage scales to avoid the higher social insurance burden. They may cut back on recruitment of new graduates and become more selective about midcareer hiring as well. Many young people will be stripped of employment opportunities and driven out of the labor market, instead of being enlisted to support the pension system with a percentage of their income. As well, the employment options for middle-aged women who wish to reenter the work force will be reduced and as only a few older workers will be able to continue commanding high wages; there is likely to be a dramatic rise in the number of aging workers who will be forced to choose between remaining on the payroll with a cut in pay or settling for retirement. It is possible that many more companies will either choose or be forced to leave the KNH, causing the number of subscribers to fall far

below the government's projections and pushing the system closer to bankruptcy.

If these event come to fruition, the jobless rate on the whole could rise. The Japan Ministry of Economy, Trade, and Industry has estimated that higher pension contributions could lead to the loss of 1 million jobs and boost the unemployment rate by 1.3 percentage points.

The government plan to increase pension contributions annually for the next 13 years will therefore exert ongoing deflationary pressure on the Japanese economy. For the worker, a rise in contribution levels means less take-home pay; as a result, consumer spending is likely to fall, and this will surely hinder prospects for a self-sustaining recovery and return to steady growth.

Another problem with increasing pension contributions is that they are regressive, since there is a ceiling for the earnings on which payment calculations are based and unearned income is not included in the calculations at all.

One major objective of the 2004 reforms is to eventually eliminate the huge excess liabilities in the balance sheet of the KNH. The plan is to generate a surplus by (1) increasing contributions, (2) increasing payments from the national treasury, and (3) reducing benefits. The policy measures adopted in the 2004 pension reform bill will induce huge *excess assets* of 420 trillion yen in part two of the balance sheet while offsetting excess liabilities of the same amount in part one, as shown in Figure 4. Huge excess assets of part two of the balance sheet imply that future generations will be forced to pay more in contributions than the anticipated benefits they will receive. That is, it is estimated that in aggregate the present value of future benefits will be around 80 percent of the present value of future contributions.

(Figure 4 about here)

It is as if the Japanese government is cutting paper not with scissors but with a saw. Younger generations are most likely to intensify their distrust against Government and the incentive-compatibility issue or drop-out problem will intensify. The management lobby (Nippon Keidanren) and trade unions (Rengo) both oppose any further increases of more than 15 percentage point in the KNH contribution rate.

A declining replacement rate

As noted above, those who are already receiving their pensions will see their benefits decline in real terms by an average 0.9 percentage points per year. The government scenario sees consumer prices eventually rising 1.0 per cent a year and take-home pay by 2.1 per cent a year. This means that the typical beneficiary who begins receiving 233,000 yen a month at age 65 in 2004 will get roughly 240,000 yen at age 84 in 2023.,

in other words, nominal benefits will remain virtually unchanged for two decades, despite the fact that average take-home pay of the working population is projected to have risen by over 40 per cent. The income replacement rate, which stood at nearly 60 per cent at age 65, will dwindle to 43 per cent by the time the typical recipient turns 84. The promise of benefits in excess of 50 per cent of take-home pay does not apply, therefore, to those who are already on old-age pensions.

Automatic balance mechanism: still incomplete

The so-called demographic factors are likely to continue changing for the foreseeable future. The government itself foresees the number of participants in public pension plans declining over the coming century: The estimated figure of 69.4 million participants in 2005 is expected to fall to 61.0 million in 2025, 45.3 million in 2050, and 29.2 million in 2100. This corresponds to an average annual decline of 0.6 per cent through 2025, 1.2 per cent of the quarter century from 2025, and 0.9 per cent for the half century from 2050. In other words, the decline in the number of workers who are financially supporting the public pension system will continue for many decades.

The 2004 reforms, however, adjust benefit levels in line with the decline in the contribution paying population for the next 20 years only; the government's "standard case" does not foresee any further downward revisions, even if the number of participants continues to fall. If the government really anticipates an ongoing decline in participation, there is no good reason to abruptly stop adjusting benefit levels after a certain period of time. Sweden and Germany, for instance, have adopted permanent mechanisms whereby benefit levels are automatically adjusted for fluctuations in demographic factors.

The decision to keep the typical income replacement rate at 50 per cent at the point when pension payments commence represents, in effect, the adoption of a defined benefit formula. Maintaining both fixed contributions on the one hand and defined benefit levels on the other is not an easy task, as there is no room to deal with unforeseen developments. The government will be confronted with a fiscal emergency should its projections for growth in contributions and a reversal in the falling birthrate veer widely from the underlying assumptions.

For example, the government has based its population figures on the January 2002 projections of the National Institute of Population and Social Security Research. Under these projections, the medium variant for the total fertility rate (the average number of childbirths per woman) falls to 1.31 in 2007, after which it begins climbing, reaching 1.39 in 2050 and 1.73 in 2100. Actual figures since the projections were released have been slightly lower than this variant, and there are no signs whatsoever that the fertility rate will stop declining in 2007.

The normal pensionable age

If the government is to keep its promise on an upper limit for contributions and a lower limit for benefits, the only policy option it will have in the event of a financial shortfall will be to raise the age at which people begin receiving benefits. The reform package makes no mention of such a possibility; policymakers no doubt chose to simply put this task off to a future date.

Increasing transfers from general revenue, why?

By FY 2009 the share of the basic pension benefits funded by the national treasury will be raised from one-third to one-half. This means that more taxes will be used to cover the cost of benefits. Taxes are by nature different from contributions paid by participants in specific pension plans, and there is a need to reconsider the benefits that are to be funded by tax revenues.

The leaders of Japanese industry tend to be quite advanced in years. For the most part, they are over the age of 65, which means that they are qualified to receive the flat-rate basic pension. Even though they are among the wealthiest people in the country, they are entitled to the same basic pension as other older people hovering around the poverty line. Using tax revenues to finance a bigger share of the basic pension essentially means asking taxpayers to foot a bigger bill for the benefits of wealthy households as well. For an elderly couple, the tax-financed portion of the basic pension will rise from 530,000 yen a year to 800,000 yen. If a need arises to raise taxes at a future date, who will then actually agree to pay more? Few people will be willing to tolerate such wasteful uses of tax revenue.

7 Future Policy Options

The Ministry of Health, Labor and Welfare has shown a great interest in switching the pension system to an NDC (notional defined contribution) arrangement. It has indicated, however, that it does not consider such a switch to be realistic until the KNH contribution rate reaches its peak level in 2017.

We believe however, that switching to an NDC arrangement could be introduced in Japan sooner, if we *separate* the “legacy pension” problem from the issue of re-building a sustainable pension system for the future.

The legacy pension problem is equivalent to *sunk costs* in the economic perspective. It can be solved not by increasing the KNH contribution rate but by introducing a new tax – for example a 3.2 per cent earmarked consumption tax and

intensive interjection of the increased transfers from general revenue (see Figure 5).¹⁴ Needless to say, the current generous benefits have to be reduced more or less by the same percentage in the aggregate level as implemented in the 2004 pension reform bill.

(Figure 5 about here)

As far as part two of the balance sheet is concerned, which relates to future contributions and promised pension benefits entitled by future contributions, a switch to the NDC is possible and preferable. The KNH contribution rate can be kept unchanged at the before-reform level of 13.58 percentage points. As well, the notional rate of return should be endogenous, following a Swedish-type automatic balance mechanism.

Importantly, with the NDC plan, the incentive-compatibility problem can be avoided. Indeed, every dollar counts in the NDC, and this would be the most important element of a switch to an NDC plan. It will be demonstrated to the public that everybody gets a pension equivalent to his/her own contribution payments.¹⁵

Further, an NDC plan is expected to be rather neutral to the retirement decision. The labor force participation rate for a Japanese elderly male still remains at a considerably high level (71.2 percent in 2003 for those of age 60 to 64) as compared with other developed countries. The shift to NDC arrangements can induce later retirement also in Japan, but its effect may not be so significant.

A move to NDC may lead to lower replacement rates at age 65. However, this can be compensated by working longer to age 67 or so, or by more voluntary saving.

However, while not explicitly considering NDC arrangements, the Japanese government has signaled increased support of defined contributions arrangements by deciding to give more tax incentives to the existing defined contribution plan from October 2004 onward.

8 Some Lessons from Japanese Experiences

Policies on Social Security Pensions

There are several lessons which can be drawn from experiences in Japan's pension reforms.

First, the pay-as-you-go defined benefit system has been working not as a pure insurance system but rather as a tax-and-transfer system involving huge amounts of

¹⁴ Another 2 per cent earmarked consumption tax might be all right, since the remaining excess liabilities of 90 trillion yen might be acceptable as a "hidden" national debt.

¹⁵ See Könberg (2002), Palmer (2003) and Settergren (2001) for more details.

income transfers between generations. It is possibly a problem between managers and trade unions, but mainly is a problem *between generations*.

We have a political difficulty in this sense. Seniors are strong voters while the younger people and future generations currently have decidedly weak or no political powers. The interest of future generations is likely to be neglected.

Second, the nature of the intergenerational contract is difficult for many people to understand. Maintaining a fixed rate of replacement in gross income terms is by no means “a contract.” It is found to be quite risky, pushing its costs entirely on actively working generations or future generations.

The benefits and contributions in pay-as-you-go defined benefit plan should be changed flexibly to respond to changing circumstances. It is partly due to the incompleteness of planning for different possible outcomes in the future. Consequently we have found that the replacement rate embedded in the law is not a “promise” in a strict sense, but it is just the “starting place” of an ongoing process of adaptation to a changing and unpredictable world. Everlasting adjustments will be required to keep the system viable, while they can be viewed as “political risks.”

Great efforts have already been made for some developed countries including Sweden, Germany and Japan to prevent political risks in the future. An automatic balance mechanism or a sustainability factor has been introduced to adjust pension benefits to flexibly respond to never-ending changes in demographic and economic conditions.

Third, social security pensions are consumption allocation mechanisms, thereby transferring resources from workers to pensioners when pensions are paid. Under the pay-as-you-go system, the transfer is direct through contributions or taxes paid by workers. Under the funded one, pensioners liquidate their accumulated assets by selling to workers. In both cases, workers’ disposable income is reduced by the amount of resources transferred to retirees.

Supporting an increasing number of retired persons is possible if output grows. Economic output depends crucially on the supply of workers, and thus increasing labor force participation of young retirees, women and young adults will be required.

In this light, we need to approach the question of funding from the perspective of circumventing constraints on economic growth. We must ask which revenue sources

will slow down growth the least. Is the answer a wage (or payroll) tax or not? It should be remembered that the consumption tax does not function as a direct levy on the saving and investment that powers the economy. It will make sense in some countries to fund part of the increased costs of a greying society by raising the rate of consumption-based tax.

Fourth, people in the more developed countries are increasingly concerned with the “taste of pie” rather than the “size of pie” or the “distribution of pie” (Takayama, 2003). When it comes to social security pensions, the most important question is whether or not they are worth buying. It has become a secondary concern how big or how fair they are. The basic design of the pension program should be incentive-compatible. Contributions should be much more directly linked with old-age pension benefits, while element of social adequacy should be incorporated in a separate tier of pension benefits financed by other sources.

The incentive-compatibility problem can be avoided with the notional defined contribution (NDC) plan, which has already been introduced in Sweden, Italy, Poland and Latvia. Furthermore, unfunded DC schemes can make transparent the relationship between contributions and benefits, thereby deterring evasion and other distortionary behavior. This can also eliminate undesirable redistribution within the same cohort of individuals.

On the other hand, the NDC plan does have some disadvantages. Among others, risks will be entirely on the shoulders of pensioners. There is no risk sharing between old parents and their children. It will not be easy for NDC plans to provide social security in the event of the invalidity or death of the breadwinner, as well. Furthermore, the *notional* rate of return is usually set to equal wage increases, long-term averages of which would be lower than long-term interest rates. If this is to be the case in the future, NDC benefit levels will be potentially lower than those under real DC plans.

Fifth, the current (and projected future) income statement has traditionally been the major tool for describing the financial performance of social security pensions all over the world. It can only give half the story, however. Financial sustainability of social security pensions is not often attained even if its income statement enjoys a surplus. The balance sheet approach is now an indispensable tool for people to understand the long run financial sustainability of social security pensions and to evaluate varying financial impacts of different reform alternatives. Balance sheet of occupational pensions is a “must” item for financial accounting of companies. Why not for social security pensions?

Strengthening Private Initiatives

The majority of people in almost all developed countries are reluctant to accept further increases in taxes and/or social security contributions. Under such circumstances, people must be much more encouraged to become self-reliant after retirement. With stronger tax incentives, private initiatives will grow in due course. If this occurs, the future picture of distribution of income after retirement may be quite different.

Obviously the funded defined contribution scheme has some advantages such as understandability (or transparency) and flexible response to increasing diversity of life-style (increasing heterogeneity, increasing freedom to choose a working place, working hours, and working periods, widening choices of no-kids, divorce, and remarriage, etc.). It also encourages people to be responsible and self-reliant, denying irresponsible behavior that imposes cost on others, especially on future generations who have no political influence today.

The funded defined contribution plan will have several difficulties, however. First, the market rate of return is quite volatile in the short-term. Its differentials are quite large. The rate of return from the financial market may decline with the ongoing population aging, and with ample supply of funded money. It is not inflation-proof.

Consequently insured people will face investment risk. The income disparity after retirement will be widened, and the increasing proportion of the elderly will suffer from low income. Some of the current retirees, namely asset-holders, will also be damaged from a possible decline in the market rate of return on their assets.

Second, we must have relevant regulations on the funded scheme. We can learn from experiences of the Anglo-Saxon countries, but so far our knowledge about them remains insufficient. Missing are institutions against investment risks.

Third, there exists an administrative cost problem. This problem will be quite serious especially for the low-income earners. They will be forced to have a relatively low rate of return.

Voluntary prefunding seems inevitable. Missing are better instruments to minimize risks involved in the funded system. Missing as well are better understandings of the induced individual behaviors, the macro economic impacts, and the distributional outcomes from increased prefunding.

No Single Solutions

Each country faces a dilemma that too many targets are sought to be achieved through a virtually single policy instrument of pensions. This contradicts the standard theory of policy assignment, which suggests that each policy objective can be best attained only if it is matched with each different policy instrument of comparative advantage. A diversified multi-tier system is thus most preferable.

Different objectives are often competing. Promoting later retirement may induce higher unemployment for younger people. Encouraging occupational and individual pensions can lead to early retirement. Tax smoothing or advance increases in the contribution rate for the long-term sound financing will cause higher unemployment in the short-term. Financial sustainability often sacrifices income adequacy in retirement, as well. Solutions will be different depending on which objective is more important.

For an ageing society, increased costs are still required to prevent poverty with securing stable income after retirement. We have no painless solutions for the future. No reforms without tears.

The type of pains that we are forced to bear will be different from country to country. It depends on potentials of economic growth, a balance between solidarity and self-reliance, perceptions about income disparity after retirement, understanding of intergenerational equity, credibility of the government commitment, regulatory competence against investment risks, development of the capital market, and so on.

9. Conclusion

Providing adequate income to senior citizens is a big challenge in the ageing world. Developed countries have been struggling to contain social security pension costs. The focus is on increasing the normal pensionable age and introducing an automatic balance mechanism, together with giving a minimum income guarantee to older persons. There are no magic bullets, however. No painless solutions for the future. No single policy will suffice in addressing the long term challenges.

Higher economic growth can mitigate the difficulties in ageing societies, and employment with increasing labor force participation of young retirees, women and young adults carries the crucial key to financing adequate retirement income in the future.

No one can claim to clearly see all the changes that lie in the decades ahead. Still the challenge is hard to ignore. Missing is more explicit consideration of economic consequences arising from population ageing. Missing as well, is a far greater commitment to research on the magnitude of the principal long-term risks in an ageing society, their sensitivity to key assumptions, and their implications.

In the end, life is still risky. We have to realize that we cannot eliminate all the risks in our long life completely. What we can do is to make greater efforts to control these risks at a minimum level.

References

- Franco, D. (1995), "Pension Liabilities: Their Use and Misuse in the Assessment of Fiscal Policies," European Commission, *Economic Papers*, No.110.
- Holzmann, R. et al. (2004), "Implicit Pension Debt: Issues, Measurement and Scope in International Perspective," DP-0403, Social Protection Unit, World Bank.
- Könberg, B. (2002), "The Swedish Pension Reform: Some Lessons," DP-46, Project on Intergenerational Equity, Institute of Economic Research, Hitotsubashi University.
- Palmer, E. (2003), "Pension Reform in Sweden," in Takayama (2003a, Chapter 7).
- Settergren, O. (2001), "The Automatic Balance Mechanism of the Swedish Pension System," available on (www.rfv.se).
- Takayama, N. (1998), *The Morning After in Japan: Its Declining Population, Too Generous Pensions and a Weakened Economy*, Tokyo: Maruzen, Ltd.
- Takayama, N. ed. (2003a), *Taste of Pie; Searching for Better Pension Provisions in Developed Countries*, Tokyo: Maruzen, Ltd.
- Takayama, N. (2003b), "Pension Arrangements in the Oldest Country: The Japanese Case," in Takayama (2003a, Chapter 5).
- Takayama, N. (2004), "Changes in the Pension System," *Japan Echo*, 31(5), October.
- Takayama, N. ed. (2005), *Pensions in Asia: Incentives, Compliance and Their Role in Retirement*, Tokyo: Maruzen Ltd.

Table 1 Start Age of Full Old-age Benefits for Male Employees

Date of Birth	Basic Benefits	Earnings-related Benefits
Before 1 April 1941	60	60
Between 2 April 1941 and 1 April 1943	61	60
Between 2 April 1943 and 1 April 1945	62	60
Between 2 April 1945 and 1 April 1947	63	60
Between 2 April 1947 and 1 April 1949	64	60
Between 2 April 1949 and 1 April 1953	65	60
Between 2 April 1953 and 1 April 1955	65	61
Between 2 April 1955 and 1 April 1957	65	62
Between 2 April 1957 and 1 April 1959	65	63
Between 2 April 1959 and 1 April 1961	65	64
After 2 April 1961	65	65