Chapter 6
Reforming Social Security Pensions in Japan: A Balance Sheet Approach

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6.1 Introduction

Japan has already had the oldest population in the world. It has built a generous social security pension program, but since 2001, income statement of the principal pension program has turned into a deficit. Its balance sheet suffers from huge excess liabilities, and distrust against the government commitment on pensions is growing. The Japanese are increasingly concerned with the incentive-compatibility problem.

This chapter proposes a balance sheet approach to describing current financial performance of social security pensions in Japan, along with comparing respective impacts from alternative reform measures through their balance sheets.

Balance sheet was invented about 700 years ago in Italy at Genova and since then it has become one of the two major accounting tools. Needless to say, the other one is income statement.

Income statement is very popular, but balance sheet is not so yet even among policy-making authorities.

Balance sheet is quite a useful tool to know the financial situations in the following three aspects. First, it describes the current financial status in stock terms by presenting assets and liabilities with their compositions. Second, it implies how smoothly future financing will be carried out. Third, it makes clear impacts of alternative policy measures on future financing.

Before going into discussion, this chapter gives a brief sketch of Japanese social security pension program, summarizing Japan’s major pension problems, while explaining the latest 2004 pension reform.

6.2 Brief Outline of Pension Provisions before 2004

Since 1980, Japan has repeated piecemeal pension reforms every 5 years, mainly due to great stresses caused by anticipated demographic and economic factors. Since then, too generous pension benefits have been reduced step by step with an increase of the normal retirement age from 60 to 65. The pension contribution rate has been lifted gradually, as well. Yet, current pension provisions still remain generous, facing serious financial difficulties in the future.

Japan currently has a two-tier benefit system, providing all sectors of the population the first-tier, flat-rate basic benefit. The second-tier, earnings-related benefit applies only to employees.[1] The system operates largely like a pay-as-you-go defined benefit program.

The flat-rate basic pension covers all residents aged 20 to 60. The full old-age pension is payable after 40 years of contributions, provided the contributions were made before 60 years of age. The maximum *monthly* pension of 66,200 yen at 2004 prices (with maximum number of years of coverage) per person is payable from age 65.[2] The benefit is indexed automatically each fiscal year (from 1 April) to reflect changes in the consumer price index (CPI) from 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 actuarial increase if claimed after 65 years.

Earnings-related benefits are given to all employees. The accrual rate for the earnings-related component of old-age benefits is 0.5481 per cent per year, and 40 years' contributions will thus earn 28.5 per cent of career average monthly real earnings.[3]

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 earnings level. The full earnings-related pension is normally payable from age 65 to an employee who is fully retired.[4] An earnings test is applied to those who are not fully retired. The current replacement rate (including basic benefits) for take-home pay or net income is about 60 per cent for a "model" male retiree (with an average salary earned during 40 years of coverage) and his dependent wife. Its *monthly* benefit is about 233,000 yen.

Equal percentage contributions are required of employees and their employers. The contributions are based on the annual standard earnings including bonuses. The total percentage in effect before October 2004 was 13.58 percent for the principal program for private-sector employees (Kosei-Nenkin-Hoken, KNH). Non-employed persons between the age of 20 to 60 years pay flat-rate individual contributions. The current rate since April 1998 is 13,300 yen per month. For those who cannot pay for financial reasons, exemptions will be permitted. The flat-rate basic benefits for the period of exemption will be one-third of the normal amount.

Under the current system, if the husband has the pension contribution for social security deducted from his salary, 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 government subsidizes one-third of the total cost of the flat-rate basic benefits. There is no subsidy for the earnings-related part. The government pays administrative expenses as well.

The aggregate amount of social security pension benefits will be around 46 trillion yen in 2004, which is equivalent to about 9 percent of her GDP of the same year.

6.3 Demography and Its Impact on Financing Social Security

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

The total fertility rate (TFR) was 1.29 in 2003. There is still little sign that the TFR 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 birth, currently about 1.12 million in 2003, will continue to decrease to less than 1.0 million by 2014, falling further to 0.67 million in 2050.

Because it has the longest life expectancy, Japan is now experiencing a very rapid aging of its population. The number of the elderly (65 years and above) is currently 24.3 million in 2003. It will increase sharply to reach 34 million by 2018, remaining around 34-36 million thereafter until around 2060. Consequently the proportion of the elderly will go up very rapidly from 19.0% in 2003 to 25.3% by 2014, rising further to more than 30% by 2033. Japan already has one of the oldest populations in the world.

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

In May 2004, the Ministry of Health, Labor and Welfare, Japan, published the latest estimates of the cost of social security, using the 2002 population projections of the NIPSSR. According to the latest estimates, the aggregate cost of social security in terms of GDP is currently 17.2% in 2004. It will steadily increase to 24.3% by 2025, if the current provisions for benefits remain unchanged.

Of the various costs, that of pensions is quite predominant, amounting to 9% of national income in 2004, with further increase to 11.6% by 2025. The cost for health care is 5.2% in 2004, but will rapidly rise to 8.1% by 2025.

The Japanese economy is still reeling from the effects of its burst bubble, and the decline in population will soon be 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.

6.4 Some Basic Facts on Pensions

Any pension reform proposal must take into account the current basic facts on pensions. Among others, the following five are especially crucial.

Persistent Deficit in Income Statement

Since 2001, the KNH has been facing an income statement deficit. It recorded a deficit of 700 billion yen in 2001, and the deficit would be 4.2 trillion yen in 2002. It is estimated that the 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, we assumed that:
a) annual increases in wages and CPI are 2.1 percent and 1.0 percent respectively in nominal terms, while the discount rate is 3.2 percent annually,
b) the current contribution rate of the KNH, 13.58 percentage point, will remain unchanged in the future, and
c) the period up to year 2100 is taken into account.

Figure 1 indicates that as at 31st March 2005, there will be excess liabilities of 550 trillion yen, which is a quarter of the total liabilities.[5]

(Figure 1 about here)

Part One of Figure 1 is assets and liabilities accrued from past contributions and Part Two is those accrued from future contributions. Figure 1 implies that, as far as Part Two is concerned, balance sheet of the KNH has been almost cleaned up. The funding sources of the current provisions will be sufficient to finance future benefits, and the only task left is to slim down future benefits by 4.5 percent.

But if we look at Part One of Figure 1, things appear quite different. The remaining pension liabilities are estimated to be 800 trillion yen, while pension assets are only 300 trillion yen (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, which accounts for the major part of excess liabilities in the KNH.

500 trillion yen is more than 60 percent of Part One liabilities, equivalent to about 100 percent of GDP of Japan in 2004. In the past, too many promises on pension benefits were made, while sufficient funding sources have not been arranged. The Japanese have enjoyed a long history of social security pensions. However, contributions made in the past were relatively small, resulting in a fairly small funded reserve. Consequently, the locus of the true crisis in Japanese social security pensions is how to handle the excess liabilities of 500 trillion yen which were entitled from contributions made in the past.

Pension Contributions: Heavy Burdens Outstanding

In Japanese public debates, one of the principal issues has been how to cut down personal and corporate income tax. But recently situations changed drastically. Social security contributions (for pensions, health care, unemployment, work injury and long-term care) are 55.6 trillion yen (15.2 percent of national income) for FY 2003. This is apparently more than all tax revenues (43.9 trillion yen) of the central government for the same year. Since 1998, the central government has acquired more from social security contributions than from tax incomes. Looking at more details, we can find that revenue from personal income tax is 13.8 trillion yen and corporate income tax is 9.1 trillion yen, while revenue from social security pension contributions stands out at 29.0 trillion yen. Needless to say, the last apparently places a most heavy burden on the public. The Japanese now feel that social security pension contributions are too heavy; they operate as the most significant factor in determining the take-home pay from the gross salary. On the other hand, managements have begun to show serious concerns on any further increases in social security contributions.

Overshooting in Income Transfer between Generations

It may be amazing 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). Undoubtedly, there must still be room for reduction in benefits provided to the current retired population.

(Figure 2 about here)

Increasing Drop-Out

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. Further such piece-meal reforms will most likely follow in the future.

Many Japanese feel that the government is breaking its promise. As distrust against government commitment builds up, concern on such an “incredibility problem” is also 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, delinquency in paying contributions or non-application (see Figure 3 for increasing delinquency).

(Figure 3 about here)

Also, employers are carefully 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.

Any further escalation in the social security contribution rate will surely induce a higher drop-out rate.[6]

6.5 The 2004 Pension Reform: Main Contents and Remaining Difficulties[7]

In February 2004, Japanese government submitted a new pension reform bill, and its bill was passed through the Diet in June 2004. The main contents of it are as follows.

1) The KNH contribution rate is to rise by 0.354 percentage point every year from October 2004, reaching 18.30 percent by 2017. After 2017, it will be kept at 18.30 percent.

2) Social security pension benefits will be further reduced by 0.9 percent in real terms every year for the next 20 years. Consequently, the replacement rate for the “model” male retiree and his dependant wife will decrease step by step from current 60 percent to 50 percent by 2023. This is

due to the introduction of a "demographic factor" which takes into account the decreasing rate of the actively working population and longer life expectancy.

3) Transfers from general revenue are to be increased from one-third to one-half of the basic benefits by 2009.

4) The earnings test is to be relaxed before age 65, while a new earnings test is introduced for those of age 70 and over.

5) An earnings-split between husband and his wife is to be introduced on divorce.

6) More taxes are levied on pension benefits from 2005.

7) No plan for any further increases in the normal pensionable age above 65.

The policy measures adopted in the 2004 pension reform bill will induce huge *excess assets* of 420 trillion yen in Part Two balance sheet whereby offsetting excess liabilities of the same amount in Part One balance sheet as shown in Figure 4. Huge excess assets of Part Two balance sheet imply that future generations will be forced to pay more than the anticipated benefits they will receive. Their benefits will be around 70 percent of their contributions and taxes, on the whole.

(Figure 4 about here)

It seems as if we cut a paper not with scissors but with a saw. Younger generations are most likely to intensify their distrust against Government. The incentive-compatibility problem or the drop-out problem will become graver. The management (Nippon Keidanren) and trade unions (Rengo) both oppose any further increases of more than 15 percent in the KNH contribution rate.

6.6 Future Options

The Ministry of Health, Labor and Welfare, Japan, shows a great interest in switching the system to an NDC. It believes, however, that the switch can become realistic only after the KNH contribution rate reaches the peak level in 2017.

Switching to the NDC can be introduced in Japan very soon, however, if we *separate* the "legacy pension" problem from re-building a sustainable pension system for the future. The legacy pension problem of Japan looks like *sunk costs* in the economic perspective. It can be solved not by increasing the KNH contribution rate but by introducing a new 3% earmarked consumption tax and intensive interjection of the increased transfers from general revenue (see Figure 5). Needless to say, the current generous benefits have to be reduced more or less by the same percentage as implemented in the 2004 pension reform bill.

(Figure 5 about here)

As far as Part Two balance sheet, which relates to future contributions and promised pension benefits entitled by future contributions, a switch to the NDC is quite advisable. The KNH contribution rate will be kept unchanged at the current level of 13.58 percent. The notional rate of return can be set to equal the financial rate of return from investment (3.2 per cent per year in nominal terms).

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

A move to NDC leads to lower replacement rates at age 65. It can be compensated by working longer by age 67 or so, or by more voluntary saving. The Japanese government has decided to give more tax incentives to the existing defined contribution plan from October 2004 onward.

6.7 Concluding Remarks

The Japanese are increasingly concerned with the “taste of pie” rather than the “size of pie” or the “distribution of pie.” 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 than contributions.

Current (and projected future) income statement has been a major tool for describing financial performance of social security pensions all over the world. It can only give half a story, however. Balance sheet has to be another indispensable tool for people to understand financial status of pensions and to evaluate varying financial impacts from different reform alternatives. Balance sheet of occupational pensions is a “must” item for financial accounting of companies. Why not for social security pensions?

Balance sheet of social security pensions in Sweden, Japan, Singapore and US have already been available. The significance of balance sheet shall be increasingly recognized with its publication from a growing number of countries.

Endnotes

[1] A detailed explanation of the Japanese social security pension system is given by Takayama (1998, 2003b).
[2] 1,000 yen = US$9.13 = Euro7.38=UK￡4.93 as at 15 July 2004.
[3] A semi-annual bonus equivalent to 3.6 months salary is typically assumed.

[4] The normal pensionable age of the KNH is 65, though Japan has special arrangements for a transition period between 2000 and 2025. See Takayama (2003b) for more details.

[5] 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.

[6] Contributions to social security pensions operate as "penalties on employment." Further hikes in the contribution rate will bitterly damage domestic companies which 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.

[7] Takayama(2004) gives more detailed explanations on the 2004 reform.