Pension Reform and Funding Options

National Report from Japan
to
the IAA International Pensions Seminar
Brighton, 6-7 June 2001

Junichi Sakamoto
Director
Actuarial Affairs Division
Pension Bureau
Ministry of Health, Labour and Welfare
Japan

1. Introduction

The 2000 pension reform bill, which was based on the 1999 actuarial valuation and was submitted to the Diet on 27 July 1999, passed the Diet on 28 March 2000. It apparently looks inconspicuous but contains many drastic measures to restore financial soundness of the social security pension schemes in Japan. It is a milestone in the history of Japan's social security system in the sense that it has solved most of the problems like that of pensionable age pending for a very long time and has practically managed to adapt the system to the rapidly changing socio-economic environment; fastest ageing population and long-lingering stagnant economy.

In preparing the reform bill, funding options were one of the focal issues, partly representing people's anxiety about the future burden of bearing the cost and partly reflecting the slow-down of economic growth which leaves less room for another hike of contribution rate. Some people wondered why they would be forced to pay such a high rate of contribution for intergenerational income transfer or for solidarity, being led to the idea that individuals should save for their retirement for themselves. Others argued that the burden should be equitable throughout the generations and that nobody had the right to force our descendants to bear our debts. On the other hand, there were, of course, people who advocated pay-as-you-go (PAYGO) financing method which they said was the natural conclusion of the idea of intergenerational supporting system.

The 2000 reform went through these kinds of discussions, but in the end it has avoided extremities; it has decided to continue to adopt partial funding. In the following remarks, I would like to make a report on how the 2000 reform evolved and how funding options were discussed.

2. Social security pension schemes in Japan

Before starting the description of the issues, I would like to outline our social security pension schemes to provide a proper framework for discussion.

(1) Coverage

Every resident of Japan aged between 20 and 60 is compulsorily covered by the National Pension (NP) scheme. If he/she is an employee in the private sector, he/she is covered by the Employees' Pension Insurance (EPI) scheme as well. This coverage is also compulsory. If he/she is an employee in the public sector like the national government, the local governments, etc., he/she is compulsorily covered by one of the mutual aid associations (MAA's). There are four MAA's: MAA for government employees, MAA for local government employees, MAA for private school employees and MAA for employees of agricultural, fishery and forestry cooperatives.

The active people covered by the NP scheme are classified into three categories. Self-employed people, farmers, fishermen, etc. are classified as the first kind. Their dependent spouses are also classified as the first kind. Those covered by the EPI or one of the MAA's are classified as the second kind. Their dependent spouses are classified as the third kind.

(2) Benefits

The NP scheme provides flat-rate basic pensions; the annual amount of benefit is only proportionate to the ratio of the number of covered months to 480 months (1 at the maximum), irrespective of what his/her pensionable remunerations have been. The EPI and MAA schemes provide earnings-related pensions; the annual amount of benefit is 7.125 ‰ (which used to be 7.5 ‰ until the 2000 reform) of the average of the pensionable remunerations during the covered period multiplied by the number of covered months. The pensionable remunerations are revalued on the basis of the increase of disposable income of the active workers so that the benefit is indexed to the improvement of the active workers' disposable income level up until the beneficiary reaches the age of 65. After the age of 65, the benefit is indexed to the increase of the Consumer Price Index (CPI). (This indexation method has also been introduced by the 2000 reform. It only used to be based on the increase of disposable income irrespective of the beneficiary's age before the reform.) The social security pension schemes in Japan are thus composed of two layers for employees, providing flat-rate benefits and earnings-related benefits respectively. The self-employed people are, on the other hand, provided only with flat-rate benefits.

The pensionable age is now 60 for the earnings-related part whereas it is 65 for the old-age basic pension benefit. It is, however, to be raised gradually to 65 for the earnings-related part by the 2000 reform.

(3) Pensionable remunerations

An employee's pensionable remuneration is the average of his/her monthly salary or wages paid in May, June and July. Bonuses are excluded from the calculation. It is applied from October until September of the next year. If his/her monthly salary or wages is sharply changed, then his/her pensionable remuneration is also changed.

(4) Contributions

The insured people of the first kind pay flat-rate contributions to the NP scheme. The present contribution rate of the first-kind insured people is ¥13,300 per month. The insured people of the first kind with low income or no income at all may be exempted from paying their contributions with benefits for such periods one third of the normal benefit level. The insured people of the second kind pay contributions proportionate to their pensionable remunerations to either the EPI scheme or one of the MAA's. The present contribution rate of the EPI scheme is 17.35%. The insured people of the third kind, namely dependent spouses of employees, do not have to pay contributions though each insured month as a third-kind insured person is considered to be a month in which he/she has paid the contribution of the NP scheme. Accordingly a person with 40 years covered by the NP scheme totally as the third-kind insured person can receive his/her old-age basic pension benefit of full amount though he/she has never paid the contributions. As seen in the following paragraph, the contributions are made for them by the schemes which cover their spouses.

(5) Financing the basic pension expenditure

The benefit expenditure of the basic pensions is financed on pay-as-you-go(PAYGO) basis by transferring the designated amount of money from each of the schemes to the basic pension account. The designated amount of money for a scheme is the total amount of annual expenditure of the basic pensions multiplied by the ratio of the number of the active people aged between 20 and 60 covered by the scheme plus the number of their dependent spouses aged between 20 and 60 to the total number of such active people aged between 20 and 60 throughout the schemes plus the number of their dependent spouses aged between 20 and 60. In other words, the total amount of annual expenditure of basic pensions is shared by each of the schemes proportionately to the number of active people aged between 20 and 60 covered by the scheme and their dependent spouses aged between 20 and 60. In calculating the designated amount of money, the insured people of the first kind are deemed to form one group as if the NP scheme were to cover them exclusively and the money is transferred from the national pension account to the basic pension account. In this way financing the basic pension benefits is immune against changes in the industrial structure though it is still dependent on the demographic structure. When the designated amount of money is transferred from each scheme to the basic pension account, one third of the amount is subsidized from the general revenue to each scheme. As a result one third of the benefit expenditure of basic pensions is subsidized by the general budget.

(6) Remarks

Since active people covered by one of the schemes for employees, that is either the EPI scheme or one of the MAA schemes, pay contributions proportionate to their pensionable remunerations and, after retirement, receive flat-rate benefits together with earnings-related benefits, the replacement rate of the benefit amount to the average of the pensionable remunerations decreases as the average of the pensionable remunerations increases. This shows the redistributive nature of our social security pension schemes.

Incidentally the 2000 reform contains the item of changing the contribution-benefit salary basis from monthly salary to yearly income, which is to be effective from April 2003. In this report, however, we only discuss the issues in terms of monthly salary to avoid confusion. For example, the contribution rates are expressed as the percentage of monthly salary and not of yearly income unless otherwise specified.

Since MAA's are special schemes for specific occupational groups and their benefit provisions are almost the same as those of the EPI scheme, I would like to focus our consideration on the

EPI scheme and the NP scheme. Therefore, when we refer to social security pension schemes in the following, we mean the EPI scheme and the NP scheme if not otherwise stated.

3. Socio-economic environment

Factors which motivated the 2000 reform can be classified into two groups: demographic factors and economic factors.

Only a few years have passed since the last actuarial valuation in 1994, but our socio-economic environment has become even more difficult. The fertility rate has declined much more sharply than we had assumed in the 1994 actuarial valuation. The economy has long been stagnant; the economic growth rate has decelerated, even experiencing contraction both in 1997 and in 1998 for the first time since the oil crisis in 1974.

(1) Demographic factors

The Prime Minister's Office carries out a Census every five years. Based on this, the National Institute of Population and Social Security Research(NIPSSR) reviews its population projection. The latest projection was made in January 1997 on the basis of 1995 Census. The result showed a much greater advance in ageing than had been projected in 1992. The difference between the two projections is summarized in the table 4. The main cause of this advance was a sharp decline in the fertility rate deemed to be attributable to the trend whereby an increasing number of women remain single for life. In fact, the total fertility rate in 1998 dropped to as low as 1.38. The ratio of the population aged 65 and above to the population aged between 20 and 64 is estimated to rapidly increase from 23.2% in 1995 to 64.6% in 2050 according to the 1997 population projection. Because the actuarial valuation in 1994 was based on the 1992 population projection, it could no longer be said to reflect the real financial status of our social security pension schemes. We examined its cost effects on our social security pension schemes just after the publication of the projection.

We did it by replacing the demographic assumptions only, in line with the 1997 projection, retaining the other assumptions as they had been in the 1994 valuation. At the same time, in the case of the EPI scheme, we retained the same contribution programme for the years before 2025 as for the 1994 actuarial valuation so as to be able to compare the results quantitatively. In the 1994 actuarial valuation, the contribution rate had been kept flat after 2025 in the EPI scheme.

As a matter of course the rate had been so calculated as to keep a balance between income and expenditure. We call this flat contribution rate the ultimate contribution rate. In the case of the NP scheme the ultimate contribution rate commenced in 2015. To express the quantitative cost effect of the latest population projection on our social security pension schemes, we calculated the ultimate contribution rate for each scheme, and obtained the results summarized in the table 5.

The result was that, for the EPI scheme, the ultimate contribution rate rose to 34.3% from 29.8%. Roughly speaking, it meant that the burden on each future active participant of the EPI scheme would increase by 15%. For the NP scheme, the ultimate contribution rate of the first-kind covered people (which is flat-rate) rose from ¥21,700 to ¥24,300 per month in terms of the Fiscal Year 1994 value, which represented a cost increase of more than 10% for future participants. These levels of contribution were deemed to be hardly bearable to the future participants, and people began to discuss the measures to restore financial soundness of the social security pension schemes.

(2) Economic factors

As the fig 3 shows, Japan's economic growth has been at a very low level for the last decade. In 1997 we experienced economic contraction for the first time after the oil crisis in1974. In 1998 even worse contraction was observed. Since our labour force is beginning to decrease even though more elderly people as well as women can be expected to participate in the labour market to a certain degree, we can hardly anticipate the return of a continued high level of economic growth. Under such circumstances, the extent to which active people can sustain their contribution to the social security pension schemes will be fairly limited. Employers, who share the half of the contributions, will be exposed to international competition with heavier burden on them. We also have to bear in mind that social insurance contributions other than pension schemes or tax will also inevitably be raised in the ageing process. These also made people feel the necessity of drastic review of our social security pension schemes.

Furthermore, people started to save more under the stagnant economy, which supposedly formed a vicious circle, resulting in weaker economy. It was partly because they felt anxiety about their retirement life. Many people, therefore, argued that we should work out a clearer image of social security pension schemes as well as medical insurance schemes or the long-term care programme in the future so that people would have confidence in them. This also motivated the reform.

4. The 2000 reform

Before discussing the main subject of funding options, to give the readers the background of discussions, I would like to describe how the 2000 reform of the social security pension schemes developed.

The 2000 reform started with the anxieties about future contribution level that was projected to reach the rate far from being sustainable as the above-mentioned socio-economic changes became clear. In the end, the Diet approved some changes in the provisions of social security pension schemes. The main items that have some financial implications are:

(1) to reduce the benefit level by 5 % of the earnings-related part the EPI provides;
(2) to change the indexation basis of benefits after the age of 65 from the increase of disposable income of active workers to that of the CPI;
(3) to gradually raise the pensionable age of the earnings-related part the EPI provides from 60 to 65;
(4) to extend the coverage of the EPI scheme to employees in the latter half of their sixties and to introduce income-testing for their benefits;
(5) to raise the subsidy rate from the general revenue for the basic pension benefits from 1/3 to 1/2 by securing its financial resources by the year 2004;
(6) to freeze the contribution rates of the social security pension schemes at the current level;
(7) to reduce the reduction rate of the benefit amount for those whose choose to start their old-age basic pension benefits earlier than the normal pensionable age of 65.

These changes have been reached through intensive discussions of various organs concerned. First the Pension Council. Shortly after the new population projection was published in January 1997, the Pension Council, an advisory body to the Minister of Health and Welfare, started to discuss the matter. It took up all the issues raised and finally published a report in October 1998. However it could not reach agreement on some of the issues; its report included differentiated views on them.

Second the Ministry of Health and Welfare (MHW). In the wake of the Pension Council's report, the MHW worked out three reform alternatives and showed it to the Liberal Democratic Party (LDP), the sole government party at that time, in the same month. Before that, the MHW published a discussion paper entitled "Five scenarios for pension reform" in December 1997 and a detailed reference material on pension problems in February 1998. It also conducted a survey of knowledgeable people's opinions in March 1998. When it worked out the three alternatives for pension reform in October 1998, it took account of the result of the survey as a matter of course. The main idea for reform of the MHW was to reduce the future contribution rates to a sustainable level, with the scheme framework maintained as it was, by minimizing the future increase of benefit expenditure. It thus proposed the above mentioned items from (1) to (4) plus the item of raising the contribution rates of the social security pension schemes. The last one was, however, rejected by the Pension Policy Committee of the LDP as described in the next paragraph; they took account of the very bad economic conditions prevailing in the country.

Third the Liberal Democratic Party. The LDP deliberated the three reform alternatives, which the MHW showed to them in October 1998, in their Pension Policy Committee. It published a report in December 1998 and showed the direction of the reform. It was almost the same as one of the alternatives the MHW showed except for two points: (a) it proposed to freeze the contribution rates, and (b) it proposed to increase the subsidy rate from the general revenue for basic pension benefits. Based on the LDP's report, the government finalized the reform bill and submitted it to the Diet in July 1999. It took time to submit the bill because the LDP started a talk with the Liberal Party (LP) to form a coalition government. The LP agreed to participating in the coalition, but they insisted that the basic pensions should be financed by tax. Finally they conceded a minor change in the bill whereby the issue should be deliberated in the future. So the final bill contained provisions of the above-mentioned items from (1) to (6).

Fourth the Diet. Shortly after the bill was submitted to the Diet, the Komei Party joined the coalition as well. The coalition parties were in the great majority both in the Lower House and in the Upper House. The opposition parties were strongly against the bill and tried to make it null and void. In the end, the government parties passed the bill and added the above-mentioned item (7) as a sort of compromise.

In the following I would like to describe the process in details.

(1) Pension Council

As the further advance of ageing of our population became clear and people became more aware of its cost effects on social security pension schemes, many people began proposing measures for restoring the financial soundness of the schemes or at least pointing out issues to be reviewed. Pressed by these moves, the Minister of Health and Welfare asked the Pension Council, advisory body to the Minister on pension matters, to discuss the problems and to propose measures for reform in May 1997. It took up all the problems raised and discussed them intensively since then. It finally issued its report on 9 October 1998, setting the goals that the reform should achieve:

- To protect and maintain the social security pension schemes;
- To restore public confidence in the social security pension schemes by providing them with a clear future vision of the schemes.

It also identified the conditions to be met by the reform:

- To show concretely what the future benefits will be;
- To indicate the sustainable level of contributions;
- To correct the intergenerational inequity as much as possible, and to maintain the equity among people in the same generations;
- To restore long-term balance of the schemes by not leaving too much burden on to the future generations through reducing the increase of total benefit expenditure.

The main issues the Pension Council took up were:

- benefits and contributions of the future generations;
- financing method of the social security pension schemes;
- privatization of the social security pension schemes;
- financing the basic pensions by tax;
- increasing the national subsidy;
- indexation of benefits;
- active beneficiaries aged over 65;
- beneficiaries with high level of income;
- pensionable age of the EPI scheme;
- contribution programme;
- pensionable remunerations;
- corporate pension plans;
- investment of the reserve fund of the social security pension schemes.

On some issues, the views of the Council members differed. The employer representatives favoured privatization of the EPI scheme while the employee representatives and the scholars would rather keep the present social insurance framework. Both employer and employee representatives favoured, as the future scheme, financing the basic pensions by tax while some of the scholars insisted to maintain the present contributory framework. The employer representatives and most of the scholars supported measures to raise the funding level while the employee representatives supported the PAYGO financing. There were many other issues on which views were divided. The report of the Council included all the differentiated views.

(2) Five scenarios

In the meantime, the Ministry of Health and Welfare (MHW) was also preparing for the reform, issuing a consultation document and conducting a survey of knowledgeable people's opinions. The consultation document, issued on 5 December 1997, showed five scenarios on benefit and contribution levels to provide the nation with basic quantitative information for discussions. These were as follows:

- Scenario A
  To maintain the present benefit level. The contribution level would be more than 34 % for monthly salary.
- Scenario B
  To reduce the ultimate contribution rate to 30 %. In order to do so, the total amount of benefit expenditure in 2025 should be reduced by 10 %.
- Scenario C
  To reduce the ultimate contribution rate to 26 %, which roughly corresponds to the contribution rate of 20 % for yearly income. In order to do so, the total amount of benefit expenditure in 2025 should be reduced by 20 %.
- Scenario D
  To reduce the ultimate contribution rate to 20 %. In order to do so, the total amount of benefit expenditure in 2025 should be reduced by 40 %.
- Scenario E
  To limit the role of the social security pension scheme to paying solely the basic pensions and to privatize the earnings-related benefits provided by the EPI scheme.

(3) MHW publication on pension matters

Furthermore, the MHW published a reference material on pension matters for the first time in February 1998, describing the present situation of the social security pension schemes with detailed data and showing various opinions for reform.

(4) Survey of opinions of knowledgeable people

The MHW also conducted a survey of opinions of knowledgeable individuals in March 1998. Here, the knowledgeable individuals mean leaders of business circle, trade unions, mass communications circle, scholars, etc. The questionnaires were sent to 2,175 individuals and 65.7 % of them answered. The most supported scenario was Scenario C. At the same time more than 70 % of them supported the idea of maintaining the current social-insurance framework of the EPI scheme while only 17 % of them supported the privatization of the EPI scheme.

(5) MHW reform alternatives

In October 1998, the MHW issued three alternative reform plans following the publication of the report by the Pension Council. Since the survey of opinions of knowledgeable individuals showed that the most supported scenario was Scenario C, all the three alternatives aimed at the ultimate contribution rate of about 26%. Main items common to all the three alternatives were:

- To change the basis of indexation of the social security pension benefits after award to the increase of the CPI from that of the disposable income of the active workers;
- To extend the coverage of the EPI scheme to the active employees in the latter half of their sixties and make them contribute. To introduce income-testing to their benefits as well;
- To change the contribution-benefit basis to yearly income including bonuses from the current monthly salary or wages;
- To raise the contribution rate of the EPI scheme by 2.0% every five years.

Together with these items, Alternative I included the item to raise the pensionable age of the earnings-related part gradually to 65. It also included the item to reduce the benefit level of the earnings-related part by 5 % with the would-be benefit amount in terms of FY 1994 value and indexed to the CPI increase secured. Alternative II included the item to reduce the benefit level of the earnings-related part by 15 % with the would-be amount secured. Alternative III included the item to reduce the benefit level of both the earnings-related part and the basic pensions by 10 % with the would-be amount secured.

The MHW reported the three alternative reform plans to the LDP.

(6) LDP Pension Policy Committee

The ruling Liberal Democratic Party (LDP) deliberated the three alternatives in the Pension Policy Committee, and the committee issued its report on 2 December 1998, clarifying the direction of the reform. The contents of the report were almost the same as Alternative I of the above-mentioned MHW reform plans except that the following three points were added:

1. The rate of national subsidy for the basic pension benefits should be raised to 1/2 from 1/3 by the year 2004 by securing its financial resources. It should be when this is realized that

the contribution rates of the social security pension schemes, so frozen as to be described in the following point 2., would return to the normal track of contribution programmes.

2. The contribution rates of the social security pension schemes should be frozen at the current level for the time being, taking into consideration the present extremely bad conditions of economy.
3. The ultimate contribution rate of the EPI scheme should not be greater than 19 % of the yearly income (24 % of the monthly income) presuming that the rate of national subsidy would be raised to 1/2. That of the NP scheme should be much lower than ¥20,000 per month in terms of FY 1999 value.

(7) Final reform bill

In the wake of the LDP report, the MHW finalized the reform bill and was about to submit it to the Diet in March 1999 when it bumped against an unexpected obstacle. Shortly after its publication of the reform plan in December 1998, the LDP started a talk to form a coalition government with the Liberal Party (LP) since the LDP was not in the majority in the Upper House. The coalition was eventually formed at the end of 1998. When the talk was going on, the issue of pension reform was discussed as a matter of course. We took it for granted that the LP agreed to the LDP reform plan when they formed the coalition. Nevertheless the LP insisted that the bill should include a provision that the basic pensions should be financed by tax in due course and refused to give final consent to the reform bill just when we were taking the final steps to submit the bill to the Diet. The LDP insisted that the current contributory system should be maintained. Both parties negotiated again and again. Finally they reached agreement on 14 July 1999. It was to add a provision in the reform bill that the financing of basic pensions should widely be reviewed. Their note of agreement also included paragraphs that the two parties were to have periodical meetings to deliberate pension reform, and that the deliberations should include reviewing the current three-pillar structure, discussing how to finance the social security pension schemes with the consumption tax reviewed in connection with this and reviewing the benefits. The cabinet finalized the reform bill on 19 July 1999. It was submitted to the Diet on 27 July 1999.

The main items of the reform bill are as follows:

- The level of benefits of the earnings-related part the EPI scheme provides is to be reduced by 5 % with the transitional provisions securing the amount so far earned, whereby the multiple in the benefit formula is to change to 7.125 ‰ from 7.5 ‰.
- The basis of indexation of the amount of benefits for those aged more than 65 is to be

changed from the rate of increase of disposable income of the active workers to that of the CPI.

- The pensionable age for the earnings-related part of the EPI scheme is to be raised gradually from 60 to 65, starting in 2013 and ending in 2025 by birth cohort for males. For females it is to start in 2018 and to end in 2030.
- Active workers aged between 65 and 70 are to be covered by the EPI scheme and income-testing for their benefits is to be introduced.
- The rate of national subsidy to the basic pension benefits should be raised to 1/2 from the current rate of 1/3 by securing the financial resources for it by the year 2004.
- The contribution rates of the NP scheme and the EPI scheme are to be frozen at the current level for the time being.

The bill started to be deliberated in the Diet in October 1999 and finally passed the Diet on 28 March 2000. There were very few amendments to the bill. In fact the only amendment which will influence the financial conditions of the social security pension schemes is the reduction rate of benefit amount for those who choose starting to receive their old-age basic pensions earlier than the normal pensionable age of 65. The reduction rate, for example, for those who choose the age of 60 instead of the normal pensionable age of 65 is currently 42 %. It is to be reduced to 30 % from FY2001 for those who reach 60 in and after FY2001. Incidentally, it is not a provision of the law but that of the regulation. It was what the Minister of Health and Welfare promised during the Diet session.

The opposition parties, in the meantime, tried to delay the deliberations as much as possible to make the bill invalid because the trade unions wanted to keep the benefits unchanged. They could not, however, show their reform plan to make the schemes sustainable especially for future generations.

As is seen from the previous discussion, one of the big issues in the next reform is to secure the financial resources for the national subsidy to the basic pension benefits. Is it by consumption tax hike? Or by any other method? It will intensively be discussed after the general election this year.

(8) 1999 Actuarial valuation

In line with the contents of the bill, the 1999 actuarial valuation was carried out both for the EPI scheme and for the NP scheme. The financial projections show that the ultimate contribution rate of the EPI scheme would have been 34.5 % of the monthly pensionable remunerations if we had kept the scheme as it had been before the 2000 reform. It is estimated to be reduced to 27.6 % by the reform bill if the national subsidy rate is to be kept at the current 1/3. It is to be 25.2 % if the national subsidy rate is to be raised to 1/2. In the case of the NP scheme, the ultimate contribution rate would have been ¥26,400 per month in terms of FY 1999 value if we had kept the scheme as it had been before the 2000 reform. It is estimated to be reduced to ¥24,800 by the reform bill if the national subsidy rate is to be kept at the current 1/3. It is to be ¥18,200 if the national subsidy rate is to be raised to 1/2.

The ultimate contribution rate of the EPI scheme in the case of the national subsidy rate of 1/3 could not satisfy the condition that it should not exceed 26 %, which was the most supported scenario by the knowledgeable people. The main reason is that we have frozen the contribution rate at the current level instead of raising it by 2 % as proposed in the MHW's three alternatives.

Here we should note that, since there was an amendment of the reduction rate of the benefit amount for those who choose to start receiving their old-age basic pensions earlier than the normal pensionable age of 65, these ultimate contribution rates will be a little bit higher. We are making projections now.

The contribution rates of the social security pension schemes seem sustainable as long as the national subsidy rate is raised to 1/2. Next step is to find the financial resources for raising the subsidy rate.

5. Funding options

As the contribution rates for the social security pension schemes increase, people become more and more conscious of intergenerational equity. One form of such consciousness is expressed in the money's worth discussion. Another form is in the discussion of funding. Shortly after the publication of the new population projection and its cost effects on the social security pension schemes, many economists started to insist that the social security pension schemes should be financed by advance funding. One extremity of such proposals was privatization of the earnings-related part. In the following I would like to summarize the discussions raised on funding options during the 2000 reform.

(1) Financing method of the EPI scheme

The financing method of the EPI scheme is not a pay-as-you-go (PAYGO) financing method nor a full funding method; it is a partial funding method exploiting the merits of both PAYGO financing and funding. It is characterized by the accumulation of a considerably large reserve fund. The actual size of the accumulated fund at the end of FY 1999 is estimated to be about ¥170 trillion.

The EPI scheme adopted a full funding method when it was introduced in 1942. When it experienced severe inflation just after World War II, it could not raise the contribution rate to the full funding level. Since then several actuarial valuations have taken place and, each time, the benefit level was raised as well as the contribution level. It was, however, the case on each occasion that the contribution level was far lower than the full funding level, although it was at a fairly higher level than the PAYGO contribution rate. When the automatic adjustment of benefits to the CPI increase or to the salary increase was introduced in 1973, its financing came to rely more on the intergenerational transfer of income. Even so the contribution rate was kept higher than the PAYGO level, continuing to accumulate a fairly large-sized reserve fund.

On the occasion of each valuation we have tried to set out the principle for financing the EPI scheme. Although the direction sought has by and large been the same except for valuations at an early stage, its formulation or expression has been somewhat varied. What we have established so far can be stated as follows:

The contribution rate should be raised gradually to a level ultimate contribution rate, taking into account equality between the present and future active participants in the scheme and the reduction of the ultimate contribution rate by use of the investment return from the accumulated fund. It should be added that, when we establish a contribution programme, the raising of the rate should not be accelerated.

(2) Degree of funding

As described in the previous section, the EPI scheme is financed on the basis of a partial funding method. It has, therefore, accumulated a fairly large size of fund. As the discussions on funding options got hot, many people asked how large was the size relative to its obligations to pay the benefits which had already accrued. We evaluated it and found that the present value of the obligations of the EPI scheme for the covered months corresponding to the periods prior to the end of March 2000 is (Tables11-1 to 11-3):

- under the scheme before the reform: ¥ 790 trillion
    1. Since the estimated amount of the accumulated reserve fund at the end of March 2000 is ¥ 170 trillion, the funding degree is about 22 %. If we compare the size of the present value and the size of the accumulated reserve fund with the gross domestic product (GDP) which is estimated to be ¥ 495 trillion in FY 1999, they are 160 % and 34 % respectively.
    2. If we restrict the obligations to those of beneficiaries and exclude those of terminated participants and active participants, the present value is about ¥ 350 trillion. If we measure the funding degree by this present value, it is about 49 %.
- under the scheme stipulated in the reform bill: ¥ 720 trillion
    1. Since the estimated amount of the accumulated reserve fund at the end of March 2000 is ¥ 170 trillion, the funding degree is about 24 %.
    2. If we restrict the obligations to those of beneficiaries and exclude those of terminated participants and active participants, the present value is about ¥ 330 trillion. If we measure the funding degree by this present value, it is about 52 %.
    3. The reform bill may be said to reduce the total cost for the period prior to April 2000 by about 9 %.

To evaluate the present value, we base on the same assumptions as the 1999 actuarial valuation, whereby the assumed rate of investment return is 4 %, the assumed rate of benefit increase is 2.3 % for years before 2025 and 2.5 % for years after 2025, and the assumed rate of CPI increase is 1.5 %.

As is shown in Tables 11-1 to 11-3, the gap between the obligations under the scheme stipulated in the reform bill and the accumulated reserve fund is partly financed by the national subsidy to the basic pension benefits and the rest is amortized by raising the contribution rate. Quantitatively speaking, the amount of the gap is about ¥ 550 trillion, and, in the case where the national subsidy rate is 1/3, that part of the gap financed by the national subsidy amounts to about ¥ 100 trillion. The remaining ¥ 450 trillion is to be amortized by raising the contribution rate. In the case where the national subsidy rate is 1/2, the part of the gap financed by the national subsidy amounts to ¥ 130 trillion. The remaining ¥ 420 trillion is to be amortized by raising the contribution rate.

(3) Assessment of the current contribution level

By using the same way as used to assess the degree of funding, we can also assess the current contribution rate. As is shown in Tables 11-1 to 11-3, the present value of the obligations of the EPI scheme corresponding to the future period at the end of March 2000 is about ¥ 1,420 trillion under the scheme stipulated in the reform bill. It consists of the part of ¥ 180 trillion financed by the national subsidy, the part of ¥ 1,170 trillion financed by contributions of the current level of 17.35 % and the part of ¥ 80 trillion financed by that part of the contributions of the rate raised in the future in excess of the current rate of 17.35 %. As explained in the section referring to the 1999 actuarial valuation, we have made the contribution programme for the EPI scheme with the contribution rate gradually raised to the ultimate contribution rate of 27.6 % in the case where the national subsidy rate is to be kept at the current rate of 1/3. The raised part of the contributions in excess of 17.35 % is to amortize the unfunded obligations corresponding to the past period (¥ 450 trillion) or the obligations corresponding to the future period (¥ 80 trillion) which are not to be financed by the current contribution rate of 17.35 %. This means that, even after the reform, the contribution rate is not enough to finance the obligations which are to accrue in the future period; it is still passing part of the future obligations on to the further future generations. In other words, the current rate of 17.35 % is a little bit smaller than the 'normal cost'. The gap has dramatically been reduced from ¥ 330 trillion to ¥ 80 trillion by the reform though.

(4) Privatization of the earnings-related pension benefits

As the contribution rates of the social security pension schemes increase and the future benefit level threaten to be reduced, people become more conscious of the intergenerational equity in bearing the cost. Though the EPI scheme adopts a partial funding method, money's worth measurements show that the younger you are, the smaller the return will be. This sort of dissatisfaction has led some people to propose that the pension schemes should be privatized.

When the Pension Council started to deliberate the pension issues in 1997, there had already been a proposal that the role of the social security pension schemes should be limited to providing the basic pensions and the earnings-related pension benefits the EPI scheme provides should be replaced by corporate pension plans or by personal pensions. The Council deliberated the proposal. Employer representatives supported it because they thought it would reduce the hiring cost. In the end, however, it recommended not to adopt it for 2000 reform but to maintain the current framework. The reasons they mentioned were:

- During the transitional period when there exists the gap between the obligations of the EPI scheme and the accumulated pension fund, the active participants in the EPI scheme would have to bear duplicated burden; one to accumulate for themselves and the other to pay the benefits for their seniors in retirement. How to assign pieces of the gap to generations would hardly be solvable practically. In fact, the present value of the obligations the EPI scheme should discharge is about ¥ 330 trillion at the end of March 2000 even under the scheme stipulated in the reform bill as is shown in Tables 11-2 and 11-3. The contribution rate to amortize the gap for perpetuity is about 5 %. Under the scheme before the reform, it was about ¥ 380 trillion and the contribution rate was about 6 %.

- On the occasion of great inflation, in order to maintain the purchasing power of pension benefits, it is normally necessary to raise the contribution rate under full-funding financing method because there would emerge unfunded liabilities. It would quite often be troublesome because, under full-funding financing method, people take it for granted that they are saving for themselves without the element of intergenerational income transfer and that the contribution rate would remain almost stable.
- It would quite often be difficult for small companies to introduce corporate pension plans or to make contract with financial institutions of personal pensions for their employees. In such a case the employees only end up with the basic pensions.

The Pension Council, however, took note of the fact that the proposal reflected some dissatisfaction with intergenerational inequity or inefficiency of PAYGO financing in a rapidly ageing society. Therefore it decided to continue to deliberate the issue.

During the Diet deliberations of the reform bill, the opposition parties repeatedly took up money's worth problem. Some of the mass communications also shed spotlights on it. So, as the Pension Council pointed out, this problem will be the subject to be discussed again in the future.

(5) Financing method of the social security pension schemes

Apart from the proposal to privatize the earnings-related pensions the EPI scheme provides, there was also a proposal that it should be financed on the basis of full-funding method. This was another expression of consciousness of intergenerational inequity. The Pension Council deliberated the issue and concluded that, although it should continue to deliberate it, the present partial funding method should be maintained for the 2000 reform. It mentioned the same reasons as it did for not adopting the privatization proposal as well as the following ones:

- It would be difficult to increase the contribution rate greatly and immediately.
- The size of the accumulated fund would be so large that there would appear several

problems very difficult to solve as to its management and investment.

Based on this, we decided to continue to make the contribution programme by the current partial funding method described in (1).

(6) Financing the basic pensions by tax

In connection with the proposal of privatizing the EPI scheme, there is a proposal of financing the basic pensions by tax. It is partly because those who propose to privatize the EPI scheme know that privatization may restrict the benefit level, sometimes making it far from sufficient for basic livelihood, or even worse situation may occur where many people may end up with no fund at all to live on in their retirement. They, therefore, propose to set a safety-net against such a disastrous situation, and to make the basic pensions play such a role. In this case, the role of the basic pensions becomes more like that of social assistance rather than social insurance and so they propose to finance the basic pensions by tax and to change them into non-contributory scheme.

Apart from this, the basic pensions have their own problems:

- The first-kind insured people contribute flat-rate contributions to the NP account. However, about 7 % of the people who should compulsorily be the first-kind insured people did not yet complete their procedures for coverage in 1995. Furthermore about 9 % of the first-kind insured people did not pay their contributions in 1996.
- As to the financing of the basic pensions, there was also a complaint, mainly from some of the working women, that it was not fair that the third-kind insured people, almost all of whom were non-working housewives, could get their old-age basic pensions without paying their contributions. This complaint may be attributable to the diversified life style of women.

Based on these, there was a proposal that the financing of the basic pensions should be changed to tax from the current social security contributions. In other words, it was a proposal to change the basic pension scheme to non-contributory scheme. The proponents also claimed that the measure would reduce the administrative cost of collecting contributions. They added that the tax for this should be ear-marked indirect tax.

The Pension Council, however, concluded that the proposal would drastically change the nature of the basic pension benefits as well as the tax system, that it would not be realistic at the moment and that it should continue to be deliberated. The main elements the Council deemed to be the problems about the proposal were as follows:

- Would the nation agree to increasing tax greatly?
- Would it be possible to raise the tax rate as the benefit expenditure increases?
- The relationship between benefit and contribution which is clear under the social insurance system would be lost.
- The nature of the pension benefits would be changed to one similar to social assistance with income-testing or means-testing.
- The proposed ear-marked indirect tax would reduce the burden on employers and increase that on households.

Following the Pension Council's report, we did not put the proposal in the reform bill, but, as described in the previous chapter, the LP insisted to finance the basic pensions by tax and a provision was added to the reform bill that the financing of basic pensions should widely be reviewed. The issue will, therefore, continue to be discussed.

(7) Increasing the national subsidy

Apart from the proposal of financing the basic pensions by tax, there was a proposal to increase the subsidy rate from the general revenue to the basic pension expenditure, the current rate being 1/3. The proponents claimed that the first-kind insured people of low income should be relieved in paying their flat-rate contributions which is regressive to the income. Some proponents thought that it might be a stepping-stone to financing the basic pensions by tax.

The proposal has some implications on funding:

- For the portion of the benefit financed by the subsidy, the schemes never accumulate the reserve fund. In other words, this portion totally depends upon the future tax-payers. Taking account of the ageing population, it might expand intergenerational inequity while it might lessen the regressive nature of the flat-rate contributions.
- At the same time, it might give a chance to increase the degree of funding of the social security pension schemes. For example, if we keep the same contribution programme as the one before increasing the subsidy rate, we can increase the degree of funding. This might help us reduce intergenerational inequity.

These elements as well as the nature of the national subsidy itself should be taken account of when we discuss the proposal. The Pension Council deliberated it and majority of the Council's members agreed to raising the national subsidy rate to 1/2 in the future. They also agreed, however, that the national financial condition was so bad that the proposal should continue to be deliberated after the 2000 reform. Following the Council's report, the reform bill did not at first contain a provision to raise the national subsidy rate.

The issue, however, became a political subject at the final stage of preparing the reform bill, mixed with the problem of changing the basic pensions into a non-contributory scheme. Within the LDP, there were differentiated views on financing of the basic pensions. Some people supported the present framework of contributory system. Other people would rather have a non-contributory system. Though we do not know whether it was a compromise or not, the December 1998 report of the LDP Pension Policy Committee included the item to raise the national subsidy rate from 1/3 to 1/2 by the year of 2004 by securing the financial resources. This was added to the reform bill as a supplementary section. Perhaps even those who supported the current contributory framework had concerns about the regressive nature of the flat-rate contributions. When the LDP started a talk to form a coalition government with the LP, this was again the subject of discussion. Since the LP supported non-contributory scheme, it urged the LDP to include a provision to change the basic pensions to a non-contributory scheme in due course. In the end it was not added in the reform bill. Instead a provision that the financing of the basic pensions should widely be reviewed was added. It was probably because there were many people in the LDP who supported the current contributory scheme. Meanwhile employers' associations and trade unions also claimed that the basic pensions should be financed by tax in the future though not at this time. Hence raising the national subsidy rate was almost unanimously supported. On the other hand, there have emerged the issues of the next reform of what the financial resources should be for raising the national subsidy rate and of whether we should change the basic pensions to a non-contributory scheme or not. At the same time, we should take full advantage of this change to increase the degree of funding and reduce the intergenerational inequity when we decide the contribution programme on the next actuarial valuation.

(8) Investment of the fund

The accumulated reserve fund of the social security pension schemes has so far compulsorily been entrusted to the Fund Trust Bureau of the Ministry of Finance. The interest rate for this has usually been the same as that of the government bonds. Together with the money of postal savings and of postal insurance, it has been the financial resources of the fiscal investment and loan programme. It has been used to construct motor ways, airports, to build public facilities, to lend money to general public to help them own their houses, etc. It did help the country construct industrial infrastructure after World War II, which must have contributed to the great economic growth in 1960's and 1970's. As the economy got matured, the fiscal investment and loan programme needed to be reviewed. Its necessity and efficiency started to be questioned. The review is still going on, but, in November 1997, the Fiscal Investment Council, an advisory body to the Minister of Finance and the Minister of Post and Telecommunications, published a report which claimed that, as a part of the review, the obligation to entrust the reserve fund of the social security pension schemes to the Fund Trust Bureau should be abolished and that the Minister of Health and Welfare should be given discretion to invest the reserve fund. At the same time, as people got more conscious of bearing the social security contributions, they came to pay more attention to the investment return of the accumulated reserve fund.

Under such circumstances, the bill to introduce a new framework for investment of the accumulated reserve fund was prepared and passed the Diet together with the pension reform bill. The law requires the Minister of Health and Welfare to prepare a written statement of the investment principles. It also requires him to obtain the advice of the Investment Committee which consists of representatives of employees and employers, experts of finance, economics, pensions, etc. when he prepares the statement. The statement of the investment principles must cover:

- the objectives of investment and the principal policy to achieve them,
- the kinds of investments to be held and the balance between different kinds of investments (the principal port-folio),
- the matters the Investment Fund of Social Security Reserve (explained below) must observe in implementing investment and management of the accumulated reserve fund,
- the criteria to assess the performance of the Investment Fund of Social Security Reserve.

In preparing the statement, the Minister of Health and Welfare is legally required to take note of the safety and surety of investment, the diversification of investments, the effects on the capital markets and other activities in the private sector of the vast size of the accumulated reserve fund which is of public nature, etc. He is also required, in making the principal port-folio, to take account of the risks of the investment return, which can be simulated, for example through Monte-Carlo method, making use of the financial projections set out at the latest actuarial valuation. The statement should be reviewed at least once a year, obtaining the advice from the Investment Committee.

The Investment Fund of Social Security Reserve (IFSSR) is to be set up by the law. It is a public corporation, and invests and manages the accumulated reserve fund, which the Minister of Health and Welfare entrusts to it, according to the statement of investment principles. It transfers the investment return to the pension accounts. The actual investment is entrusted by the IFSSR to private financial institutions like trust banks, insurance companies, investment advisory firms, etc. except for a portion invested in-house by the IFSSR. The in-house investment is only permissible in bonds. The IFSSR must prepare a written statement of investment and management policy for deciding the port-folio which must, of course, be within the permissible range of the Minister's statement of investment principles and for making contracts with private financial institutions, evaluating their performances and changing the contracts. The IFSSR implements its duties according to the statement. The decisions of the IFSSR are made by the board which comprises a president and two other members. The IFSSR also appoints several advisors on investment and management of the fund. They must participate in the decision-making process of the board.

Duty of care and duty of loyalty solely for the interest of people covered by the social security pension schemes are imposed on all the people concerned with the investment of the fund, including the officials of the MHW. If a person commits a breach of duties, he may be penalized or punished. These duties must also be provided in the contracts made by the IFSSR with private financial institutions.

The Minister of Health and Welfare and the IFSSR are not allowed to exercise the stockholder's right to vote. Only those private financial institutions to whom investment is entrusted can do so.

Disclosure of information is also required. The Minister's statement of investment principles, the annual report and the IFSSR's business report must be submitted to the Investment Committee and published. The IFSSR must prepare financial statements every year and they must be audited internally by the auditor of the IFSSR as well as externally by public accountants or by auditing firms. The auditors' report must be published.

The new framework of investment of the accumulated reserve fund of the social security pension schemes is to become effective when the bill to reform the fiscal investment and loan programme, which is going to be deliberated soon, passes the Diet. It will have possibly come into effect in FY 2001. After the new framework starts, the amount of money invested under the new framework is to be gradually increased to avoid adverse effects on the fiscal investment and loan programme and the financial markets.

(9) Summing up

One of the features of the 2000 reform with reference to funding options was the fact that it avoided changing the nature of the social security pension schemes drastically. It did not adopt privatizing the EPI scheme nor changing the basic pensions into a non-contributory scheme. The proposal was not supported by the survey. It did not give a practical solution for amortizing the unfunded liabilities which would emerge by privatization, either. On the other hand, the reform did not adopt managing the EPI scheme thoroughly on a PAYGO basis. It did take account of the needs to minimize the intergenerational inequity.

We should, however, bear it in mind that the current contribution rates are not enough to finance the obligations which accrue in the future; we further pass some of the obligations on to the further future generation. In the next actuarial valuation, we should make contribution programmes, taking account of these elements.

Investment and management of the fund is going to be drastically changed, and we have to work out the details of the rules to implement it, though its framework is fixed by the new law.

6. Concluding remarks

(1) Defined-contribution plans

Apart from the social security pension reform discussion, introduction of defined-contribution pension plans was deliberated in the subcommittee on private pension plans of the LDP Pension Policy Committee for more than two years. There were various reasons for it:

- Under the long-lingering bad investment environment which only produced very low rate of return, many employers lost financial strength to amortize the losses of their defined-benefit corporate pension plans continuously caused by the poor investment return much lower than the assumed interest.
- More and more employees, especially young employees, have come to change their jobs and the life-time employment is being eroded. Seniority system is being taken over by merit system as well. Under such circumstances, portability of the retirement benefit fund has become even more important to employees.
- Some people argued that only limited people were enjoying the advantages of defined-benefit corporate pension plans and thought that the defined-contribution pension plans would give chance to everyone to enjoy the advantages of complementary pensions, especially to those working for small companies.

The bill to introduce them was worked out and submitted to the Diet in March 2000. It is to add a new funding vehicle to complementary pensions as well as to give chance to employers to change their defined-benefit plans to defined-contribution plans.

(2) Diet deliberations

When the reform bill was deliberated in the Diet, one of the questions most frequently raised was about the role of the accumulated reserve fund. Many Diet members asked why we had to have such a large size of fund and wondered if we could reduce the contribution rate by deciding not to accumulate the reserve fund. This is a misunderstanding as a matter of course. The fund produces investment return which keeps the contribution rate lower than the PAYGO contribution rate in the future. But this kind of misunderstanding about the role of the accumulated reserve fund seems prevalent all through the world. The social security actuaries might have to explain the mechanism plainly to them.