

Current Situation and Future Issues of Corporate Pension in Japan

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FY 2019 Financial Verification of the public pension, which was released in August 2019, shows that the adequacy of future benefits could be ensured if the amendments based on "Option Trial" are implemented on the premise of economic growth and labor participation.

From the perspective of retirement income, "Work Longer" and private pension are very important as well as the public pension. In recent years, the work environment for women and elderly has been improved, but the corporate pension plan's coverage has declined particularly in small and medium-sized companies. In response to this, the government has been promoting the development of individual DC ("iDeCo"), but the coverage is not sufficient. The retirement income of the working generation is increasingly dependent on the public pension.

This paper proposes the establishment of "Auto Bridged Pension" as a scheme to solve the problem of retirement income. The main points are as follows.

- It applies to all workers, and companies collect monthly premiums.
- The premiums are consolidated into the single DB and invested for one year. It will be transferred automatically to iDeCo at the end of each year.
- It is possible to withdraw from the DB before transferring.

Key words

employment situation, corporate pension, individual DC

1. FY 2019 Financial Verification of the public pension

1.1. Japanese pension system

Japanese pension system has the three-floor structure. The public pension on the 1st and 2nd floors supports the basic life of the people in their old age, while the corporate pension and individual pension on the 3rd floor meet various needs in their old age.

National Pension System (NP) on the 1st floor and Employees' Pension Insurance System (EPI) on the 2nd floor are mandatory systems operated by the government and provide lifetime pension with the indexation.

Corporate pension and individual pension on the 3rd floor are voluntary systems operated by companies and individuals and generally provide fixed pension without an indexation. Lifetime pension is rare.

1.2. Role of the public pension

Currently, the public pension accounts for 61.1% of the elderly households' income in Japan.

The public pension plays an extremely important role in supporting the elderly, and also allows the working generation to live without worrying about their parents' economic life.

Table 1-1: Breakdown of elderly households' income

Public pension	61.1%
Working income	25.4%
Private pension, Savings, etc.	13.5%

Source: Ministry of Health, Labour and Welfare, Comprehensive Survey of Living Conditions, (2018)

"Households with the public pension accounting for 100% of total income" accounted for 51.1% of the elderly households receiving the public pension.

The public pension is the main source of income for many elderly households.

Table 1-2: Percentage of elderly households receiving public pension by percentage of public pension to total income

Ratio of public pension to total income	Percentage of elderly households
100%	51.1%
80~100%	11.2%
60~80%	13.4%
40~60%	11.6%
20~40%	8.7%
0~20%	4.1%

Source: Ministry of Health, Labour and Welfare, Comprehensive Survey of Living Conditions, (2018)

1.3. Financial Verification of the public pension

Japanese public pension has shifted from DB-basis to DC-basis in 2004. This was called the paradigm shift. The details are as follows.

- Increase in insurance premiums (Set upper limit)
It will be raised gradually through 2017. The final premium is as follows.
NP ; JPY17,000 (in 2004 price) / EPI ; 18.3%
- Introduction of the modified indexation as an automatic balancing mechanism (Macro-Economic Slide)
It distributes the fixed burden.
It will continue until the budget is balanced, during which time the replacement rate will decline.
- Utilization of the reserve fund
Although it is a pay-as-you-go system, it has a large reserve fund.
The reserve will be used to provide benefits to future generations.
- Raising the national subsidy rate
The national subsidy rate for NP will be raised from 1/3 to 1/2.

At least every five years, the government will conduct Financial Verification to check present and future.

- ◇ Financial Projection
- ◇ Macro-Economic Slide Outlook

If the replacement rate is expected to fall below 50% by next Financial Verification (five years later), the government is required by the law to consider how the benefits and burdens should be provided. The specific formula for the replacement rate is as follows. It is expressed as the ratio of the pension amount to the average take-home income of active males.

The formula of the replacement rate

- The replacement rate = $(\text{Couple's NP amount} + \text{Husband's EPI amount}) \div (\text{The average take-home income of active males})$
- FY 2019 rate ; 61.7% = $(\text{JPY65,000} \times 2 + \text{JPY90,000}) \div \text{JPY357,000}$

Nowadays, various lifestyles have been widespread, and the households in which only husbands work is decreasing. However, the replacement rate is the important indicator in Financial Verification from the legal perspective.

1.4. Summary of FY 2019 Financial Verification

FY 2019 Financial Verification of the public pension, which was released in August 2019, shows that the adequacy of future benefits could be ensured if the amendments based on "Option Trial" are implemented on the premise of economic growth and labor participation.

Specifically, the replacement rate in FY 2019 was 61.7%, and in FY 2024 it will be 60.0% to 60.9% depending on each economic growth and labor participation. The figure exceeds 50%, so no legal action is necessary at this time.

In the case of high economic growth and labor participation (Case I-III), the replacement rate will be 50% in 2046 (2047). Promoting economic growth and labor participation will help maintain the adequacy of future benefits. On the other hand, in the case of low economic growth and labor participation (Case IV-VI), the replacement rate falls below 50%. Legal action will be required in the future.

Table 1-3: Macro-Economic Slide Outlook

	FY2019	Economic assumption	FY2024	After the fiscal balance
The replacement rate	61.7%	Case I	60.9%	51.9%
		Case II	60.6%	51.6%
		Case III	60.2%	50.8%
		Case IV	60.1%	46.5%
		Case V	60.1%	44.5%
		Case VI	60.0%	36~38%

Case I~III: High economic growth and labor participation

Case IV~VI: Low economic growth and labor participation

Source: Ministry of Health, Labour and Welfare, FY 2019 Financial Review, (2019)

1.5. Option Trial

In the case of high economic growth and labor participation, the adequacy of future benefits will be maintained.

On the other hand, in the case of low economic growth and labor participation, or if the replacement rate of 50% is not sufficient for the elderly, what reforms will be necessary in the future?

Option Trial is the basis for discussion and suggests a reform plan. This time, Option A and Option B were announced as follows.

The contents are nothing new and have been under consideration for more than 10 years. During this period, the public pension was used for political

activities to gain votes by inciting unrest, leading to a change of government. It was not an environment in which policymakers could discuss calmly.

1.6. Option A

Option A is Further Expansion of the EPI coverage.

The current number of the EPI participants is 44 million. The total number of employees is 57 million, so 13 million employees are not covered by the EPI. By enrolling these 13 million people, the replacement rate will increase.

This time, the following three patterns were shown.

- A-1: About 1.25 million Expansion
 Extending the coverage to non-regular employees working on the same conditions as the current provision except for the size of the workplace (with no more than 500 employees)
 The replacement rate (Case III) is 51.4%, up 0.6% from 50.8%.
- A-2: About 3.25 million Expansion
 Extending the coverage on the same conditions as the current provision except for the size of the workplace and the monthly salary
 The replacement rate (Case III) is 51.9%, up 1.1% from 50.8%.
- A-3: About 10.5 million Expansion
 Extending the coverage to the non-regular employees earning no less than JPY 58,000 per month including students and those working for the workplace for less than a year
 The replacement rate (Case III) is 55.7%, up 4.8% from 50.8%.

The wider coverage, the higher replacement rate and the more adequate benefits will be.

Table 1-4: The effect of Option A

	New participants	The replacement rate	The effect
A-1	About 1.25 mil.	51.4%	+0.6%
A-2	About 3.25 mil.	51.9%	+1.1%
A-3	About 10.5 mil.	55.7%	+4.9%

Source: Ministry of Health, Labour and Welfare, FY 2019 Financial Review, (2019)

1.7. Option B

Option B is Prolonging the contribution period and Raising the age limit for the deferral.

- B-1: Prolonging the NP contribution period from 20-60 to 20-65
The replacement rate (Case III) is 57.6%, up 6.8% from 50.8%.
- B-2: Elimination of reduction adjustment for employees aged 65 or older
The replacement rate (Case III) is 50.4%, down from 0.4% 50.8%.
- B-3: Raising the upper age limit of the EPI contribution period from 70 to 75
The replacement rate (Case III) is 51.1%, up 0.3% from 50.8%.
- B-4: Raising the age limit for the deferral of starting to receive the old-age pensions from 70 to 75
The replacement rate (Case III) is up to 95.2%. In this case, since people start receiving benefits at age 75 after working until age 75, the pension amount will increase, but the pension period will be shorter.

Table 1-5: The effect of Option B

		The replacement rate	The effect
B-1	Prolonging the NP contribution period from 20-60 to 20-65	57.6%	+6.8%
B-2	Elimination of reduction adjustment for employees aged 65 or older	50.4%	-0.4%
B-3	Raising the upper age limit of the EPI contribution period from 70 to 75	51.1%	+0.3%
B-4	Raising the age limit for the deferral of starting to receive the old-age pensions from 70 to 75	ultimate 95.2%	ultimate +44.4%

Source: Ministry of Health, Labour and Welfare, FY 2019 Financial Review, (2019)

In this way, Financial Verification of the public pension including Option Trial is shown once every five years. The PDCA cycle has been established to discuss institutional revisions based on this. In Japan, it is important to continue to conduct Option Trial and discuss institutional revisions in response to changes in the social economic and labor markets.

2. Current Situation in the work environment for women and elderly

From the viewpoint of retirement income, it is not desirable to retire early and receive public pensions. It is important to defer the public pension, increase the pension amount, and work longer. In recent years, the work environment for women and elderly has been improved.

2.1. Changes in the employment rate

In the case of male, the employment rate of age 60 or older has increased significantly in recent years. In the case of female, not only age 60 and over, but also the overall employment rate has increased significantly. It is expected that this kind of labor participation will continue to grow in the future. As a result, the total population is expected to decline, but the number of employees is expected to decline moderately.

Table 2-1: The employment rate

Male	2010	2017	2040	Female	2010	2017	2040
	Actual	Actual	Estimated		Actual	Actual	Estimated
Age 15 ~ 19	12.9%	15.9%	14.8%	Age 15 ~ 19	14.6%	16.4%	16.3%
Age 20 ~ 24	60.2%	67.4%	64.7%	Age 20 ~ 24	63.6%	68.8%	68.5%
Age 25 ~ 29	86.5%	89.8%	89.1%	Age 25 ~ 29	72.7%	78.9%	84.6%
Age 30 ~ 34	91.2%	92.3%	92.2%	Age 30 ~ 34	64.1%	72.9%	83.4%
Age 35 ~ 39	92.5%	93.5%	94.0%	Age 35 ~ 39	62.6%	71.4%	88.9%
Age 40 ~ 44	92.9%	93.8%	94.9%	Age 40 ~ 44	68.3%	75.1%	91.2%
Age 45 ~ 49	93.0%	93.5%	94.1%	Age 45 ~ 49	72.7%	77.5%	89.4%
Age 50 ~ 54	91.9%	92.6%	93.2%	Age 50 ~ 54	70.2%	76.4%	88.5%
Age 55 ~ 59	88.0%	91.0%	91.6%	Age 55 ~ 59	61.2%	70.5%	85.4%
Age 60 ~ 64	70.6%	79.1%	86.5%	Age 60 ~ 64	44.2%	53.6%	73.7%
Age 65 ~ 69	46.8%	54.8%	70.1%	Age 65 ~ 69	26.9%	34.4%	53.7%
Age 70 ~ 74	29.3%	34.2%	48.1%	Age 70 ~ 74	16.1%	20.9%	32.4%
Age 75 or older	13.4%	14.1%	17.5%	Age 75 or older	5.1%	5.8%	9.7%

Source: The Japan Institute for Labour Policy and Training, Estimation of Labor Demand and Supply, (2019)

Table 2-2: Changes in the employees

	2017	2040
	Actual	Estimated
Employees	65.3 million	60.24 million
Employment rate (Age 15 or older)	58.8%	60.9%

Source: The Japan Institute for Labour Policy and Training, Estimation of Labor Demand and Supply, (2019)

2.2. Changes in the life expectancy

Compared to 1986, the life expectancy at age 65 has increased by about 5 years. It is also expected to increase for about 3 years in the future. In 2065, the survival rate until age 75 is expected to be 82.41% for male and 92.01% for female.

Table 2-3: The life expectancy

		(year)			
		1985	2015	2040	2065
		Actual	Actual	Estimated	Estimated
Male	Age 0	74.87	80.75	83.27	84.95
	Age 20	55.83	61.13	63.50	65.11
	Age 65	15.58	19.41	21.33	22.60
	Age 75	9.02	12.03	13.61	14.67
Female	Age 0	80.51	86.98	89.63	91.35
	Age 20	61.23	67.30	69.83	71.50
	Age 65	18.96	24.24	26.48	27.94
	Age 75	11.21	15.63	17.64	18.96

Source: National Institute of Population and Social Security Research, Population Projections for Japan (Estimates for 2017), (2017)

Table 2-4: The survival rate

		1985	2015	2040	2065
		Actual	Actual	Estimated	Estimated
Male	Age 20	98.6%	99.5%	99.7%	99.8%
	Age 65	81.2%	88.8%	91.1%	92.5%
	Age 75	60.4%	74.7%	79.5%	82.4%
Female	Age 20	99.1%	99.6%	99.8%	99.8%
	Age 65	90.1%	94.2%	95.5%	96.2%
	Age 75	77.0%	87.7%	90.4%	92.0%

Source: National Institute of Population and Social Security Research, Population Projections for Japan (Estimates for 2017), (2017)

2.3. Health status and willingness to work

According to the "Physical Fitness Test score for age 65 and older", the elderly is about 5-10 years younger than 10-20 years ago. Also, about 80% of age 60 and older who are currently working are willing to work longer until they reach 65 or can work regardless of age.

If the 100 year life comes at a time when the population is decreasing, working only for 40-45 years will lead to a decline in the social economy. It is natural for the social economy to work half as long as a healthy period increases.

Table 2-5: Physical Fitness Test score

		1998	2008	2018
Male	Age 65~69	37.7	41.4	41.7
	Age 70~74	34.6	37.4	39.3
	Age 75~79	30.4	33.8	35.5
Female	Age 65~69	36.8	40.1	42.4
	Age 70~74	33.5	36.9	39.3
	Age 75~79	29.6	33.3	35.8

(point)

Source: Japan Sports Agency, Physical Fitness and Exercise Capacity Survey, (2018)

Table 2-6: The willing to work longer

As far as possible	Up to Age 80	Up to Age 75	Up to Age 70	Up to Age 65	Others
42%	4%	11%	22%	14%	7%

Source: Cabinet Office, Survey of Elderly People's Attitudes toward Daily Life, (2014)

3. Current Situation in private pension

From the viewpoint of enriching old age, it is important to make use of private pension (corporate pension and individual pension), except for some very high-income people. However, the corporate pension's coverage has been on a declining trend.

3.1. Changes in corporate and individual pension

Defined Benefit corporate pension (DB) was established as a scheme to succeed tax-qualified pension plans and the employees' pension fund.

Defined Contribution pension (DC) was established as a new scheme, not savings, referring to the U.S. 401(k).

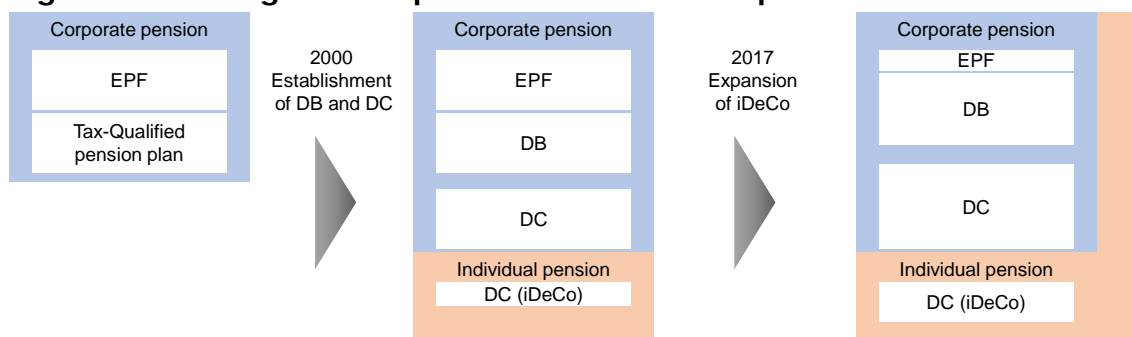
The government has made improvements to corporate pension and individual pension to make them easier to use, including more flexible contribution arrangements and more flexible portability.

The individual DC (iDeCo) originally started as a system for people without corporate pension. Later, in January 2017, the coverage was expanded to include those under NP.

The characteristics of retirement benefit systems in Japan are noteworthy. Even without the corporate pension, many companies have lump-sum payments. They allow employees to receive lump-sum payments when they retire. However, the lump-sum payments do not have a law to protect the right

to receive benefits like DB and DC. Also, if employees receive a lump-sum payment, they tend to waste it instead of saving for their old age.

Figure 3-1 Changes in corporate and individual pension



3.2. Trends in DB and Corporate DC

The number of DB has increased with the shift from Tax-Qualified pension plan which was then allowed. Since around 2014, the total number has been on a decreasing trend.

In Japan, benefits can be reduced under some severe conditions (labor and management agreements, etc.). Many companies have maintained their DBs by abolishing lifetime pension and lowering pension benefit rates. However, some small and medium-sized companies have given up on DB. The main cause is the market deterioration.

The number of Corporate DC is still increasing. Some companies have moved their DB to DC to avoid investment risk.

Table 3-1: DB and Corporate DC plan numbers

	(plan number)			
	2004.3	2009.3	2014.3	2019.3
Defined benefit pension plan (DB)	316	5,008	14,296	12,952
Corporate defined contribution pension plan (DC)	2,379	11,706	18,393	33,138

Source: Ministry of Health, Labour and Welfare HP

Table 3-2: Japanese Government Bond (JGB) annual average

	2004	2009	2014	2019
10Y JGB (annual average)	1.498%	1.358%	0.565%	-0.090%
20Y JGB (annual average)	2.096%	2.045%	1.402%	0.298%
30Y JGB (annual average)	2.405%	2.144%	1.636%	0.448%

Source: Ministry of Finance HP

3.3. Trends in Retirement Benefit Plans

The smaller companies, the lower coverage. In recent years, the coverage has declined in all categories with the significant decline in categories with fewer than 300 employees.

The rate of companies without retirement benefit plans was 12.0% (100 ~ 299 employees) and 18.3% (30 ~ 99 employees) in 2008, but increased to 17.3% (100 ~ 299 employees) and 25.4% (30 ~ 99 employees) in 2018.

Workers value current benefits over future benefits. They tend to choose companies with higher salaries than those with higher retirement benefits. It is important for workers who work for companies without a retirement benefit plan to save for their old age.

Table 3-3: Retirement Benefit Plans' Coverage by company size

	The 2008 survey			The 2018 survey		
	Pension plan	Lump-sum payment only	No retirement benefit	Pension plan	Lump-sum payment only	No retirement benefit
Total	37.5%	46.4%	16.1%	22.6%	55.2%	22.2%
1,000 employees or more	76.8%	18.4%	4.8%	71.8%	19.3%	8.9%
300~999 employees	63.9%	28.3%	7.8%	57.5%	34.1%	8.3%
100~299 employees	51.8%	36.2%	12.0%	34.9%	47.8%	17.3%
30~99 employees	30.2%	51.5%	18.3%	14.1%	60.5%	25.4%

Source: Ministry of Health, Labour and Welfare, General Survey on Working Conditions, (2018)

3.4. Individual DC (iDeCo)

Given the difficulties in managing corporate pension, the government has been promoting the establishment of individual DC (iDeCo), where individuals can choose to save. Currently, all insured persons of NP are eligible to participate. The main merit of iDeCo are the three tax advantages.

- ✧ At the time of contribution
Premiums are deductible from income (Limited).
- ✧ At the time of investment
Investment gains are tax-free (Usually 20.315%).
- ✧ At the time of payment
Benefits are deductible from income.

3.5. iDeCo participants

The number of iDeCo participants has gradually increased since introduced. In 2017, the government strengthened its public relations activities and promoted enrollment, bringing the number of participants to 1.21 million (As of March 31, 2019). However, there are still many non-participants especially among young people. About 70% of participants are in their 40-50's, and the younger generation is not a big participant. It may have been used to save taxes for the rich and not spread to those who need savings for retirement.

Table 3-4: Participants

(people)			
2004.3	2009.3	2014.3	2019.3
0.03 mil.	0.1 mil.	0.18 mil.	1.21 mil.

Source: Information Services Agent Liaison Meeting, Defined Contribution Pension Statistical Data, (2019)

Table 3-5: Age structure

(as of 2019.3)			
Age 20~29	Age 30~39	Age 40~49	Age 50~59
5.4%	21.6%	39.9%	33.1%

Source: Information Services Agent Liaison Meeting, Defined Contribution Pension Statistical Data, (2019)

4. Future Issues

Based on the above, the main issues of public pension, private pension and work environment are as follows.

Public pension

- Sufficiency of benefits (The replacement rate must be 50% or more) is ensured for the time being. However, the replacement rate will decline in the future.
- To address, further promote economic growth and labor participation. Conduct Optional Trial in response to changes in the social economic environment, and discuss and reform.

Work environment

- The elderly are healthier and more willing to work longer. However, it is unclear whether there is a desirable way of working.

- To address, the government should take the lead in creating the employment environment for people up to the age 70 or 75, as well as 65.

Private pension

- Given the social economic environment in which small and medium-sized companies and others have given up on corporate pension, it will be difficult for corporate pension coverage to recover. In addition, there is strong opposition from companies to the enforcement of compulsory measures, which is not realistic.
- iDeCo has plenty of room for expansion. However, it is not expected to spread widely because it is voluntary.

In light of the recent decline in the coverage of retirement benefit plans, the retirement income of the working generation is increasingly dependent on the public pension. Small and medium-sized companies' employees don't have sufficient retirement benefit. In addition, it is a serious problem that the level of future public pension benefits for those with low incomes is low.

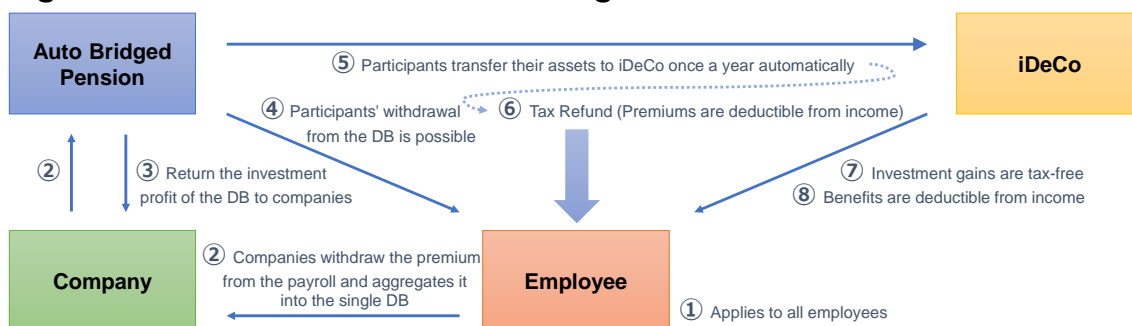
Those who can work until age 75 may be able to secure their retirement income through a combination of work and public pensions. However, everyone cannot work as they wish. Some want to retire early. In order to realize a variety of lifestyles, it is essential to promote private pension.

5. Solutions in Japan

In order to promote private pension, it is necessary to establish a system that is as enforceable as possible.

This chapter proposes the establishment of "Auto Bridged Pension" as a scheme to solve the problem of retirement income. The main points are as follows.

Figure 5-1: The scheme of "Auto Bridged Pension"



- ✧ Applies to all employees
 - The company takes the procedure of participating.
- ✧ The companies withdraw the premium (JPY5,000 per person per month) from the payroll and aggregates it into a single DB (National Pension Fund Association)
 - Simple design reduces the workload. National Pension Fund Association is the implementing party for iDeCo.
- ✧ Return the investment profit of the DB to the companies.
 - Although the current market environment is severe, part of the investment profit will be returned to small and medium-sized companies as a subsidy for office expenses.
- ✧ Withdrawal from the DB is possible.
 - Participants can withdraw without penalty. Thus, a kind of opt-out is set. In this case, there is no tax benefit.
- ✧ Participants transfer their assets to iDeCo once a year automatically.
 - Tax benefits can be obtained when transferring. Promoting tax benefits can lead to iDeCo transferees. Specifically, participants can choose to receive JPY60,000 (JPY5,000 x 12 months) now or save for the future and save taxes (The amount varies according to the annual income).
 - The well-thought-out notification document will lead to savings.

It is hoped that by utilizing the same system, society as a whole will become more aware of the need to prepare for retirement income. In Japan, a mandatory system is not appropriate. It is desirable to establish such a quasi-mandatory system to increase the coverage.

6. Suggestions to other countries

The three areas (Public pension, Private pension, Work environment) vary by each country. If the burden is too high in one area, the overall balance would be lost. The reform of the three areas should be conducted according to the social economic environment. What is needed is for the people to understand how to allocate the burden in the three areas. Actuaries should be actively involved to ensure that discussions are conducted properly.

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