



Modified Indexation of the Social Security Pension Systems and its Application to Pensions of Civil Servants in Japan

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Part I

Modified Indexation of the Social Security Pension systems

Social security pension systems in Japan

(Figures are as of the end of March 2020)

Employees' Pension Insurance System
(EPI)
(44.9 million)
~earnings-related part~

National Pension System (NP)
(65.0 million)
~flat-rate part~

(1st Category)

farmers, self-employees, unemployed, etc

(3rd Category)

dependent spouses of the 2nd category

(2nd Category)

private employees and civil servants

(Source) Actuarial Subcommittee, Social Security Council, Ministry of Health, labour and Welfare "FY2021 Annual Report"

(Note) The number of those who are covered by the social security pension systems is 67.6 million, a little bit larger than the number of NP coverage.

This is because the EPI system covers the EPI old-age beneficiaries aged 65 and above who continue to work as a regular worker while the NP system principally does not.

Socio-economic trends after the turn of the century

- Very rapid population ageing
- Increase of the life expectancy of the elderly
- Decrease of the fertility rate
- Increase of the non-regular employees
- Pension jealousy discussion
- This has existed for a very long time since 1980
- This has become more acute after the corruption cases of the bureaucrats just before 2000
- It has become essential for keeping people's trust in the social security pension systems to make the pension provisions equitable between civil servants and private employees

Rapid population ageing

year	Korea	Japan	US	Canada	Germany	UK	Sweden	France	Italy
1950	2.9	4.9	8.2	7.6	9.7	10.8	10.2	11.4	8.1
1970	3.4	6.9	10.1	8.0	13.6	13.0	13.7	12.9	11.1
1990	5.2	11.9	12.6	11.3	14.9	15.7	17.8	14.0	14.9
2010	10.7	22.5	13.0	14.2	20.6	16.6	18.2	16.9	20.4
2020	15.8	28.4	16.6	18.1	21.7	18.7	20.3	20.8	23.3
2030	24.7	30.9	20.3	22.8	26.2	21.5	22.2	24.1	27.9
2050	38.1	37.7	22.4	25.0	30.0	25.3	24.6	27.8	36.0
2070	41.9	37.9	25.6	27.6	30.6	27.3	26.7	29.2	36.2

(Source) World Population Prospect (Revision 2019), UN Population Division

Situation during 1980~2000

- **Consecutive tough reforms**
 - Tradition to carry out reform every five years on actuarial valuation
 - Raising the pensionable age
 - Reducing the benefit level
 - Changing the indexation

- **Most of the reform bills were deliberated under irreconcilable atmosphere between the government parties and the opposition parties**
 - Fruitless political battle repeated
 - The decision votes were carried out without consent of the opposition parties to the votes
 - The opposition parties criticized the government parties for the population ageing as the failure of their policy measures, which was a dangerous sign of ignoring the efforts to recognize the reality. This made the government work out a framework that automatically adapts the social security pension system to the population ageing

- **Corruption by the bureaucrats around the end of the last century**
 - Loss of confidence in the bureaucrats, resulting in disruption of dialogue between the policy makers and the bureaucrats
 - Severe criticism about the advantages of the benefit provisions for civil servants

2004 financial framework

- **Environment at the beginning of the 21st century**
 - The population ageing advanced more than projected in the last demographic projection
 - The rapid increase of non-regular employment became conspicuous
 - Very difficult situation for bureaucrats to talk to policy makers
 - Seeking for a framework that automatically adapts the system to the environmental change
 - People's anxiety that the contribution rate would rise endlessly
 - Intensified denial of the benefit disparity between the civil servants and private employees

- **2004 reform**
 - We studied the Swedish reform in the 1990's and the Italian case
 - We fixed the contribution programme. The ultimate contribution rate is 18.3% since 2017

 - Then the financial equilibrium would not be attained if we left other items unchanged
 - Introduction of **the modified indexation** as an automatic balancing mechanism to attain financial equilibrium, which attracted attention of policy makers in the end

 - Raised the national subsidy rate for the basic pensions from $\frac{1}{3}$ to $\frac{1}{2}$, mandating the policy makers to secure the financial resources for this by 2009

Modified indexation

- **Normal indexation:**
 - when the wage increase rate is not less than the CPI increase rate
 - up to the age of 65: by the wage increase rate
 - after the age of 65: by the CPI increase rate
 - when the wage increase rate is less than the CPI increase rate
 - by the wage increase rate for everybody
- **Modified indexation:**
 - Normal indexation minus modifier as long as the financial projection shows the financial equilibrium is not attained
 - If the financial equilibrium is attained, the indexation returns to normal indexation and modified indexation is no longer activated
 - Modified indexation is a sort of transitional provision which terminates when the financial equilibrium is attained
- **Modifier:**
 - $(\text{decrease rate of the active participants in the social security pension systems}) + (\text{increase rate of the unisex life expectancy at age 65}) + (\text{unrealized modifier in the previous fiscal year})$
- **No activation provision**
 - when the normal indexation is negative
 - when the modified indexation becomes negative, it is replaced by zero
 - Unrealized modifier is carried over to the next fiscal year (this provision was introduced in the 2016 reform)

Factors in the modifier

- ▶ Decrease rate of the number of active participants in the social security pension systems
 - Decrease of the supporting ability to pay the benefits
 - About 1% according to the 2019 actuarial valuation
- ▶ Increase rate of the life expectancy at age 65 (unisex)
 - Decrease of the supporting ability to pay the benefits due to the increase of the beneficiaries
 - Fixed at 0.3% based on the 2002 population projection
 - fixed to avoid fluctuations due to spread of flu virus
 - might be reviewed in the future
- ▶ German sustainability factor can be decomposed into:
 - Decrease rate of the number of active participants in the social security pension systems
 - Increase rate of the life expectancy at age 65 (unisex)
 - Increase rate of the number of the newly awarded pensioners

Fiscal years when modified indexation was activated

- After the introduction of modified indexation in 2005, the Japanese economy has long been deflationary
- Never anticipated when we were constructing the modified indexation in 2003 and 2004
- Never been activated from 2005 to 2014 due to the no activation provision
 - annual average increase rate of the CPI: -0.06%
 - annual average real increase rate of the salary: -0.52%
- Fiscal years when activated: 2015, 2019, 2020

FY	normal indexation	unrealized modifier carried over from the previous year	modifier	modified indexation (actual indexation)
2015	2.3%	-	0.9%	0.9% (Note2)
2019	0.6%	0.3%	0.2%	0.1%
2020	0.3%	0.0%	0.1%	0.2%

(Note1) Carrying over the unrealized modifier to the next fiscal year was implemented in FY2018.

(Note2) There was a benefit cut of 0.5% in FY2015 which corrected the extravagant benefit resulting from the non-activation of the negative indexation in the past.

Part II

Current Situation of the Retirement Benefits
for Civil Servants in Japan

Civil servants are now covered by the EPI System

- Civil service pension systems were unified into the EPI system on 1 October 2015
- Civil servants receive social security pension benefits that are completely the same as the private employees
- Their benefits are indexed to the same modified indexation as the private employees
- Mutual Aid Associations are functioning as branch offices as the EPI System
 - This was to avoid the huge amount of transitional cost that would have been necessary if data processing and awarding process had been transferred to the Social Insurance Offices

Retirement Benefits for Civil Servants in Japan

1. Social security pension benefit (modified indexation applied)
2. Occupational pension benefit for civil servants (no indexation)
3. Retirement lump-sum benefit (based on the last salary)
4. Personal pensions, personal savings (no indexation)

Retirement Benefit for Central Government Employees

- The occupational pension benefit and the retirement lump-sum benefit must be equal to the average of the occupational pension benefits and the retirement lump-sum benefits for private employees with no less than 50 employees
 - in terms of present value of the benefits
 - Every five years the National Personnel Authority (NPA) conducts the survey
- Local government employees do not have such restrictions
 - For the occupational pension plan, they will have to follow the plan design of that for the Central Government Employees
 - For the retirement lump-sum benefits, prefectural governments and municipalities can determine the plan design

The NPA Survey on Retirement Benefits in 2017

- ▶ Private sector
 - Occupational pensions: JPY 14,535,000 (in terms of present value)
 - Retirement lump-sum benefits: JPY 10,061,000
 - Total: JPY 24,596,000 (1)
- ▶ Central government employees
 - Occupational pensions: JPY 2,236,000 (in terms of present value)
 - Retirement lump-sum benefits: JPY 23,141,000
 - Total: JPY 25,377,000 (2)
- ▶ $(2)-(1)=\text{JPY } 781,000$
- ▶ The NPA recommended that the benefit level of the retirement lump-sum benefits for the central government employees be reduced by JPY 781,000 in average
 - It has been implemented since January 1st, 2018
 - The next survey is being conducted now and the result will be published early next year.

(For reference 1)
History of Retirement Benefits for the Civil
Servants in Japan

Civil Servants in the 19th Century (1)

- ▶ 1868: Meiji Restoration
 - The new government endeavored to build an industrialized country
 - It necessitated human resources
 - It studied civil service system in Western countries
- ▶ Two groups of government employees
 - civil servants
 - public employees
 - similar to German system
 - no concept of local government

Civil Servants in the 19th Century (2)

- Basic concept of civil servants:
 - Civil servants were those whose lives were bought by the country.
 - employment for life, service for life
 - smooth transition from the feudalism of Tokugawa Shogunate Regime
- Superannuation system for civil servants
 - a form of salary after retiring from the front line (Ruhegehalt)
 - no retirement lump-sum benefits until 1953

Superannuation System

- 1875: for the army (in April), for the navy (in August)
- 1884: for civil servants
- 1923: unified into a single system
- Benefit design: final salary system
- Continued to exist until 1959
- Beneficiaries still exist including survivors' beneficiaries

Mutual Aid Associations

- ▶ Introduced by government organizations in charge of day-to-day operations for their public employees
- ▶ 1905: Yawata Iron Manufacturing Public Corporation
- ▶ 1907: the Imperial Railway Agency
- ▶ Several other organizations followed
- ▶ Public employees working for government organizations for planning and not in charge of day-to-day operations were without benefits until 1949

Evolution of Social Security Pension Systems in Japan (1)

Until the end of 1930's

- Superannuation system (SA)
- Mutual aid associations for public employees (MAAs)

In the 1940's

- SA
- MAAs
- Seamen's Insurance
- Employees' Pension Insurance (EPI) scheme for private employees

JR=Japan Railway Company
JT=Japan Tobacco Company
NTT=Nippon Telegraph and
Telecommunication Company

In the 1950's

- SA was merged with the MAA (government)
- MAAs for JR, JT, NTT Employees separated from the MAAs for government employees due to change from government department to public corporations
- Seamen's Insurance
- EPI scheme
- New MAAs (private school employees, agricultural cooperative employees)

Evolution of Social Security Pension Systems in Japan (2)

In the 1960's

the EPI scheme
the Seamen's Insurance
the NP scheme
MAA for Government Employees
MAA for JR Employees
MAA for JT Employees
MAA for NTT Employees
MAA for Local Government Employees
MAA for Private School Employees
MAA for Agricultural, Fishery and Forestry Cooperative Employees

<<< Newly introduced in 1961 for non-employees

<<< Newly introduced in 1962 for local government employees after the introduction of the concept of local autonomy under the New Constitution

Gradual Appearance of Problems in the 1970's

- Pension jealousy discussion
 - Final salary benefits vs career average benefits
 - Pensionable age (MAAs=55, EPI=60)
- Financial problems
 - Caused by changes in industrial structure or employment structure
 - NP System <<< rapid decrease of the number of farmers
 - Seamen's Insurance <<< decrease of the number of seamen due to automated steering and redefinition of EEZ
 - MAA for JR Employees <<< redundancies caused by the development of motorways and shift of land transportation from railways to lorries

(example)

Number of Active Participants of the MAA for JR Employees

(at the end of FY; in thousand)

FY	number of active participants
1965	478
1970	468
1975	436
1980	419
1985	282
1990	196
1995	196

Similar Things Happened to Some MAAs in the 1980's and 1990's

- ▶ MAA for JT Employees
- ▶ MAA for NTT Employees
- ▶ MAA for the Agricultural, Fishery and Forestry Cooperative Employees
- ▶ The pension branch of the Seamen's Insurance was absorbed in the EPI System on April 1st, 1986
- ▶ MAAs for JR, JT, NTT Employees were absorbed in the EPI System on April 1

(For reference 2)
Unification Process

Problems Summarized

- Inequitable provisions
 - which lead to pension jealousy discussion
 - Increasing people's distrust in social security pension in general
- Instable financial basis
 - decrease of active participants
 - weakened financial basis, sometimes to unsustainable extent

Gradual Forming of Consensus to Unify the Social Security Pension Systems

- ▶ Equalize the provisions
- ▶ Gain the financial stability
- ▶ Increase people's trust in the systems

Unification Process (1)

- 1979 reform
 - Pensionable age of MAAs: from 55 to 60
- 1985 reform
 - sharing of the basic pension benefits by extending the coverage of the NP System to the whole nation
 - benefit formula of the MAAs: from the final salary formula to the same career average formula as the EPI System, except for the occupational addition of 20% of the EPI earning-related part
 - The pension branch of the Seamen's Insurance was absorbed in the EPI System

Unification Process (2)

- ▶ 1997 reform
 - MAAs for JR, JT, NTT employees were merged with the EPI System
- ▶ 2002 reform
 - MAA for Agricultural, Fishery and Forestry Cooperative Employees was merged with the EPI System
 - ▶ As a result of the 2002 reform, the social security pension systems were composed of the following five systems:
 - The NP System
 - The EPI System
 - MAA for the Central Government Employees
 - MAA for the Local Government Employees
 - MAA for the Private School Employees

Unification Process (3)

- ▶ The strong leadership of Junichiro Koizumi government drew a blueprint of complete unification of the social security pension systems for employees
- ▶ 2012 reform
 - Complete unification of the social security pension systems for employees
 - MAAs are now implementing branch organizations of the EPI System
- ▶ As a result of the 2012 reform, the social security pension systems are now composed of the following two systems:
 - The NP System
 - The EPI System

Unified EPI System for Employees

- Benefit provisions have completely been made the same for both EPI active participants and MAA active members
- Occupation addition has stopped accrual after October 2015 and has become closed system
- Instead of the occupational addition, new occupational plans for members of the MAAs have been introduced
- They are cash balance plans
- Benefit expenditures are equally shared among the EPI and the MAAs
- On the day of unification of October 1st, 2015, each MAA allocated portion of their reserve fund as the reserve fund for the EPI. The amount was equal to the amount of annual expenditures multiplied by the ratio of the EPI reserve fund to the EPI annual expenditures

Thank you very much for your attention!