

**Overview of the Annual Actuarial Report on
the Public Pension Plans in Japan
Fiscal Year 2020**

Pension Actuarial Subcommittee of the Social Security Council

0. On the annual actuarial report on the public pension plans in Japan Fiscal Year 2020

- The “Annual Actuarial Report on the Public Pension Plans in Japan” is a compilation of the results of cross-plan analysis and assessment of the financial status of Japan’s public pension plans each fiscal year from a professional perspective, based on the reports from each pension plan and implementing organization.
- This report clarifies trends in actual performance and compares it with actuarial valuation, and also summarizes the financial status of entire Employees' Pension Insurance (EPI) including Mutual Aid Association, etc.

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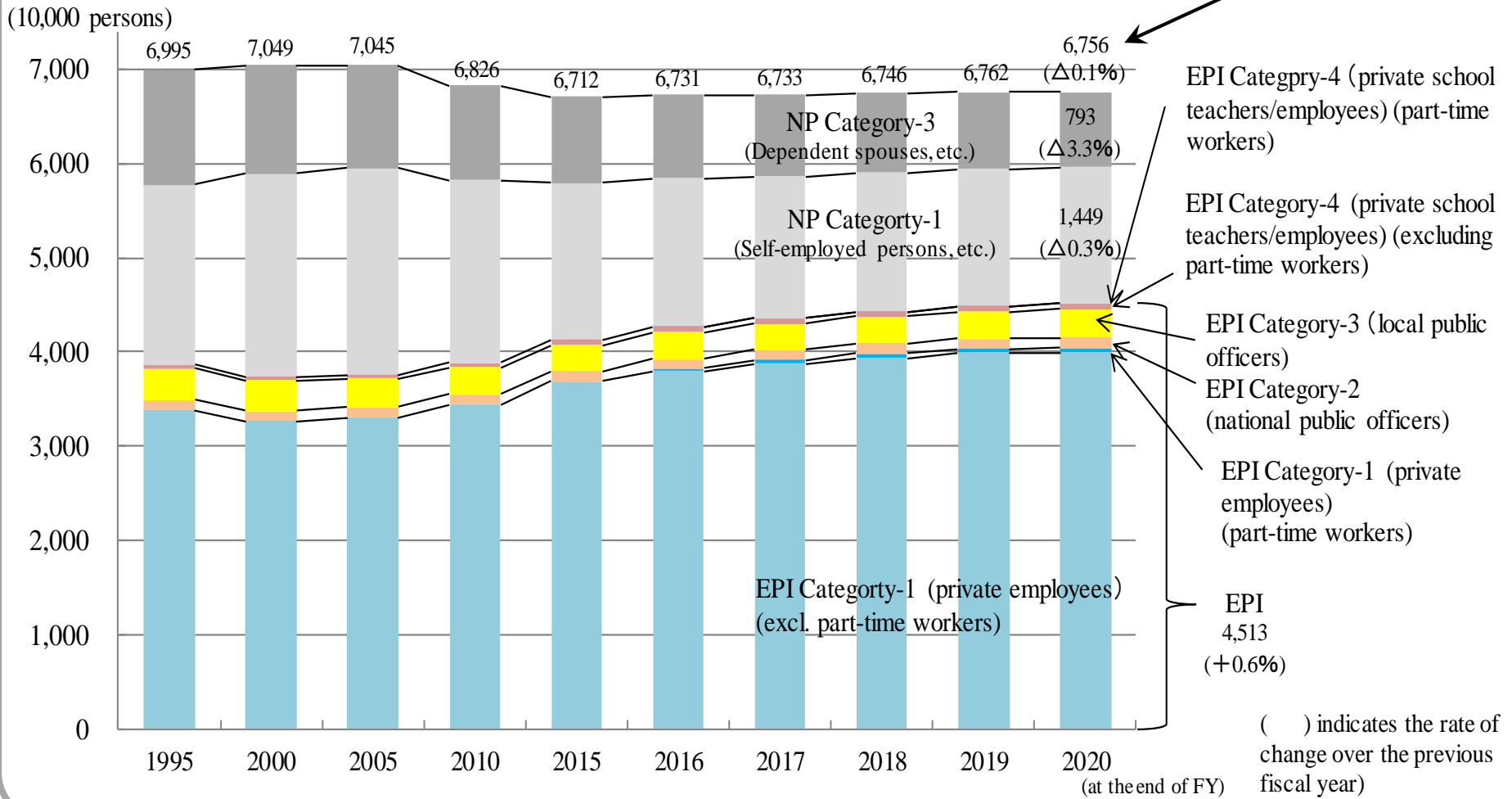
Reports and hearings for FY2020 report

- 90th Pension Actuarial Subcommittee**
(Held on December 24, 2021)
 - Employees' Pension Insurance (Category-1)
 - National Pension/Basic Pension Plan
- 91st Pension Actuarial Subcommittee**
(Held on January 7, 2022)
 - National Public Officers Mutual Aid Associations
 - Local Public Officers Mutual Aid Associations
 - Private School Teachers/Employees Mutual Aid Association

**Current situation and trends of insured persons
(Excerpt from Chapter 2, Section 1)**

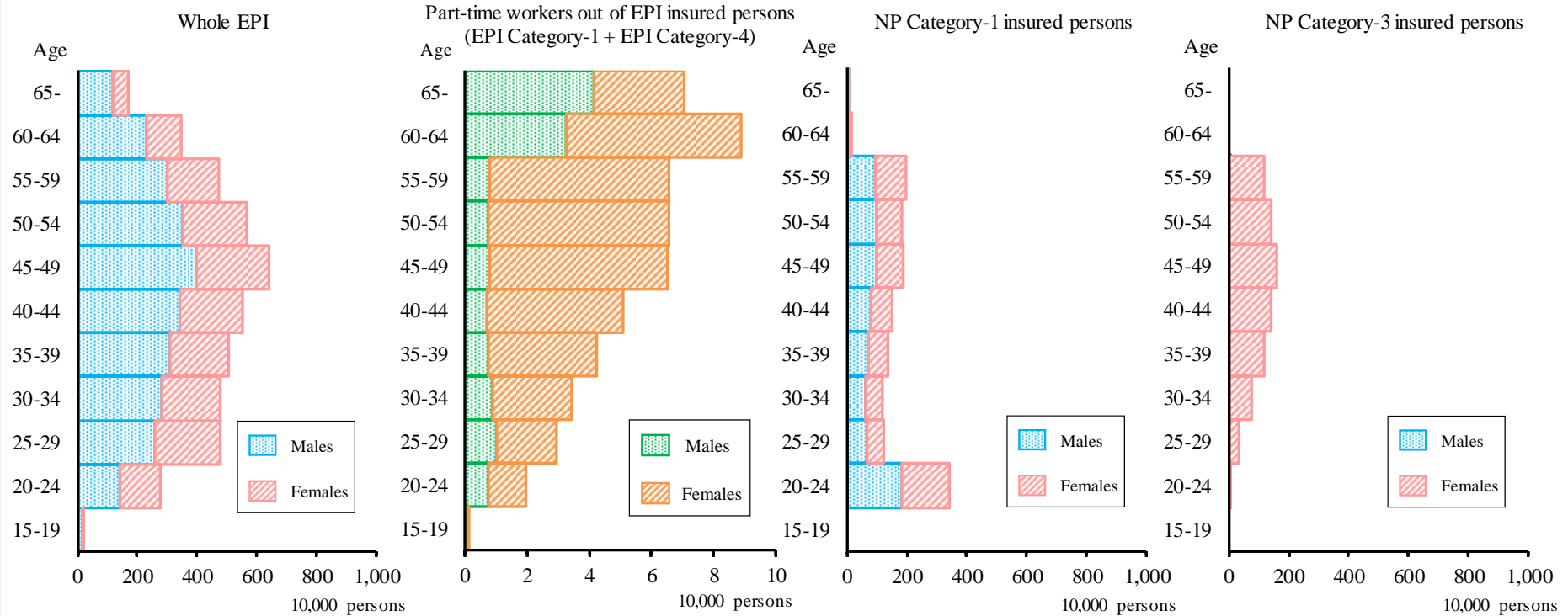
1. Trends in the number of insured persons with public pensions

- In FY2020, while the number of EPI insured persons increased, that of the national pension (NP) Category-1 and Category-3 insured persons decreased and therefore the total number of persons insured under the public pension plans decreased by 0.1%.
- The rate of increase in the number of insured persons for EPI is 0.6%, the rate of increase is 0.4% after part-time workers are excluded. For part-time workers alone, the rate of increase is 12.3%.



2. Age distribution of insured persons

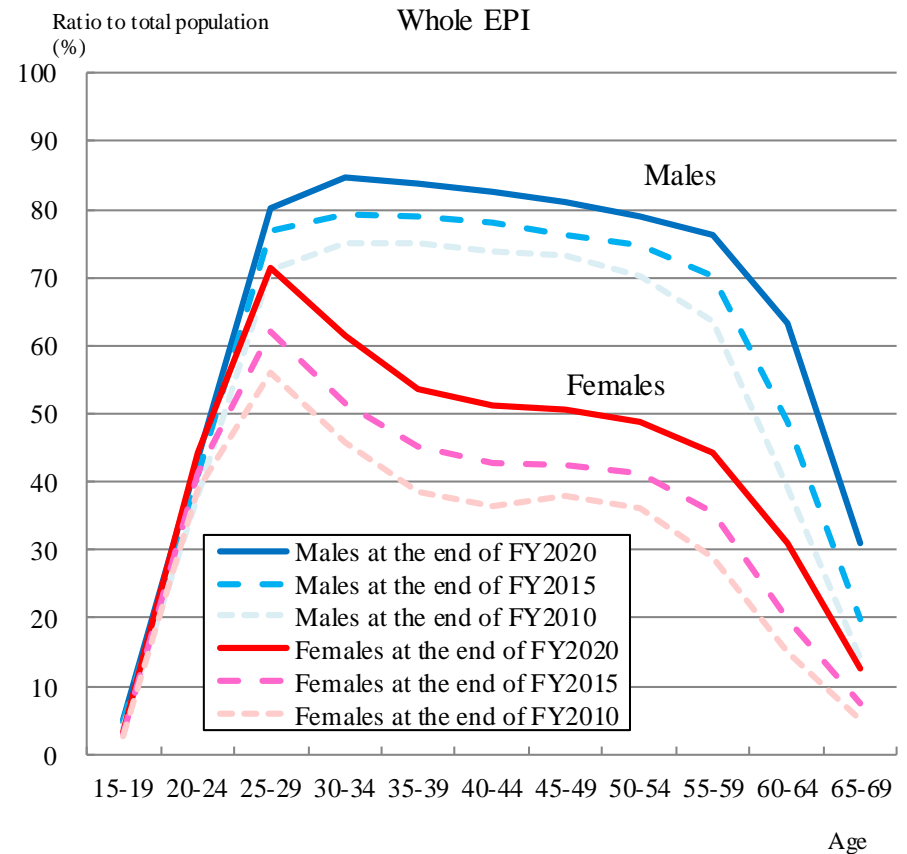
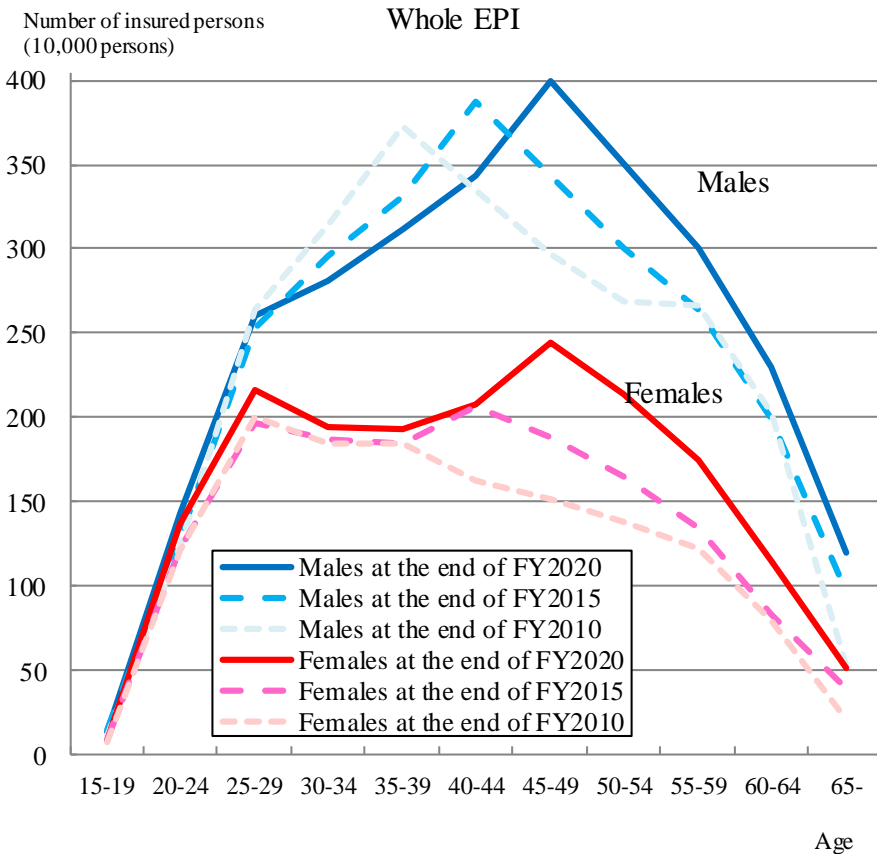
- The age distribution of the insured persons as of the end of FY2020 shows that the largest proportion of insured persons is in the 45-49 age group for the whole EPI and NP Category-3 insured persons.
- Among part-time workers EPI insured persons (comprising 1.2% of all EPI insured persons), most males are over 60, while most females are between 45 and 64.
- For NP Category-1 insured persons, the 20-24 age group comprises the largest proportion, exceeding 20%.



3. Change in age distribution of insured persons (whole EPI)

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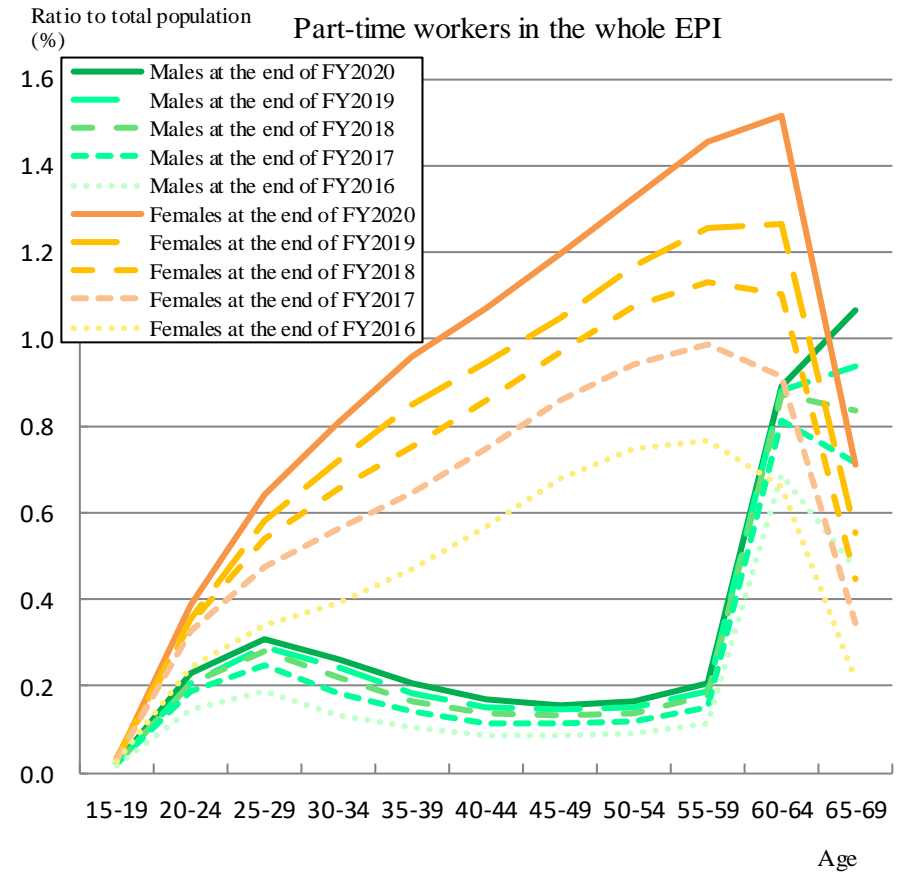
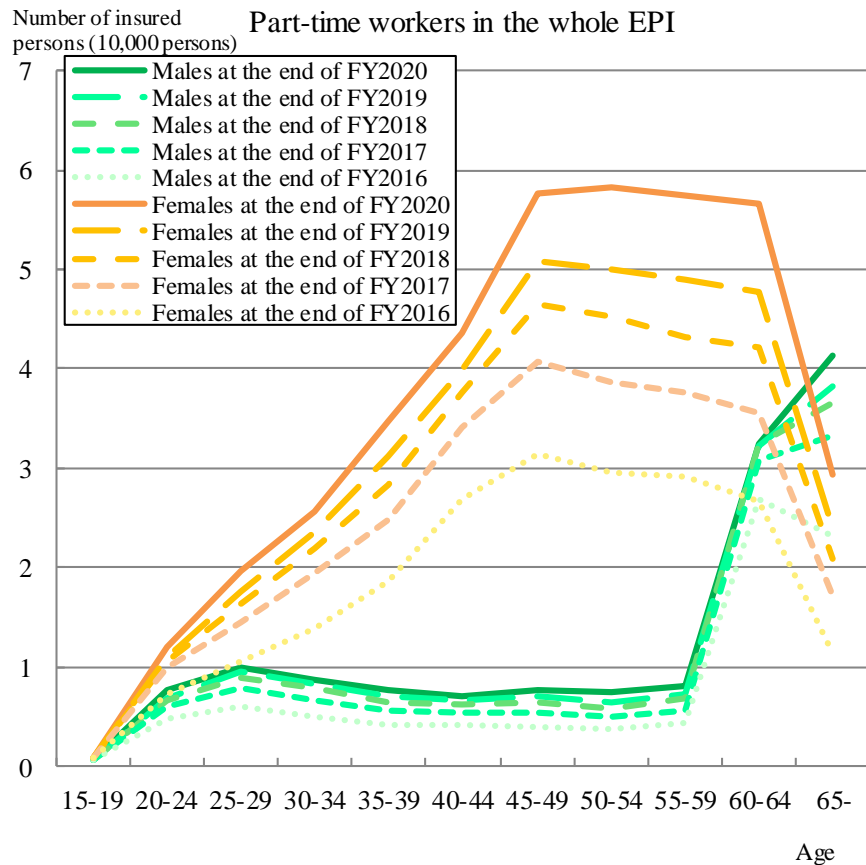
- For the entire cohort of whole EPI male insured persons, the age group accounting for the largest proportion shifted from 35-39 a decade ago to 40-44 five years ago, followed by 45-49 at the end of FY2020 (as the junior baby-boomer generation aged). The second peak that the age group of 55-59 formed a decade earlier has disappeared as the baby-boomer generation retired. For the entire population of whole EPI female insured persons, the number increased except the 15-19 age group. The number of insured persons aged 65-69, both male and female, has also increased in the past five years.
- Viewing insured persons as a percentage of the population, there were increases in each age group for both males and females, compared with five years before. In particular, as evidenced by the increased percentage of insured aged 65-69 from 19.7 to 31.0% for males and 7.4 to 12.6% for females, it was revealed that the employment of those aged 65 or over is progressing.



4. Change in age distribution of insured persons (part-time workers)

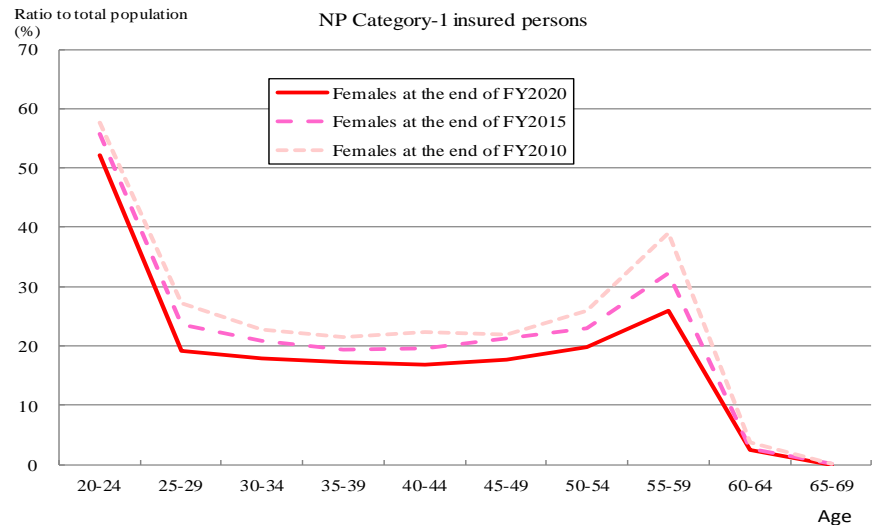
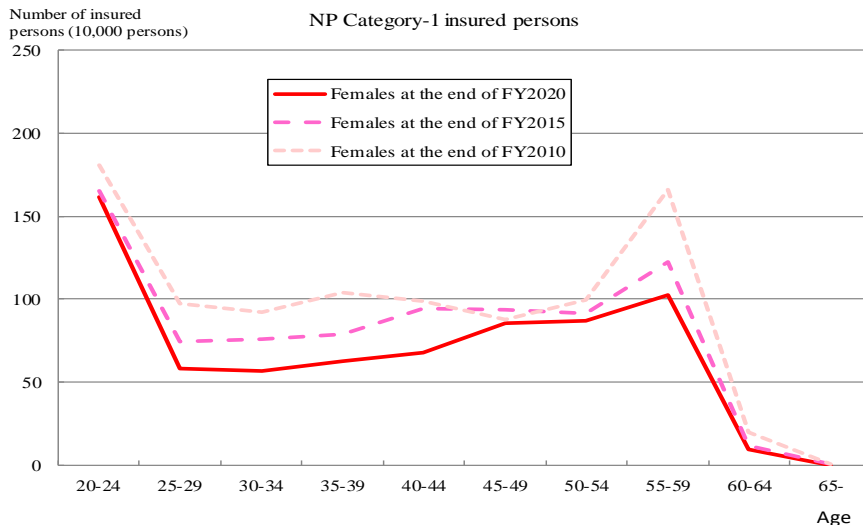
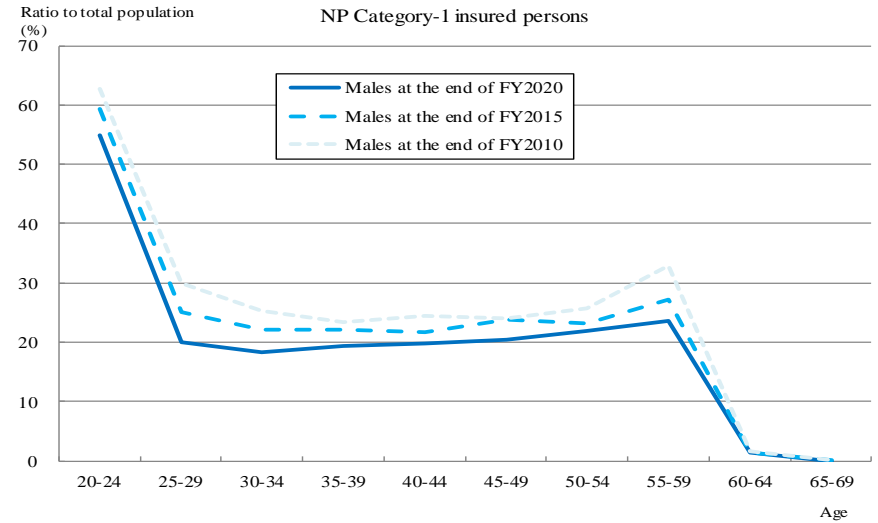
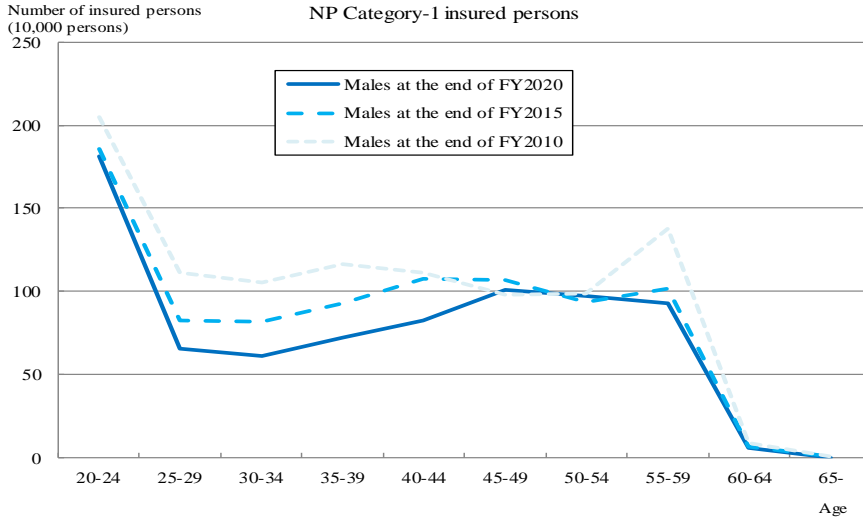
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- For part-time workers (1.2% of the whole EPI), the number of insured persons increased from the end of the previous fiscal year, except for males and females aged 15-19.
- The number of insured persons as a percentage of the population rose compared to the end of the previous fiscal year, except for males and females aged 15-19.



5. Change in age distribution of insured persons (NP Category-1)

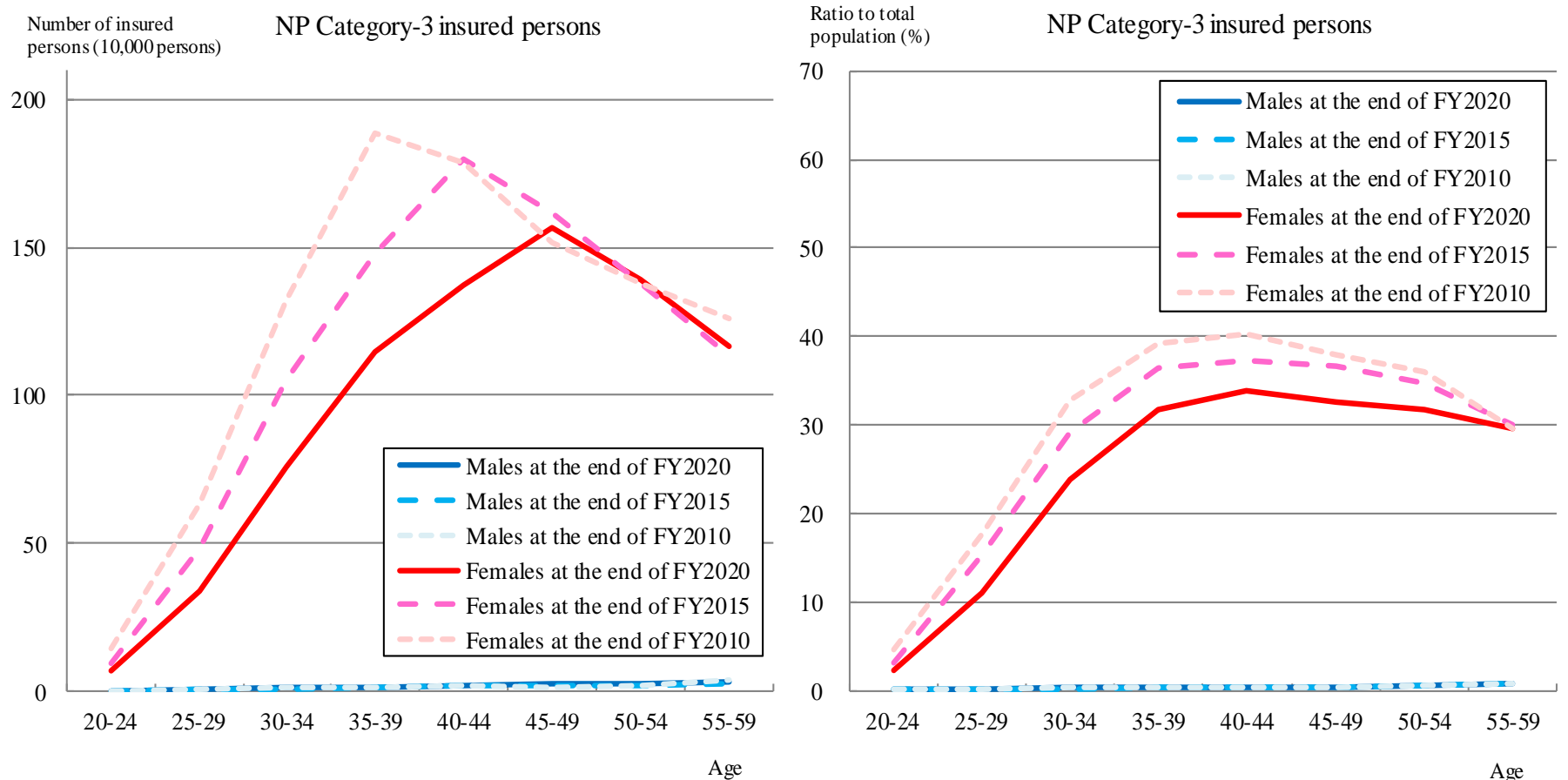
- For NP Category-1 insured persons, the total number of insured persons declined for both genders, except for the shift in the junior baby-boomer generation.
- The number of insured persons, as a percentage of the population, declined in all age groups for insured persons of both genders compared to five years ago.



6. Change in age distribution of insured persons (NP Category-3)

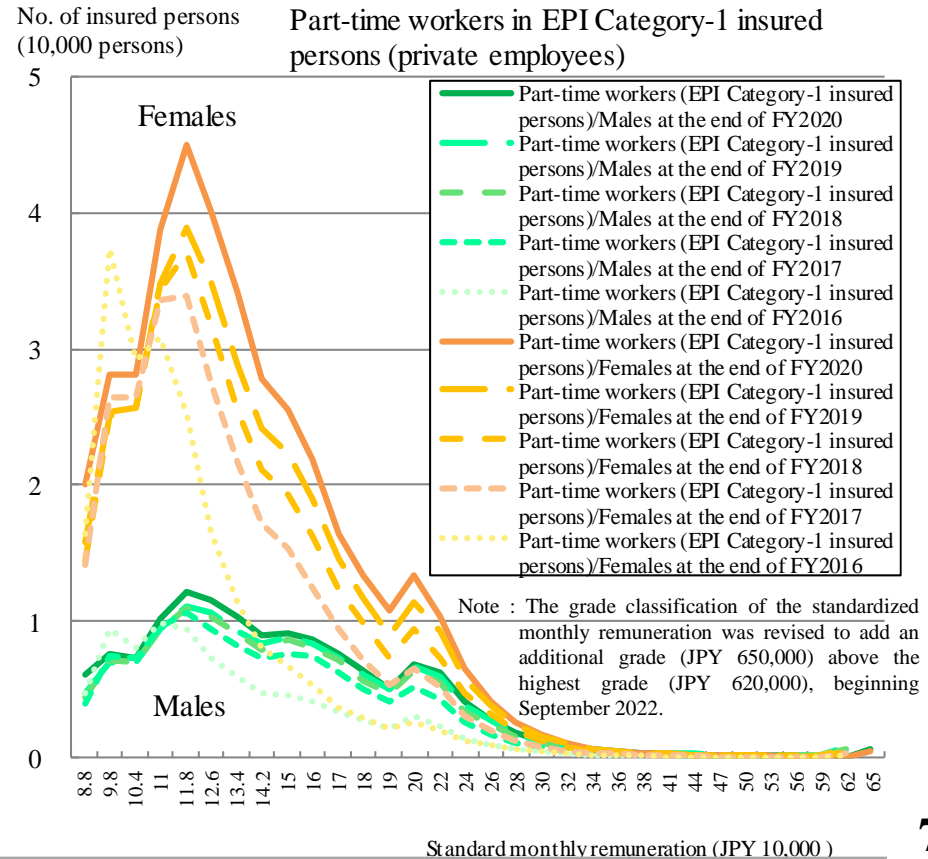
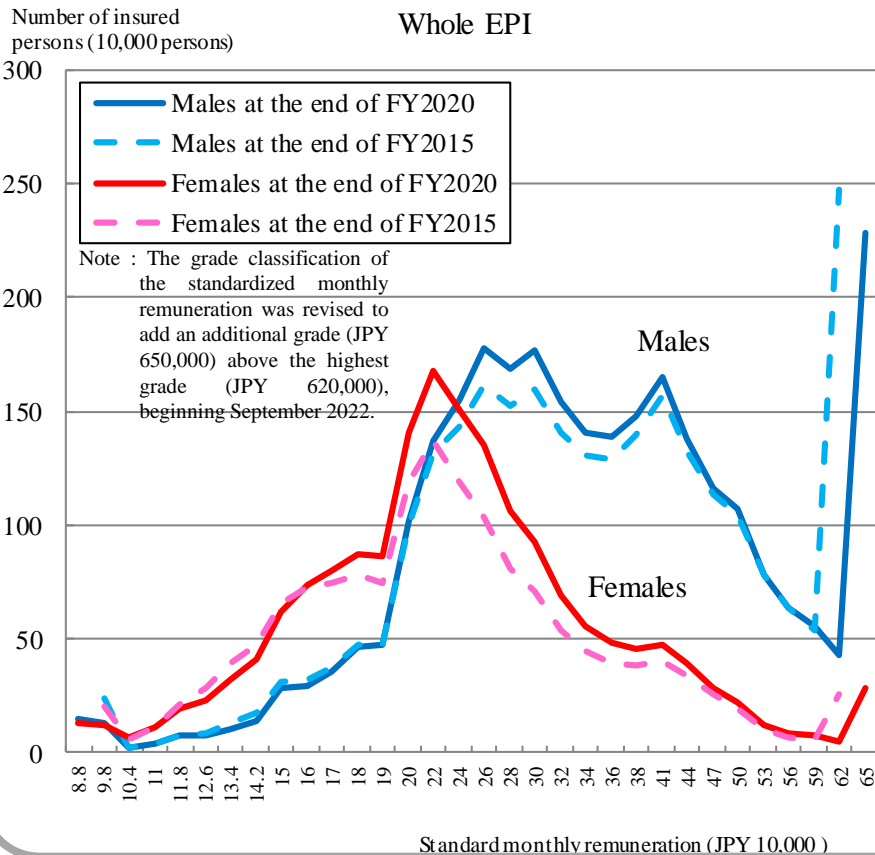
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- For female NP Category-3 insured persons, the group under 44 years old has declined significantly.
- Looking at the number of insured persons as a percentage of the population, there was no significant change in the number of males from five years ago, while the number of females declined in all age groups.



7. Distribution of EPI insured persons by standard monthly remuneration

- The largest standard monthly remuneration of whole EPI received by male insured persons is JPY 650 thousand and the distribution of insured persons peaks at JPY 260-300-thousand and JPY 410 thousand respectively. The distribution peaks at JPY 220 thousand for whole EPI female insureds.
- Compared to the distribution five years ago, the number of insured persons increased for male insured persons, except in the JPY 118-190 thousand and JPY 530 thousand categories. The number of insured persons increased for female insured persons, except in the JPY 118 to 150 thousand categories.
- The distribution of part-time workers in EPI Category-1 insured persons (private employees) peaks at JPY 118 thousand for both genders. That changed from the FY2016 distribution, where the peak was a standard monthly remuneration of between JPY 98 to 110 thousand for insured persons of both genders.



**Current situation and trends of beneficiaries
(Excerpt from Chapter 2, Section 2)**

8. Trends in the total amount of pensions for beneficiaries

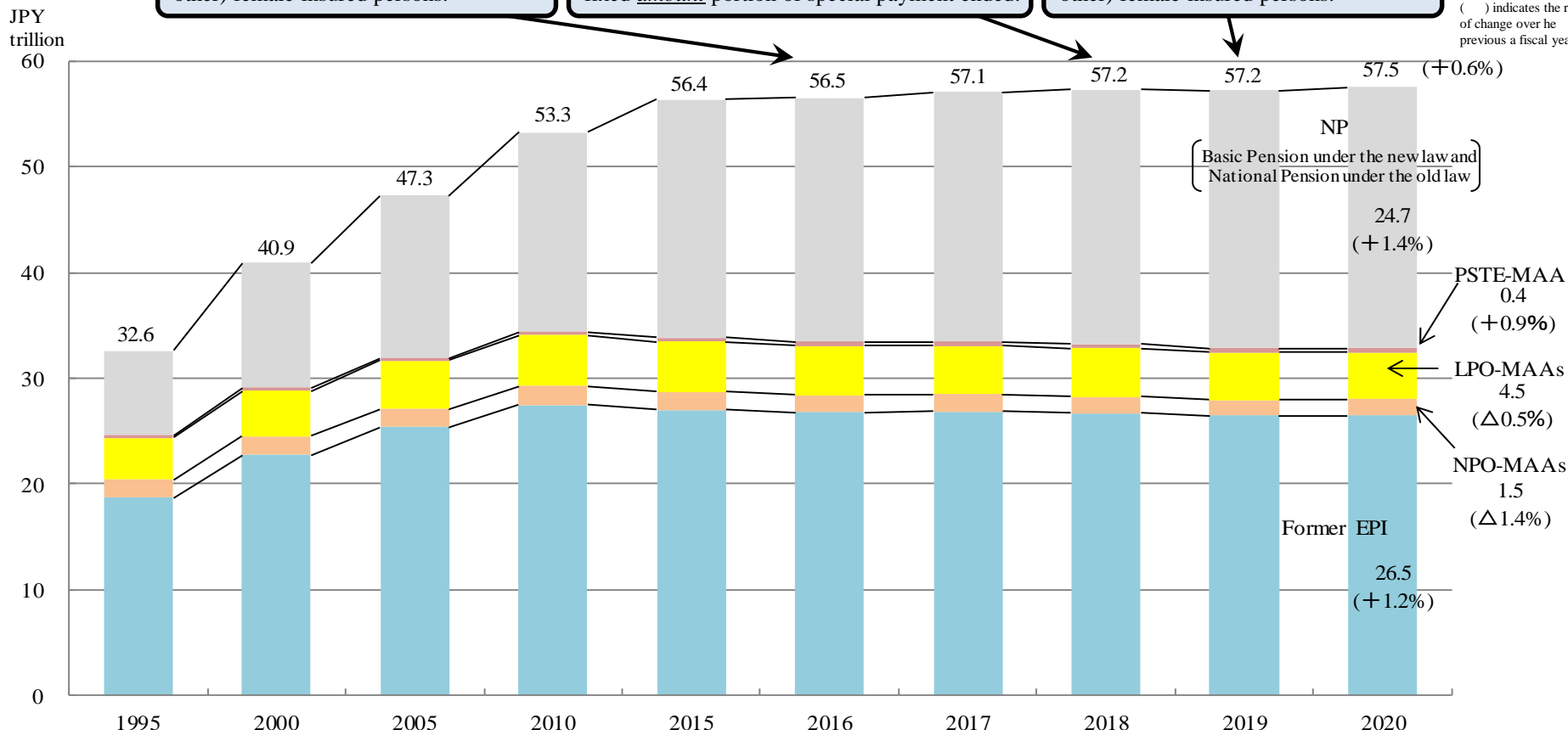
The total pension amounts at the end of FY2020 were JPY 57.5 trillion for all public pension plans. Compared to the end of FY2019, the total pension amount of the National Public Officers' Mutual Aid Associations (NPO-MAAs), and the Local Public Officers Mutual Aid Associations (LPO-MAAs) declined, while that for the former EPI, the Private School Teachers/Employees Mutual Aid Association (PSTE-MAA) and the NP increased.

Pensionable age for the earnings-related portion was raised to 62 years old for male insured persons and MAAs (and other) female insured persons.

Pensionable age for the earnings-related portion was raised to 61 years old for female insured persons of the former EPI and the fixed amount portion of special payment ended.

Pensionable age for the earnings-related portion was raised to 63 years old for male insured persons and MAAs (and other) female insured persons.

() indicates the rate of change over the previous a fiscal year

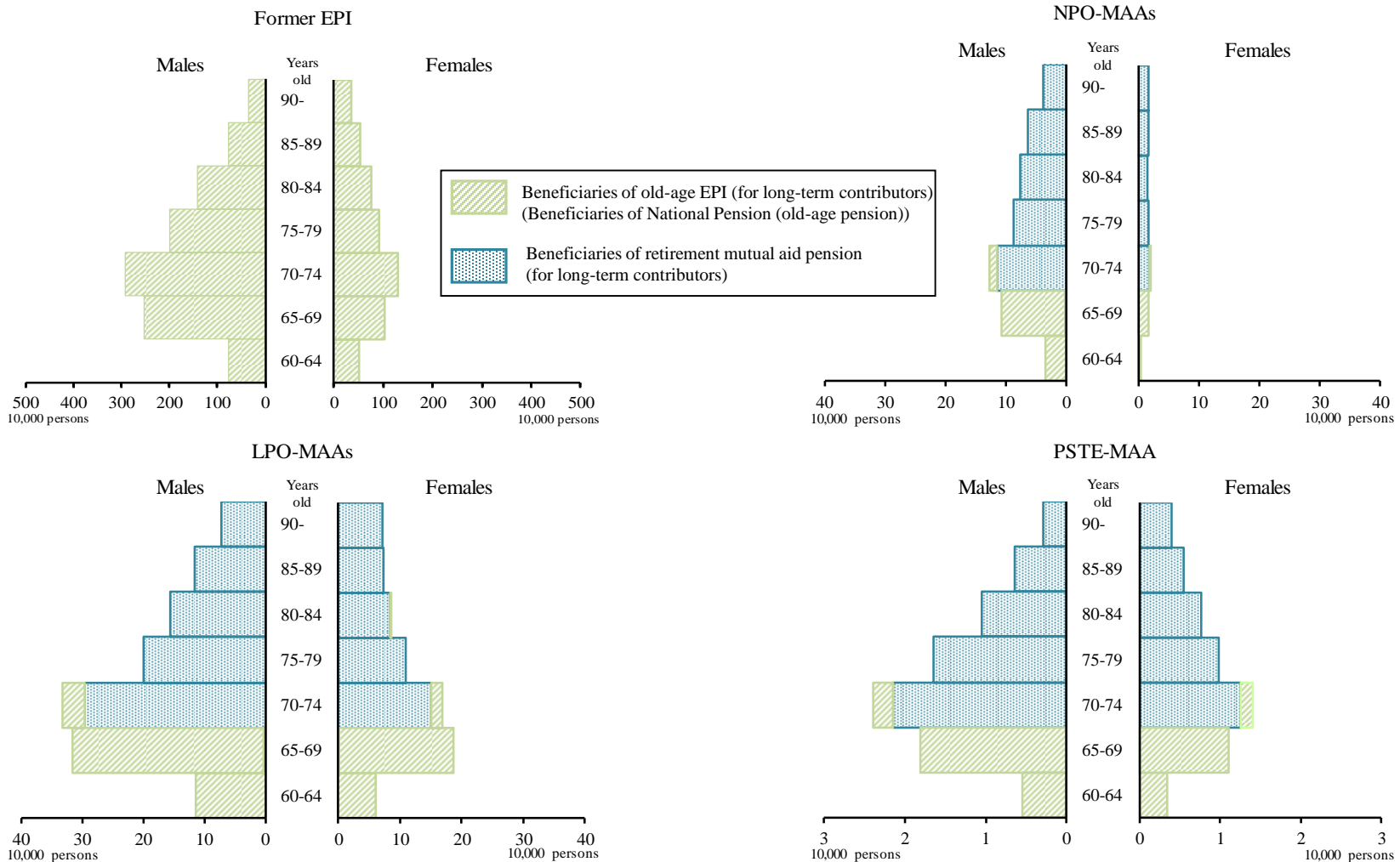


Note: NPO-MAAs, LPO-MAAs, and PSTE-MAA of FY2015 and subsequent years are the total amounts of the total pensions provided to the beneficiaries of MAA pensions and the total pensions provided to the beneficiaries of EPI before the integration of the employee's pension schemes. (at the end of FY)

9. Age distribution of beneficiaries of old-age pension for long-term contributors

- In the former EPI, NPO-MAAs and PSTE-MAA, the number of beneficiaries in the age group of 70-74 is the largest. In the LPO-MAAs that of 70-74 for male and 65-69 for females is the largest.
- The NPO-MAAs are characterized by the paucity of female beneficiaries and the number of female beneficiaries in each over-65 age group remains relatively unchanged.

*“Beneficiaries of old age pension for long-term contributors” mean, as a general rule, those having met the eligibility criteria of 25 years among the beneficiaries of old age (retirement) pensions.



10. Average monthly old-age pension for long-term contributors excluding occupational additions of MAAs, etc. (estimates)

Since mutual aid pensions, such as the pensions provided by MAAs, include occupational additions, the pension actuarial subcommittee estimated the pension amount of the portion equivalent to EPI pension excluding these additions. The average monthly whole EPI was JPY 149 thousand; JPY 167 thousand and 112 thousand for male and female beneficiaries, respectively.

The reason for the difference in the monthly pension amounts among the implementing organizations is that, regarding males, despite the fact the average contribution period in the former EPI exceeds that of NPO-MAAs and PSTE-MAA, the standard remuneration amount, the benchmark for calculating the pension, is deemed to be higher in MAAs, etc. and the age of beneficiaries in MAAs, etc., is higher than that of the former EPI.

Classification	Former EPI	NPO-MAAs	LPO-MAAs	PSTE-MAA	Whole EPI
Average monthly amount of pension (including the amount of the Old-Age Basic Pension)	JPY	JPY	JPY	JPY	JPY
Total	144,366	173,386	176,785	176,602	149,114
Males	164,742	176,839	183,587	192,529	167,388
Females	103,808	156,066	164,971	152,507	112,433
Female-to-male ratio ("males"=100)	63.0	88.3	89.9	79.2	67.2

Note 1: The amounts of retirement mutual aid pension for long-term contributors for NPO-MAAs, LPO-MAAs and PSTE-MAA excluding the occupational addition are estimates.
 Note 2: For NPO-MAAs, LPO-MAAs and PSTE-MAA, the average for beneficiaries of retirement mutual aid pension for long-term contributors and beneficiaries of old-age EPI for long-term contributors.

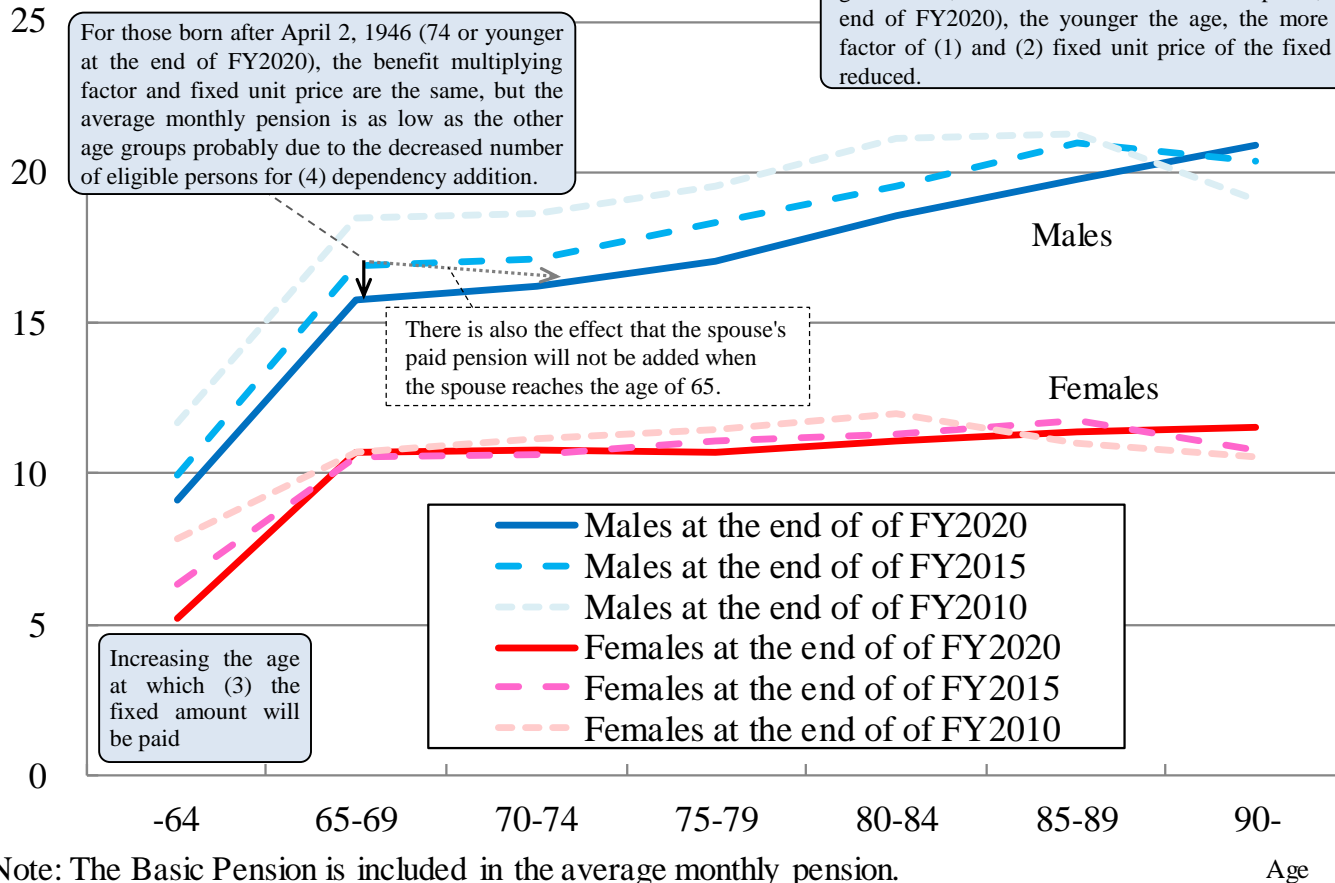
Regarding females, the difference in the standard remuneration amount (the basis for calculating the pension), the average contribution period in MAAs etc., which is considerably longer than that of the former EPI and the age of beneficiaries in NPO-MAAs and PSTE-MAA, which exceeds that of the former EPI, seem to be having an impact.

11. Average monthly pension for beneficiaries of old-age pension by age group

The average monthly pension amount for the former EPI has been declining as the average length of contribution has been prolonged for all beneficiaries. The main reasons are considered to be the following:

- (1) Decline in benefit multiplying factors of the earnings-related portion, (2) decline in unit price of fixed amount portion, (3) increase in the pensionable age for the fixed amount portion, (4) decline in number of persons eligible for dependency addition, (5) price indexation, and (6) elimination of “special level” overpayment (negative revision of pension amounts).

Average monthly amount of pension (JPY10,000)



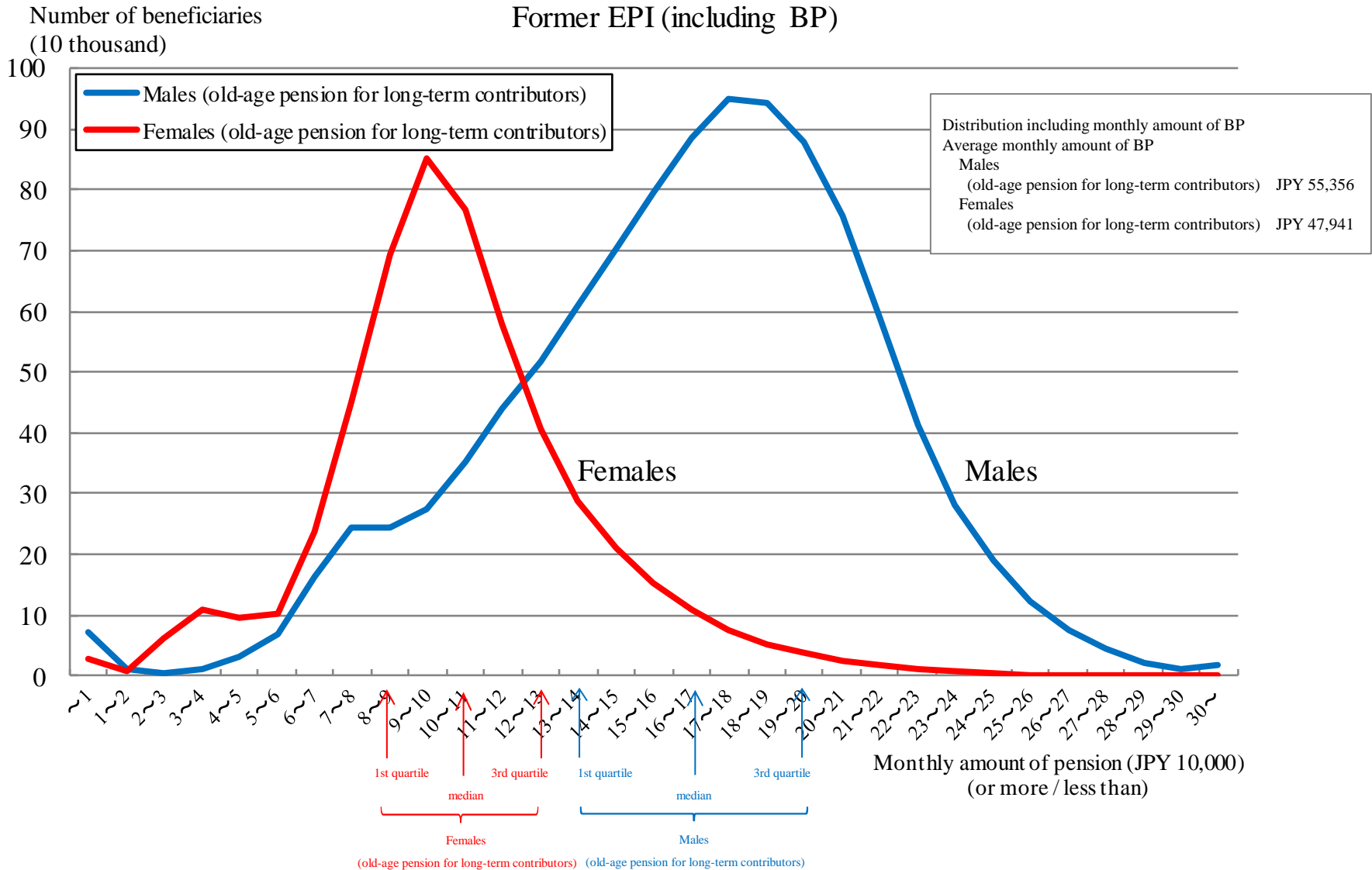
From the end of FY2010 to the end of FY2015 (in addition to (1) reduction of benefit multiplying factor and (2) fixed unit price, (6) there will also be the impact of the elimination of special levels.

Note: The Basic Pension is included in the average monthly pension.

12. Number of beneficiaries of old-age pension by class of monthly pension amount

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The amount includes the Basic Pension. The number of beneficiaries peaks at JPY 160-200 thousand for male beneficiaries and JPY 80-110 thousand for female beneficiaries.



**Current situation of fiscal revenue and expenditure
(Excerpt from Chapter 2, Section 3)**

13. Annual balance of revenues and expenditures in FY2020

- The annual balance of revenues was analyzed for “Annual balance of revenues and expenditures excluding investment income” and “Investment income” separately.
- The revenue of the public pension plans as a whole was composed of JPY 38.6 trillion of the contribution income, JPY 13.2 trillion of the national and local government subsidies, etc., and so on. The total amount of revenues excluding investment income was JPY 52.5 trillion. The expenditure side was mainly composed of JPY 53.4 trillion of benefit disbursements, and the total amount of expenditures was JPY 53.7 trillion. As a result, the annual balance of revenues and expenditures excluding investment income was negative JPY1.2 trillion.
- The investment income was positive JPY 44.5 trillion on a market value basis. This was due to the strong performance of equities in Japan and overseas.
- The reserve of the public pension plans as a whole at the end of FY2020 was JPY 233.9 trillion on a market value basis which increased by JPY 43.4 trillion compared with the previous fiscal year.

Item	Whole Employees' Pension Insurance	National Pension		Public pension plans as a whole	
		National Pension Account	Basic Pension Account		
	JPY 100 million	JPY 100 million	JPY 100 million	JPY 100 million	
Reserves at the previous fiscal year end (a)	1,782,686	85,232	37,281	1,905,199	
Revenues (adjusted financial status base)	Total amount	498,137	34,090	249,757	525,271
	(of which) Contribution income	372,802	13,365	•	386,168
	(of which) National and local government subsidies etc.	113,305	18,308	•	131,613
	(of which) Subsidies from Basic Pension	4,680	2,370	•	•
	(of which) Revenue of the contribution to Basic Pension	•	•	249,663	•
Expenditures (adjusted financial status base)	Total amount	511,980	36,604	245,106	536,977
	(of which) Benefit disbursements	292,067	3,491	238,053	533,612
	(of which) Contribution to Basic Pension	217,735	31,928	•	•
	(of which) Benefits equivalent to Basic Pension (Subsidies from Basic Pension)	•	•	7,050	•
Annual balance of revenues and expenditures excluding investment income (b)	Δ13,844	Δ2,514	4,651	Δ11,706	
Investment income (c)	424,373	20,489	10	444,873	
Others (d)	206	52	-	258	
Reserves at the fiscal year end (a + b + c + d)	2,193,421	103,259	41,942	2,338,623	
Change in reserves from the previous fiscal year end	410,735	18,028	4,661	433,424	

Note 1 To observe whole EPI and the fiscal revenue and expenditure situation for EPI as a whole, “give-and-take” exchanges between EPI implementing organizations are excluded from both revenues and expenditures.

In the same way, “give-and-take” transactions within the public pension plans are excluded from both revenues and expenditures for the public pension plans as a whole.

Note 2 Whole EPI and Public pension plans as a whole do not include the substitutional portion managed by EPFs.

Note 3 The amount recorded as “Others (d)” is “Transfer to reserves from the Business Account” in EPI Account and the National Pension Account of NP.

14. Factor analysis of change in contribution income for EPI

Trends in contribution income for EPI

FY	EPI Account	NPO-MAAs	LPO-MAAs	PSTE-MAA	Whole EPI
	JPY 100 million	JPY 100 million	JPY 100 million	JPY 100 million	JPY 100 million
2019	326,197	12,901	33,771	4,578	377,446
2020	320,612	12,849	34,553	4,788	372,802

The increase in the number of insured persons significantly boosted the contribution income.

The decrease in the average amounts of standard remuneration contributed to the decrease in contribution income.

Rate of change over previous FY (%)

2020	Δ1.7	Δ0.4	2.3	4.6	Δ1.2
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Note: EPI Account and Whole EPI do not include the substitutional portion managed by EPFs.

Classification		EPI Account	NPO-MAAs	LPO-MAAs	PSTE-MAA
		%	%	%	%
Rate of change over previous FY (contribution income)		Δ1.7	Δ0.4	2.3	4.6
Contributions by factor	Number of insured persons	0.4	0.8	4.7	1.8
	Average amounts of standard remuneration	Δ0.6	Δ0.9	Δ2.2	0.1
	Contribution rate	—	—	—	2.4
	Others	Δ1.6	Δ0.3	Δ0.1	0.4

Note1: The contributions of each factor are estimates, being expressed in terms of the rate against contribution income in the previous fiscal year.

Note2: The fiscal year average is used for the number of insured persons.

“Others” are the residual of factor analysis, which includes the impact of the special contribution postponement system implemented as a response to the COVID-19 pandemic.

The increase in contribution rates in FY2020 contributed to the increase in contribution income.

15. Analysis of the factors causing an increase or decrease in contribution income of the current year for National Pension Account of NP

The decline in the number of NP Category-1 insured persons contributed to the decline in contribution income.

In FY2020, proportion of contribution-exempted insured persons increased due to an increase in the number of persons who applied for full exemption of contributions or contribution postponement, partly due to the impact of the temporary special system implemented as a response to the COVID-19 pandemic, contributing to a decrease in premium income.

Rise in the nominal amount of NP contributions contributed to the increase in contribution income.

FY	Contribution income	Contributions for current FY	Contributions for preceding FY	Payment rate for current FY	Final payment rate	Contributions
	JPY 100 million	JPY 100 million	JPY 100 million	%	%	
2018	13,904	13,153	751	68.1	77.2	16,340
2019	13,458	12,817	641	69.3		16,410
2020	13,365	12,749	616	71.5		16,540

	Rate of change over previous FY (%)			Difference from previous FY	
2018	Δ0.4	Δ0.6	3.2	1.8	0.9
2019	Δ3.2	Δ2.6	Δ14.6	1.1	
2020	Δ0.7	Δ0.5	Δ3.9	2.2	

Note1: The payment rate of NP contributions is the ratio of the number of months actually paid to the number of months in which contributions should be paid. The number of months to be paid is the number of months to be paid as the concerned fiscal year's portion of contributions (not including the number of statutory exemption months, the number of full exemption months applied, number of special case months for students and number of suspension months for the youth), and the number of months paid is the number of months actually paid during that year (until the end of April of the following year). In addition, the number of months to be paid and the number of months actually paid are counted as one month even for those who paid partially the contributions.
 Note2: Contributions can be paid for the preceding two years' portion. Final payment rate is the payment rate including contributions paid in the preceding fiscal years.

Classification		2018	2019	2020
		%	%	%
Rate of change over previous FY (Contributions for current FY)		Δ0.6	Δ2.6	Δ0.5
Contribution by factor	Number of insured persons	Δ3.0	Δ2.0	Δ0.3
	Proportion of number of contribution-exempted insured persons	Δ0.4	Δ1.8	Δ3.3
	Amount of contributions	Δ0.7	0.3	0.8
	Payment rate	2.7	1.7	3.2
	Others	0.8	Δ0.7	Δ1.0

Note1: Contributions by factor are estimates, being expressed as a ratio to contributions for the current year's portion in the previous fiscal year.
 Note2: The fiscal year average is used for the number of insured persons.
 Note3: The amount of contributions is the weighted average in consideration of the number of months received.

The increase in the payment rate contributed to the increase in contribution income.

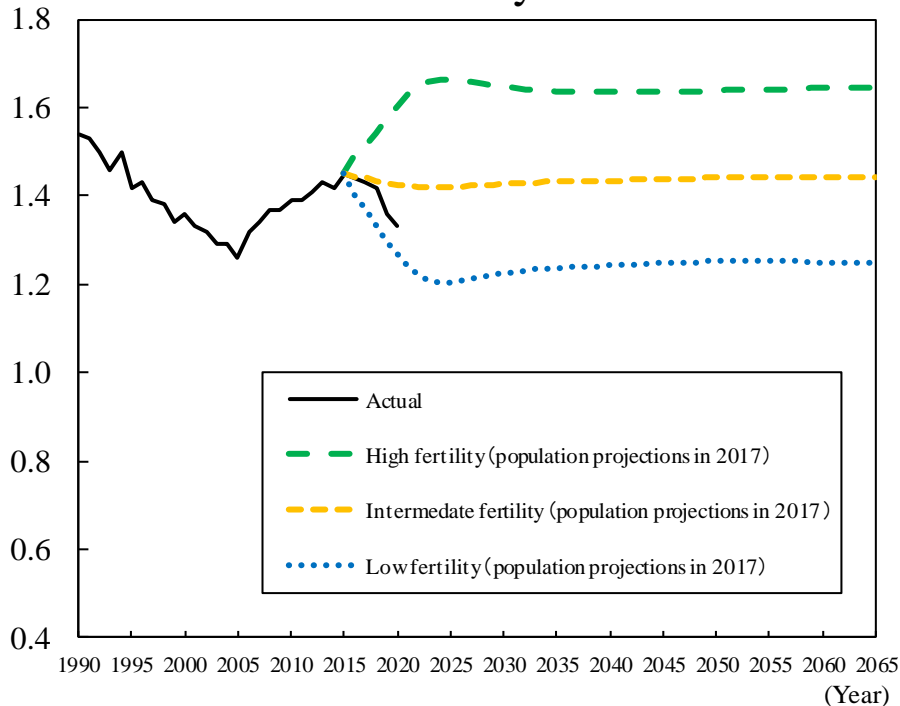
**Comparison of actual and
projected fiscal revenues and expenditures
(Excerpt from Chapter 3, Section 2)**

16. Comparison of actual results and assumptions for total fertility rate and average life expectancies at 65

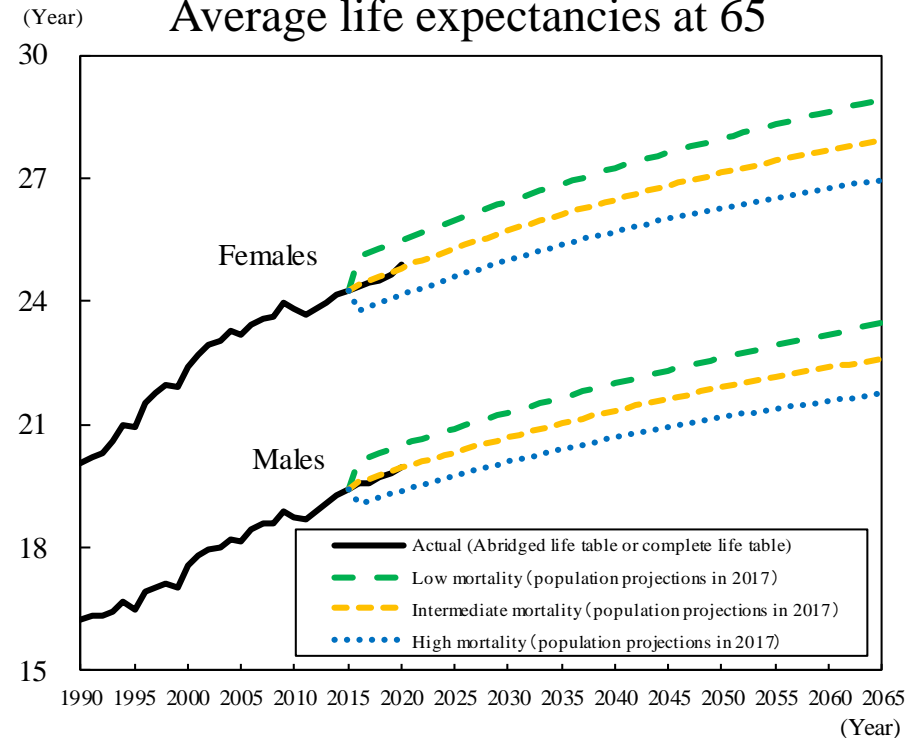
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- The actual fertility rate in 2020 was roughly in the middle of the assumed intermediate fertility rate and the assumed low fertility rate in the 2017 population projections, which underpinned the 2019 actuarial valuation, as in 2019.
- A comparison of the actual average life expectancies of Japanese nationals aged 65 with the corresponding assumptions for the year 2017 population projections shows that the actual life expectancy for both males and females is proceeding at equivalent to the assumed intermediate mortality.

Total fertility rate

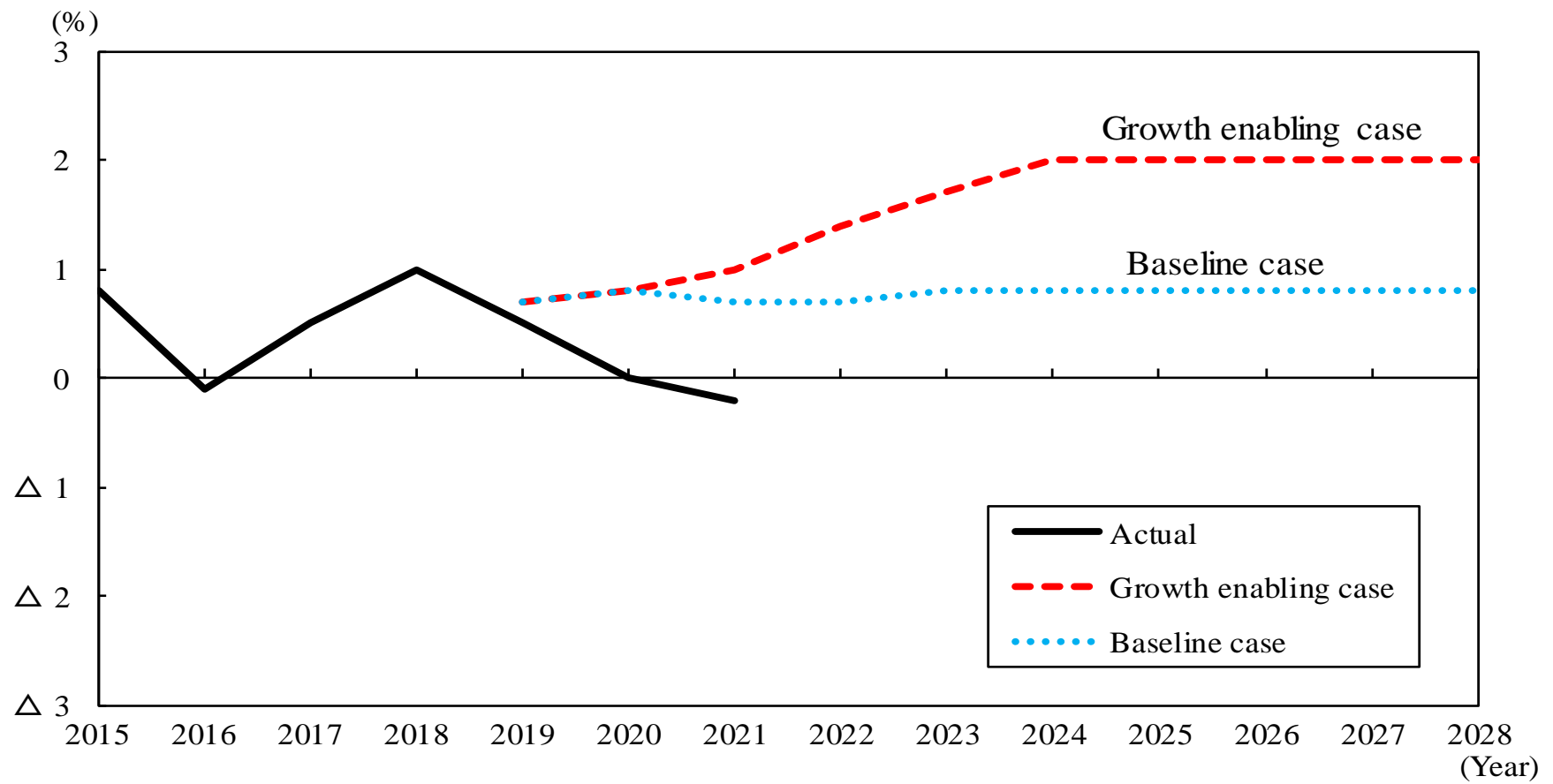


Average life expectancies at 65



17. Comparison of actual and assumed inflation rates

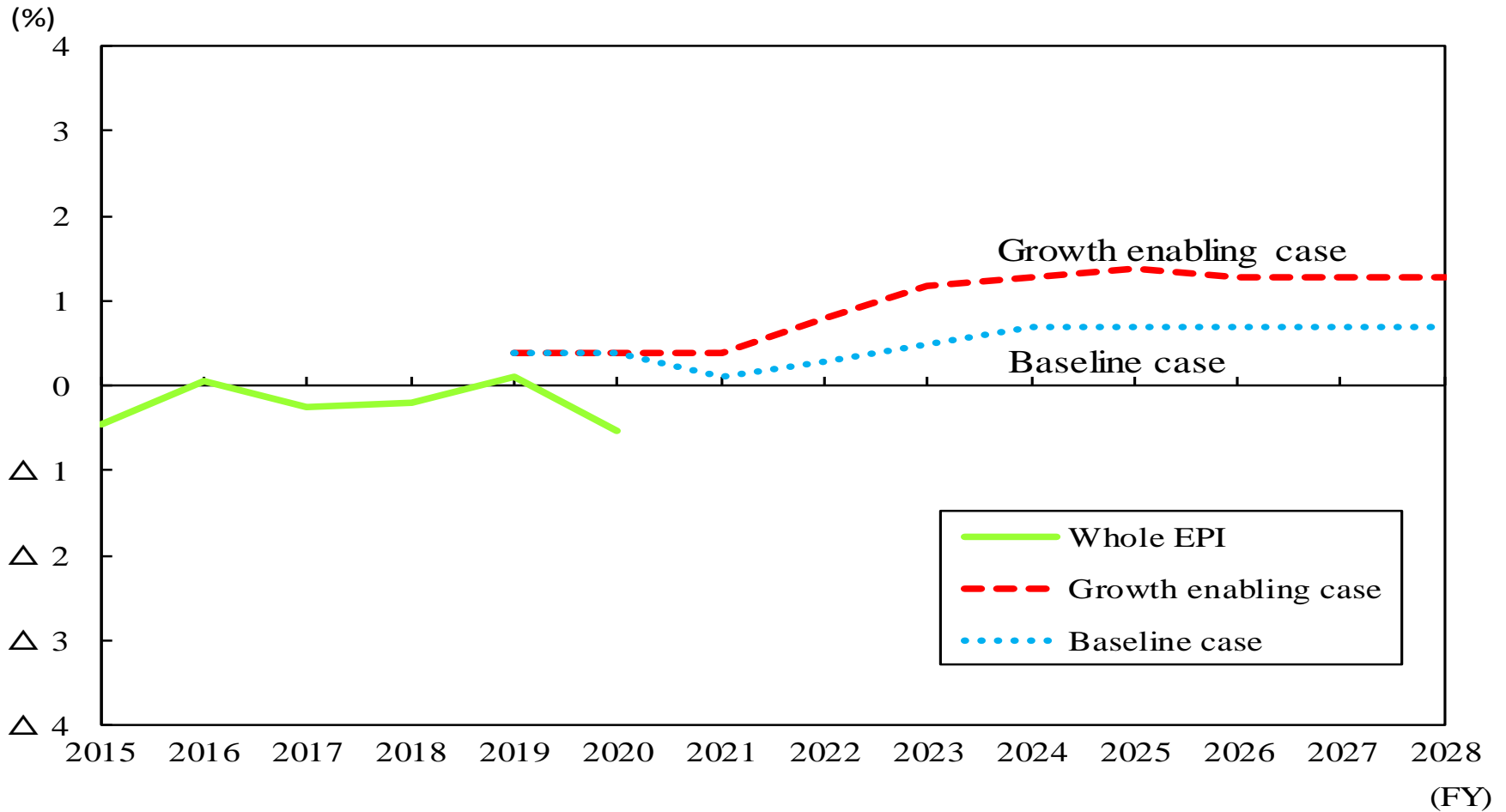
The actual inflation rate in 2020 was lower than the assumptions made in the actuarial valuation, both in growth enabling and baseline cases. This was mainly because many items rose with the consumption tax rate hike in October 2019, and “Kindergarten fees (public / private)” and “Nursery school fees” fell as a result of the introduction of new subsidies for preschool education and childcare in October 2019.



Note: The "Growth enabling case" is connected to Case I-III, and the "Baseline case" is connected to Case IV-VI of the actuarial valuation.

18. Comparison of actual rates of real wage increase and assumed rates

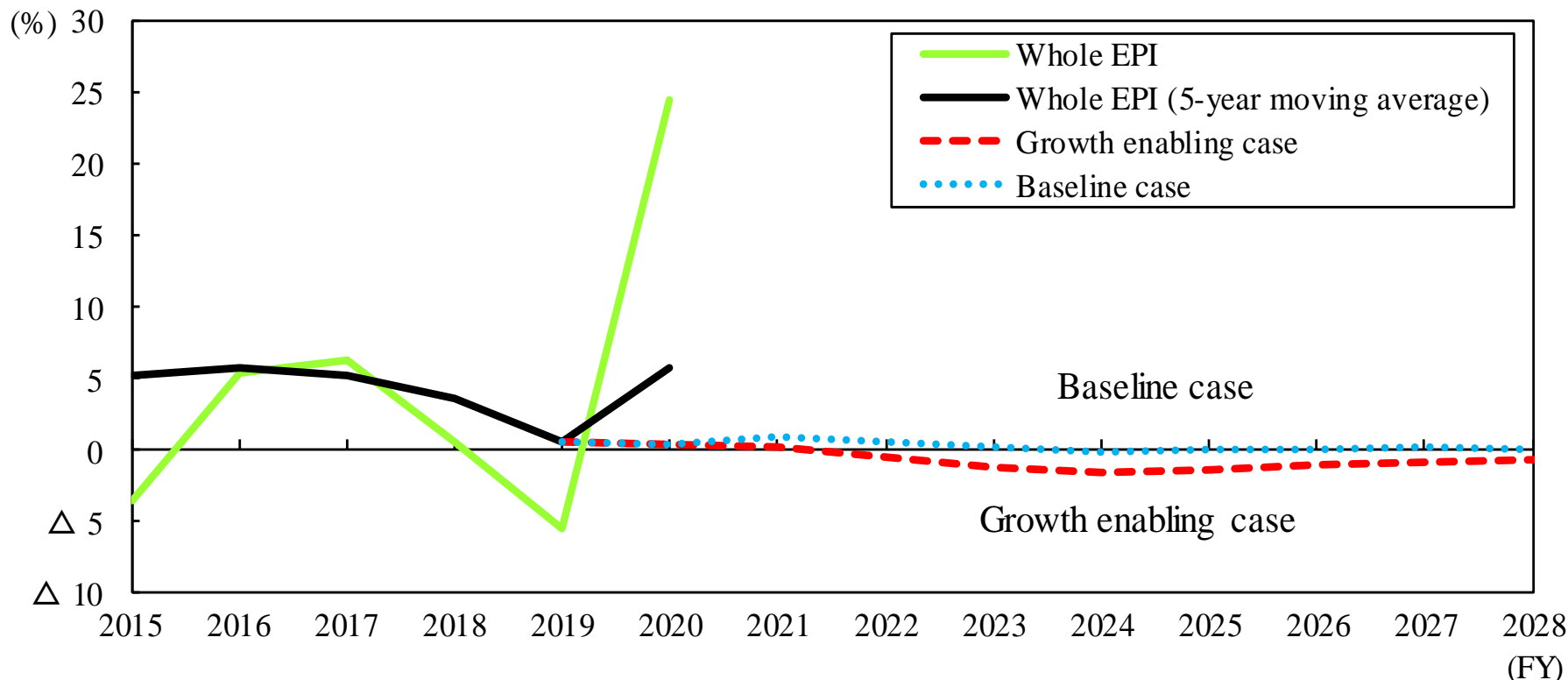
The actual rate of real wage increase (adjusted for price inflation) in FY2020 was lower than the assumption in the actuarial valuation.



Note: The "Growth Enabling Case" is connected to Case I-III, and the "Baseline Case" is connected to Case IV-VI of the actuarial valuation.

19. Comparison of actual substantial investment returns and assumptions

The actual substantial investment return (adjusted for nominal wage increase) in FY2020 exceeded the assumption in the actuarial valuation. This was due to the strong performance of equities in Japan and overseas.



Note 1: The whole EPI (five-year moving average) is calculated by averaging the substantial investment returns for the five years prior to the fiscal year in question, for the whole EPI FY2015 and subsequent years, and for the former EPI for FY2014 and earlier.

Note 2: The "Growth enabling case" is connected to Case I-III, and the "Baseline case" is connected to Case IV-VI of the actuarial valuation.

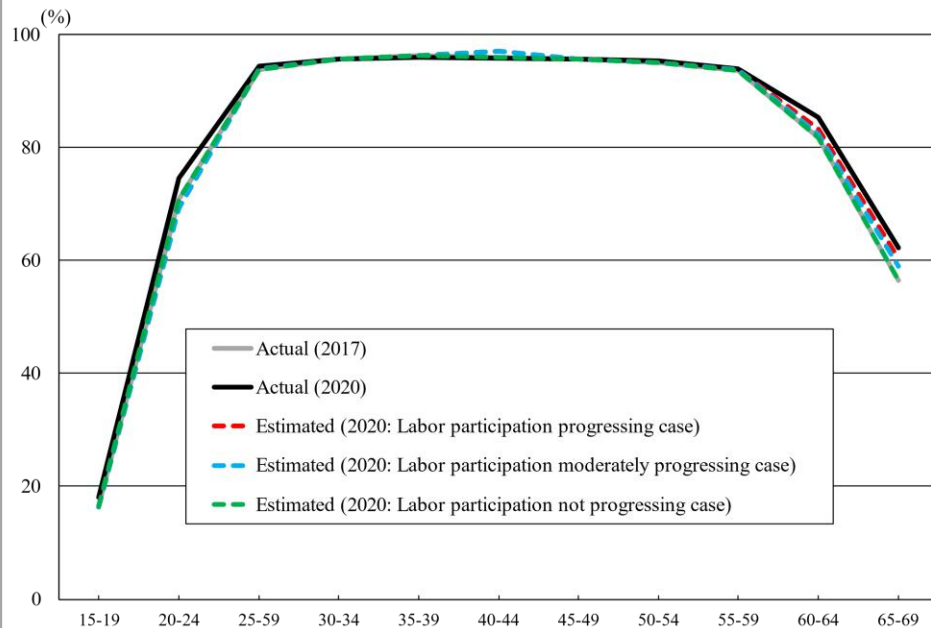
As public pension plan contributions and newly awarded benefits vary in accordance with rates of nominal wage increase, the actual investment return and the assumption used for future projections are best compared from a long-term perspective by comparing the substantial investment return (adjusted for nominal wage increase).

20. Comparison of actual labor force participation rates and assumed rates

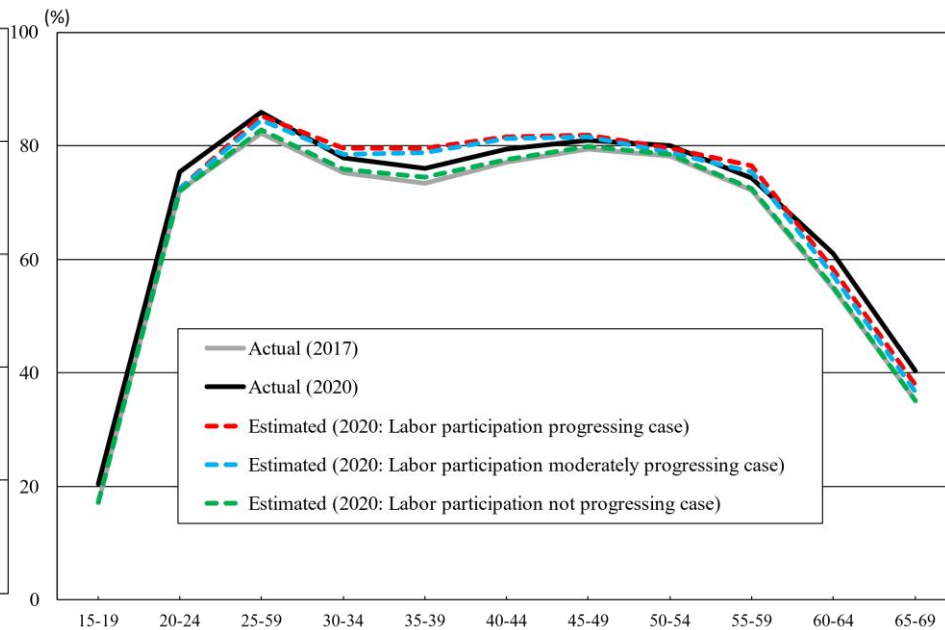
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Comparing the actual results in 2020 with the labor participation progressing case estimates, the actual results exceeded the labor participation progressing case estimates for males aged 15-34 and 50-69, and females aged 15-29, 50-54 and 60-69.

Labor force participation rates by age group (males)



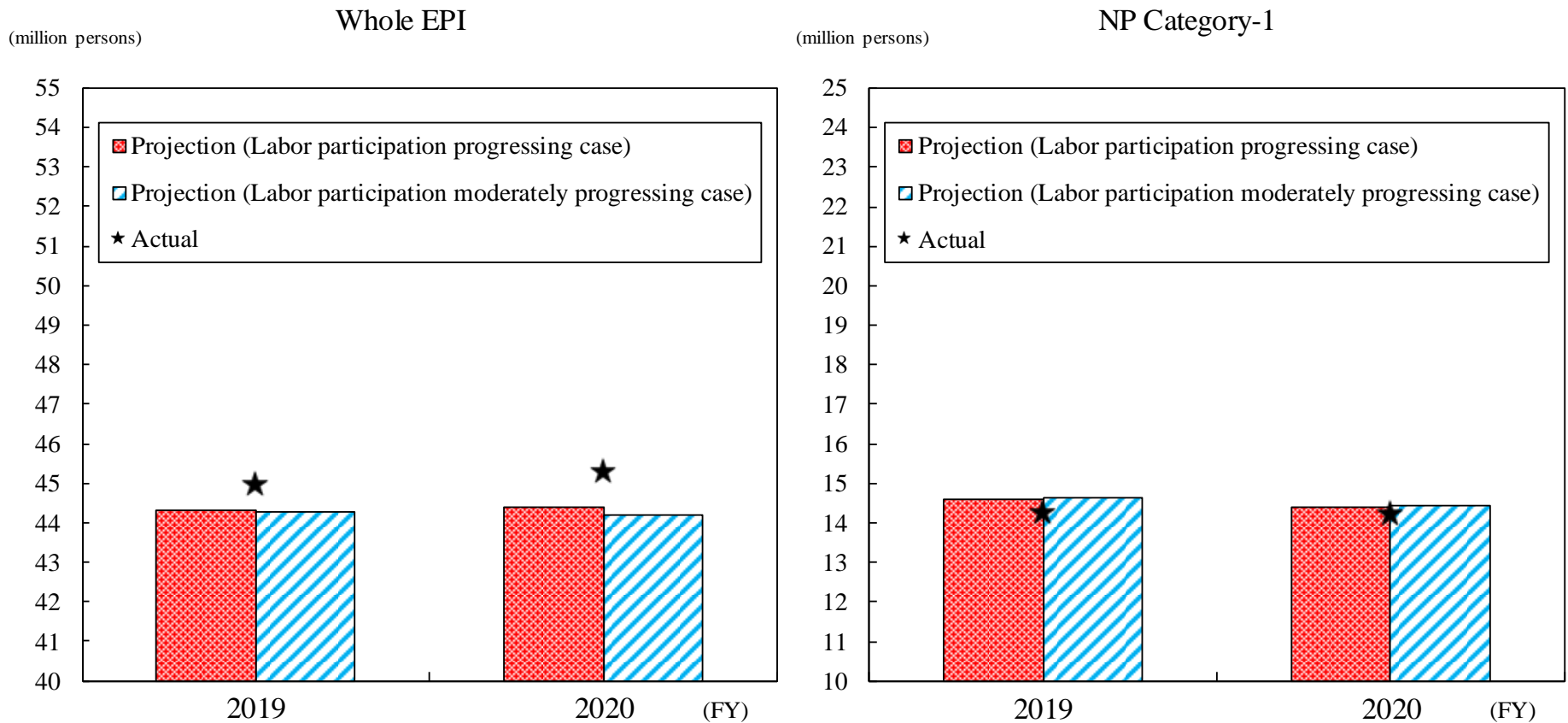
Labor force participation rates by age group (females)



Note: The “Labor participation progressing case” corresponds to Case I-III, the “Labor participation moderately progressing case” to Cases IV and V, and the “Labor participation not progressing case” corresponds to Case VI of the actuarial valuation.

21. Comparison of actual number of insured persons and future projections

In FY2020, the actual result (marked with “★” in the figure below) exceeds the future projections (bar graph) for the whole EPI, while the actual result is lower than the future projections for NP Category-1 insured persons.

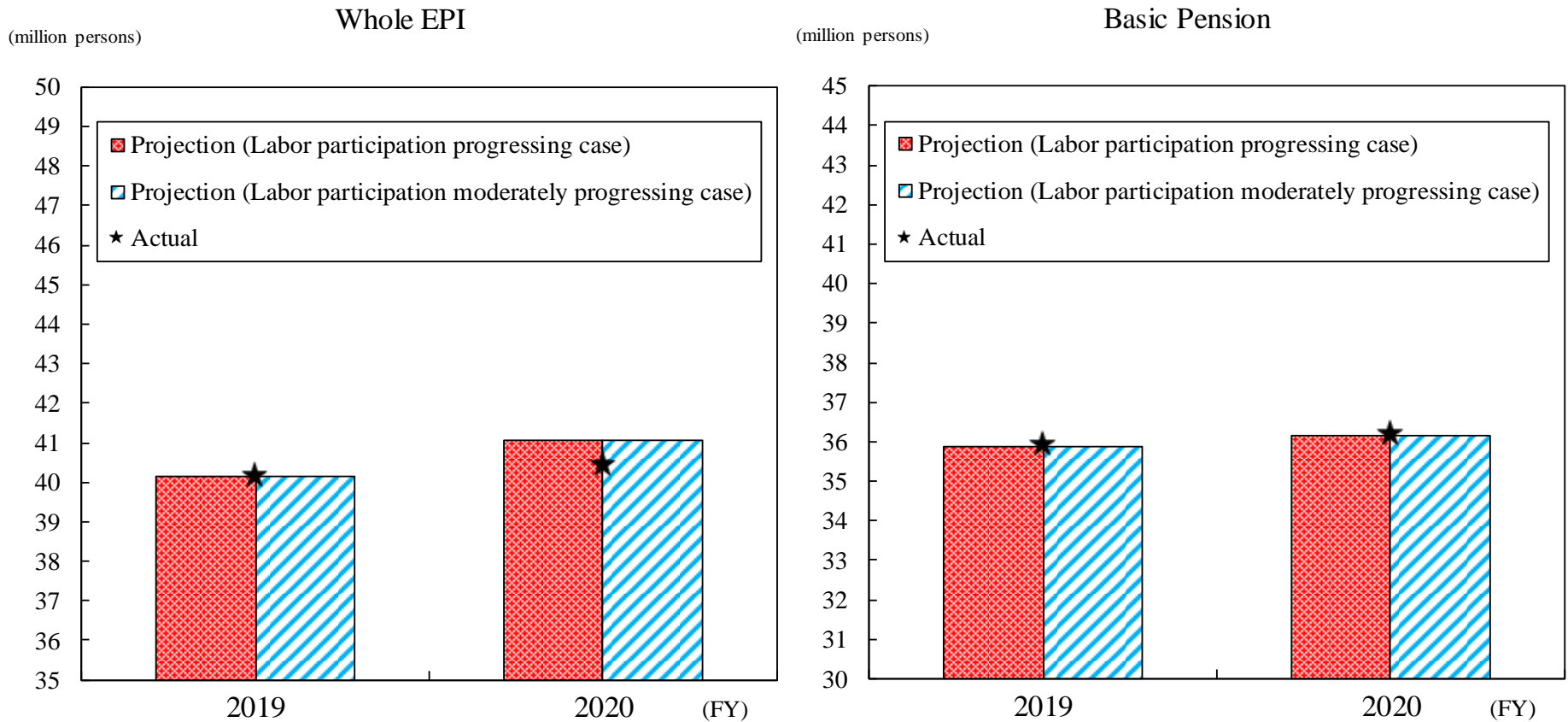


Note: The “Labor participation progressing case” corresponds to Case I-III, and the “Labor participation moderately progressing Case” corresponds to Case IV and V of the actuarial valuation.

22. Comparison of actual number of recipients and future projections

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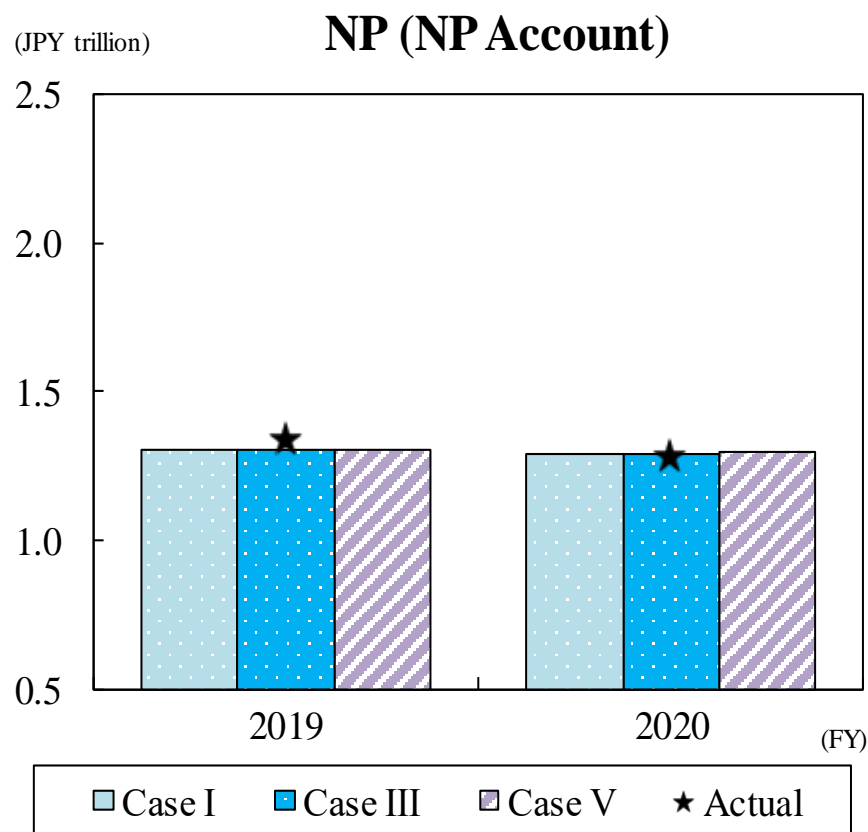
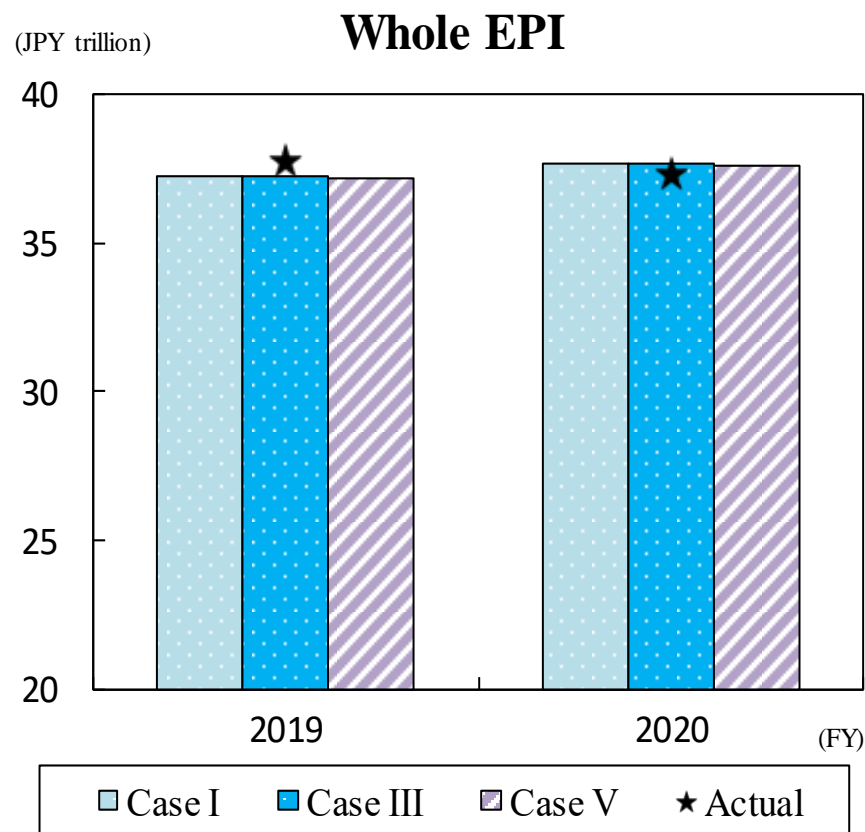
In FY2020, the actual result (marked with “★” in the figure below) is lower than the future projections (bar graph) for the whole EPI, while the actual result is almost equivalent to the future projection for the basic pension.



Note: The “Labor participation progressing case” corresponds to Case I-III, and the “Labor participation moderately progressing case” corresponds to Case IV and V of the actuarial valuation.

23. Comparison of actual contribution income and future projections

- In FY2020, the actual results (marked with “★” in the figure below) are lower than the future projections (bar graph) for both the whole EPI and the National Pension Account of NP.
- The reason for the whole EPI is that there may be a temporary impact of the special contribution postponement system implemented as a response to the COVID-19 pandemic, although the actual result of total standard remuneration exceeds the future projection. For the National Pension Account of NP, the reason is that the actual number of insured persons is lower than the future projection.



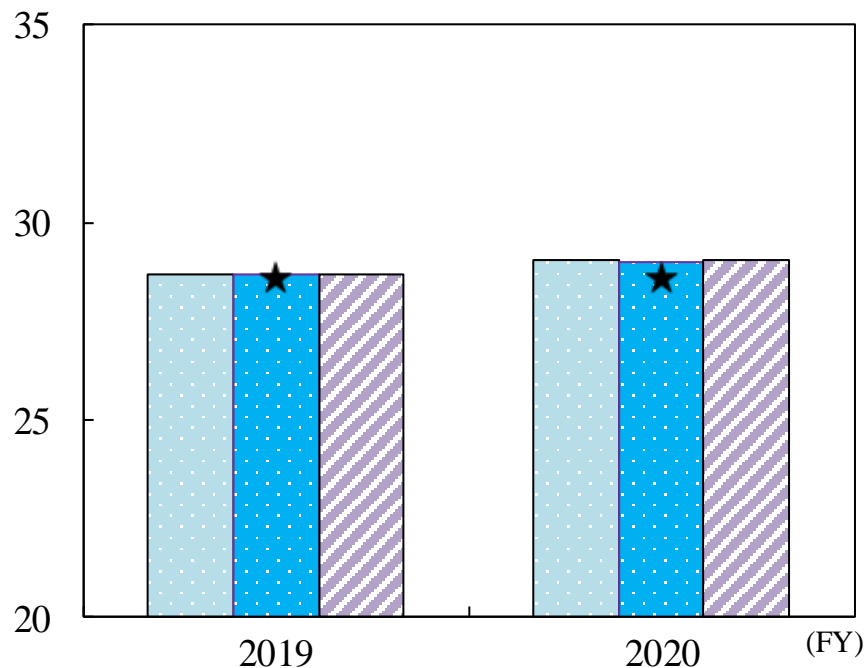
24. Comparison of actual benefit disbursement and future projections

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In FY2020, the actual result (marked with “★” in the figure below) is lower than the future projections (bar graph) for the whole EPI, while the actual result exceeds the future projection for the National Pension Account of NP [Benefit disbursement of additional pension plan for NP category-1 insured persons and voluntary insured persons, etc.].

Whole EPI

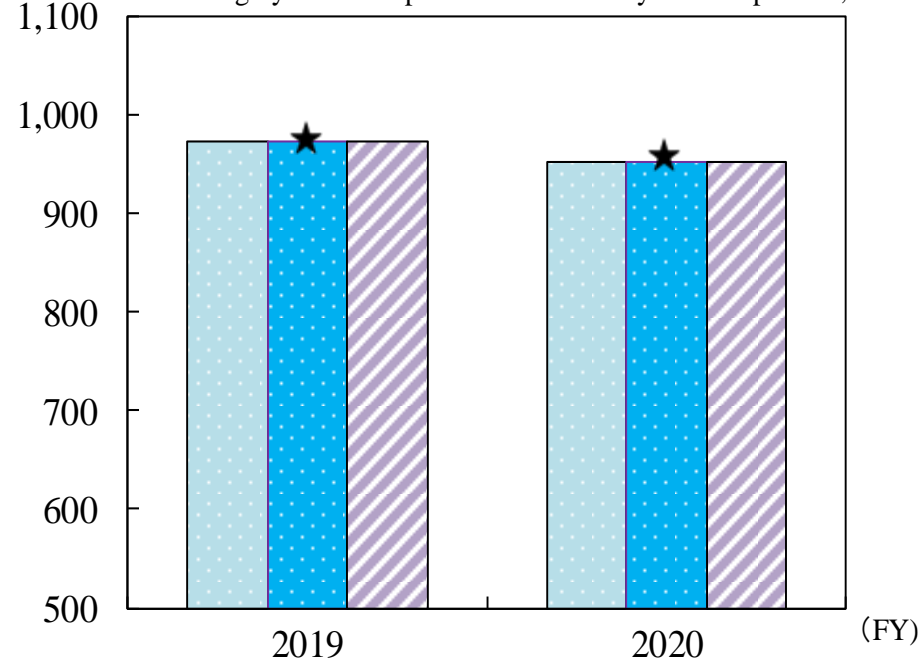
(JPY trillion)



NP (NP Account)

(JPY 100
million)

[Benefit disbursement of additional pension plan for
NP category-1 insured persons and voluntary insured persons, etc.]



□ Case I □ Case III □ Case V ★ Actual

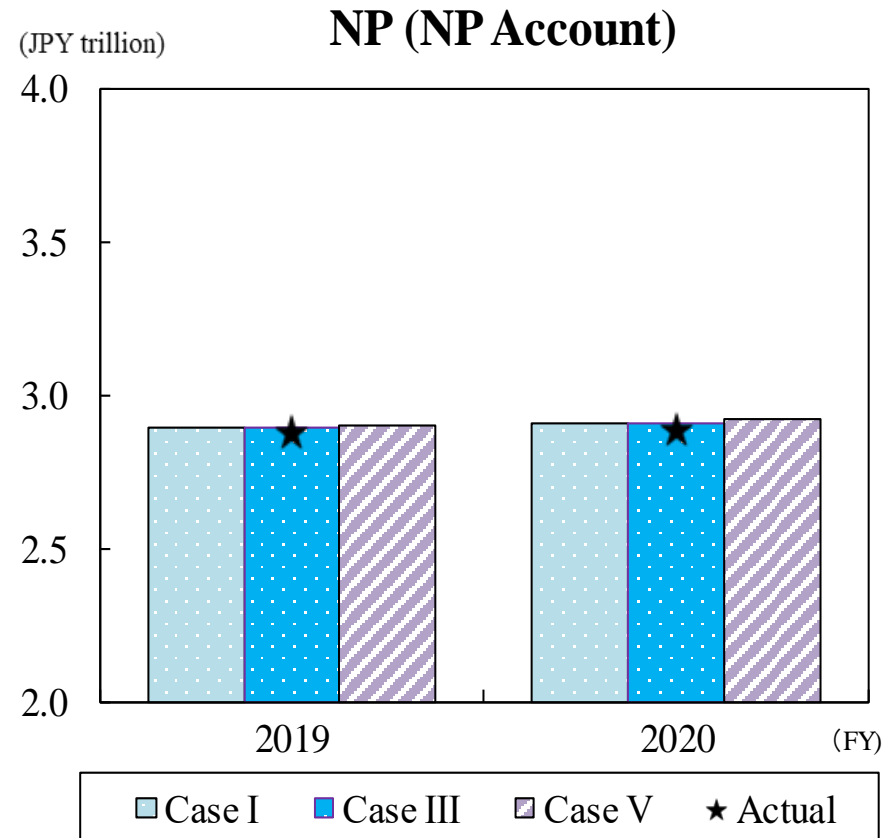
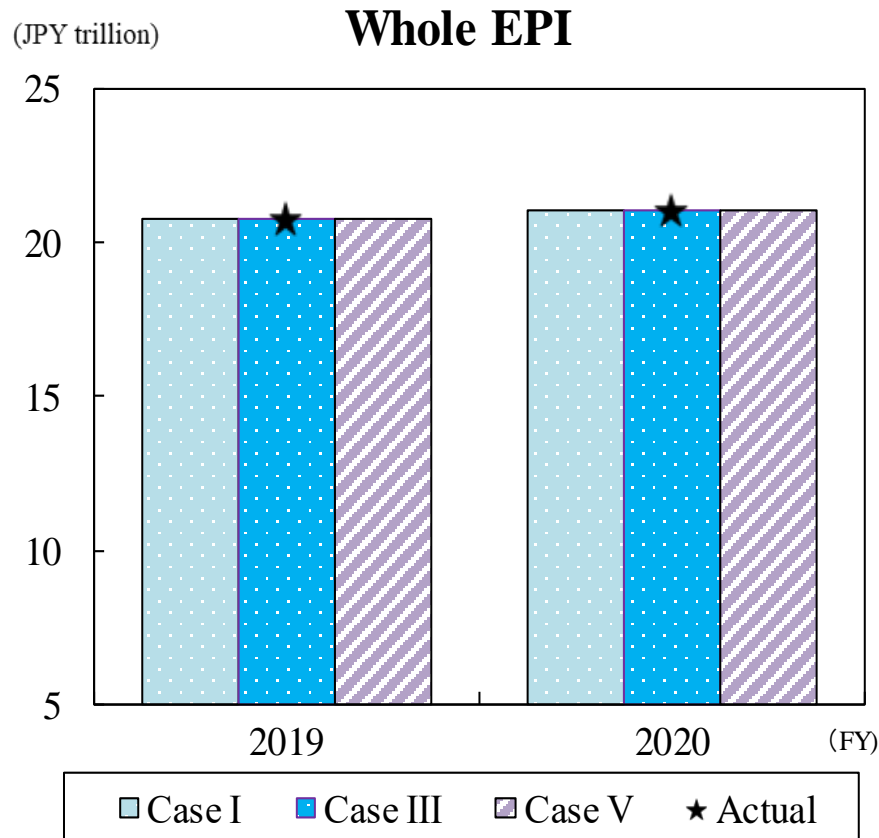
□ Case I □ Case III □ Case V ★ Actual

Note: Excludes benefit cost of Basic Pensions provided by the New Law and National Pensions equivalent to BP provided by the Old Law.

25. Comparison of actual contributions to Basic Pension and the future projections

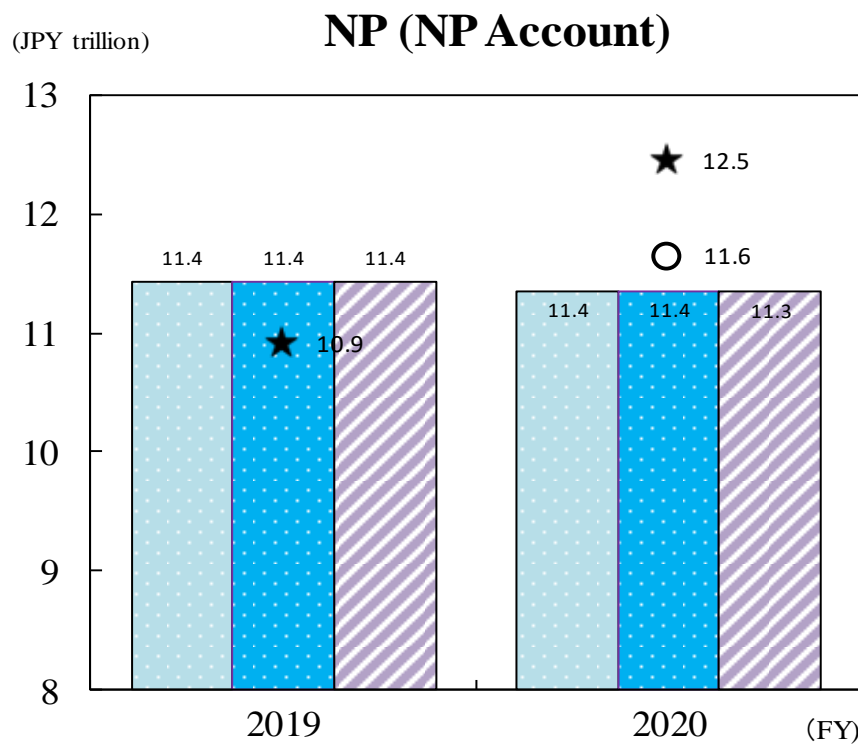
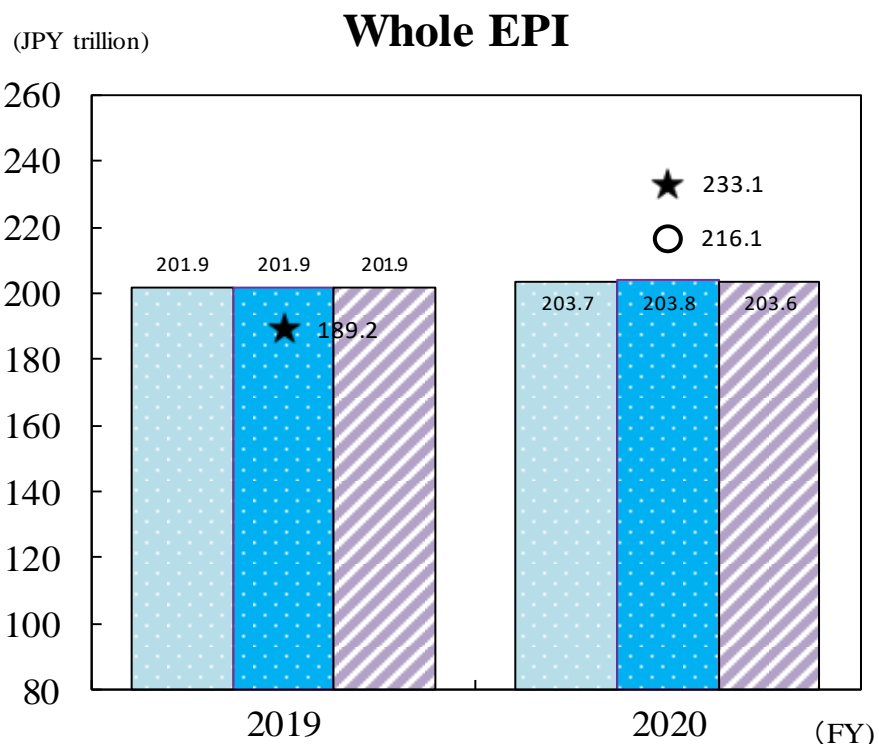
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In FY2020, the whole EPI (marked with “★” in the figure below) is almost equivalent to the future projections (bar graph), while the actual result of the National Pension Account of NP is lower than the future projections.



26. Comparison of actual reserves and future projections

- At the end of FY2020, the actual results for both the whole EPI and the National Pension Account of NP (marked with “★” in the figure below) exceeded the future projection (bar graph). This was due to the strong performance of equities in Japan and overseas.
 - The reserve amounts smoothed for changes in market valuation* (marked with “○” in the figure below, calculated from FY2020) also exceeded the future projection at the end of FY2020.
- * The difference between investment income on a market value basis and historical average income is smoothed out for the past five fiscal years and reflected in the reserve valuation.

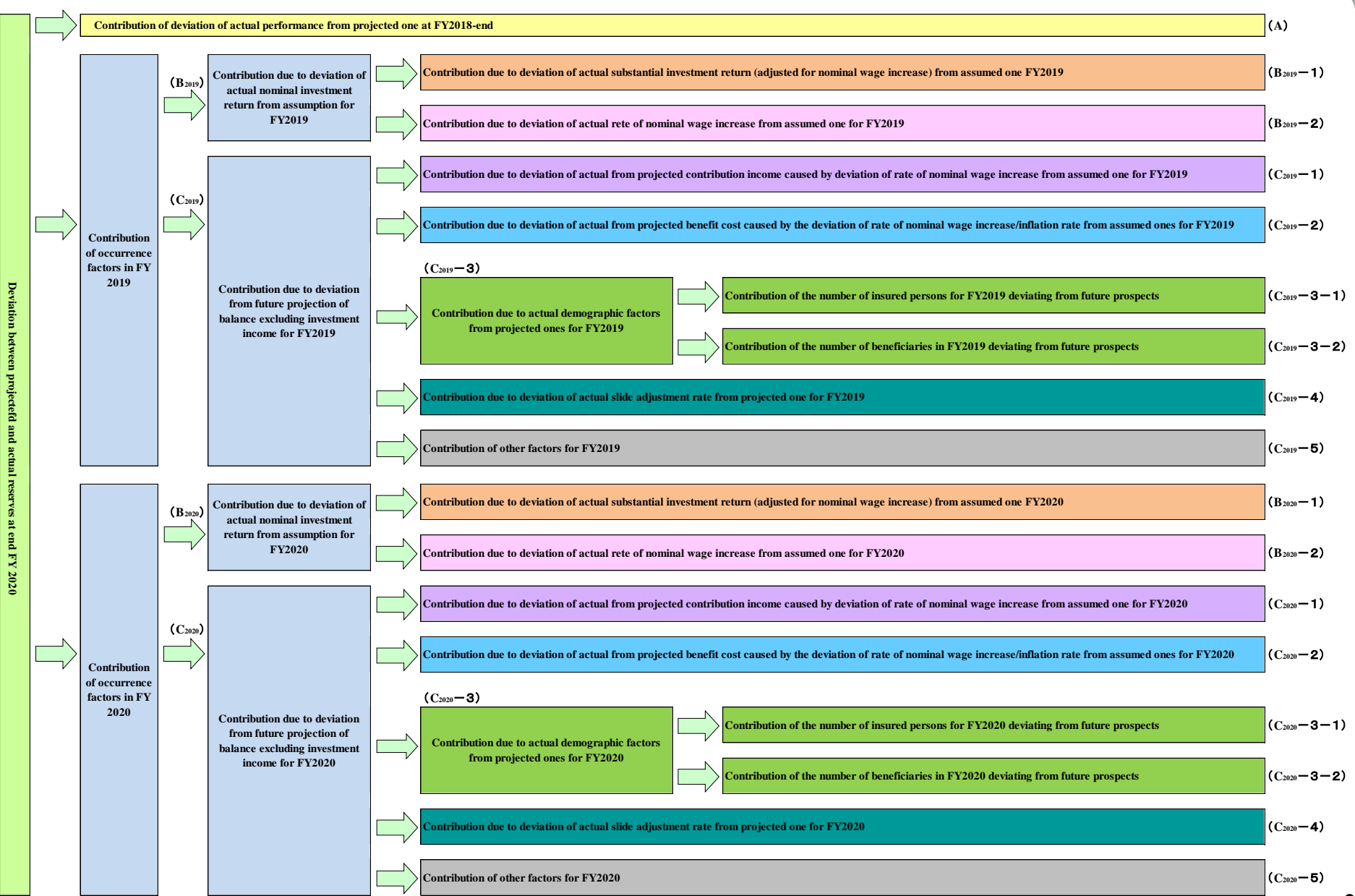


Case I Case III Case V ★ Actual ○ Smoothed

Case I Case III Case V ★ Actual ○ Smoothed

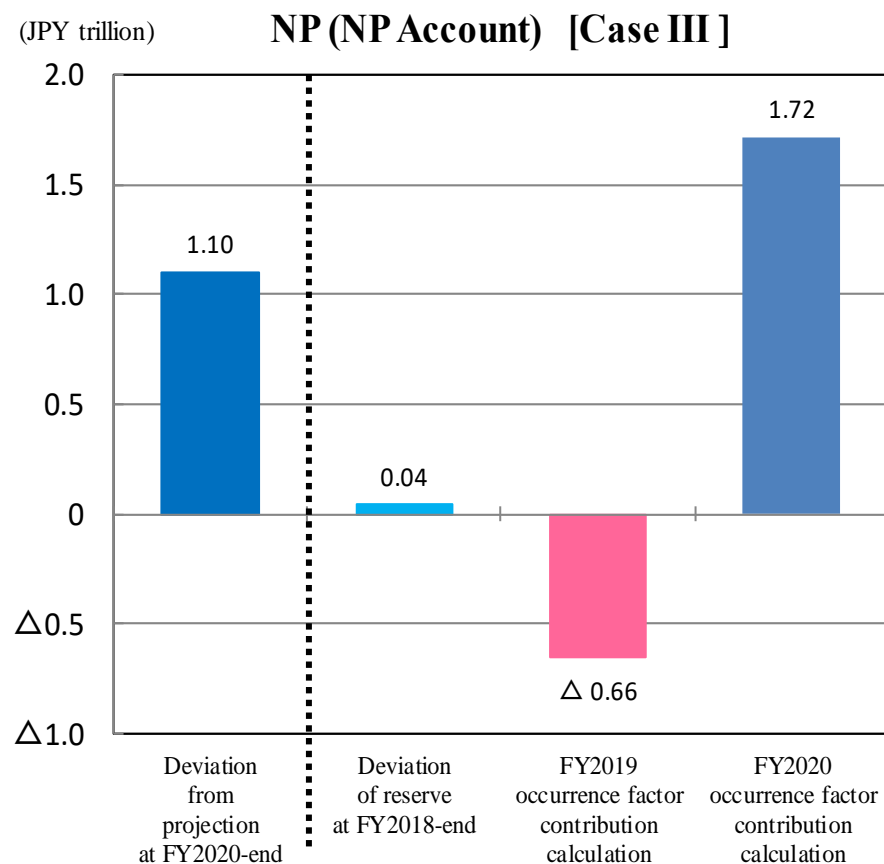
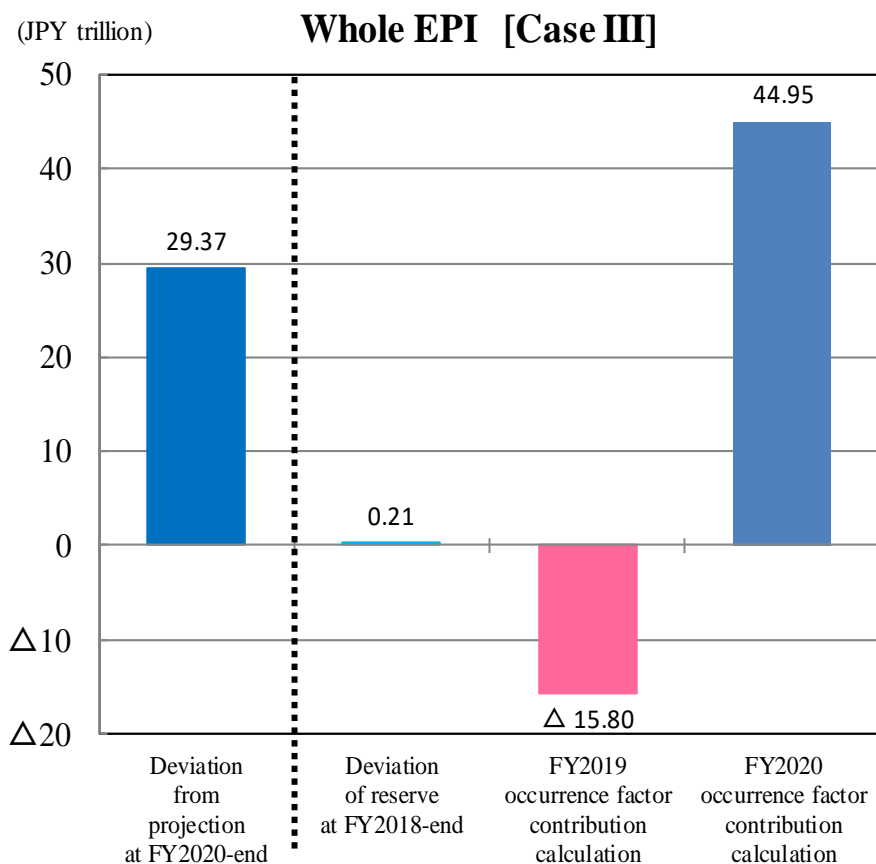
**Analysis of deviations in reserves and
evaluation of actuarial status of
EPI and the Public Pension Plans
(Excerpt from Chapter 3, Sections 4, 5 and 6)**

27. Flow of deviation analysis in actual reserves and future projections



28. Deviation of actual reserves and future projections by generated year

Actual reserves for the whole EPI and National Pension Account of NP as of the end of FY2020 exceeded the future projections. This was because FY2020 occurrence factor contribution calculation was more than cancel out the negative contribution of FY2019 occurrence factor contribution calculation.

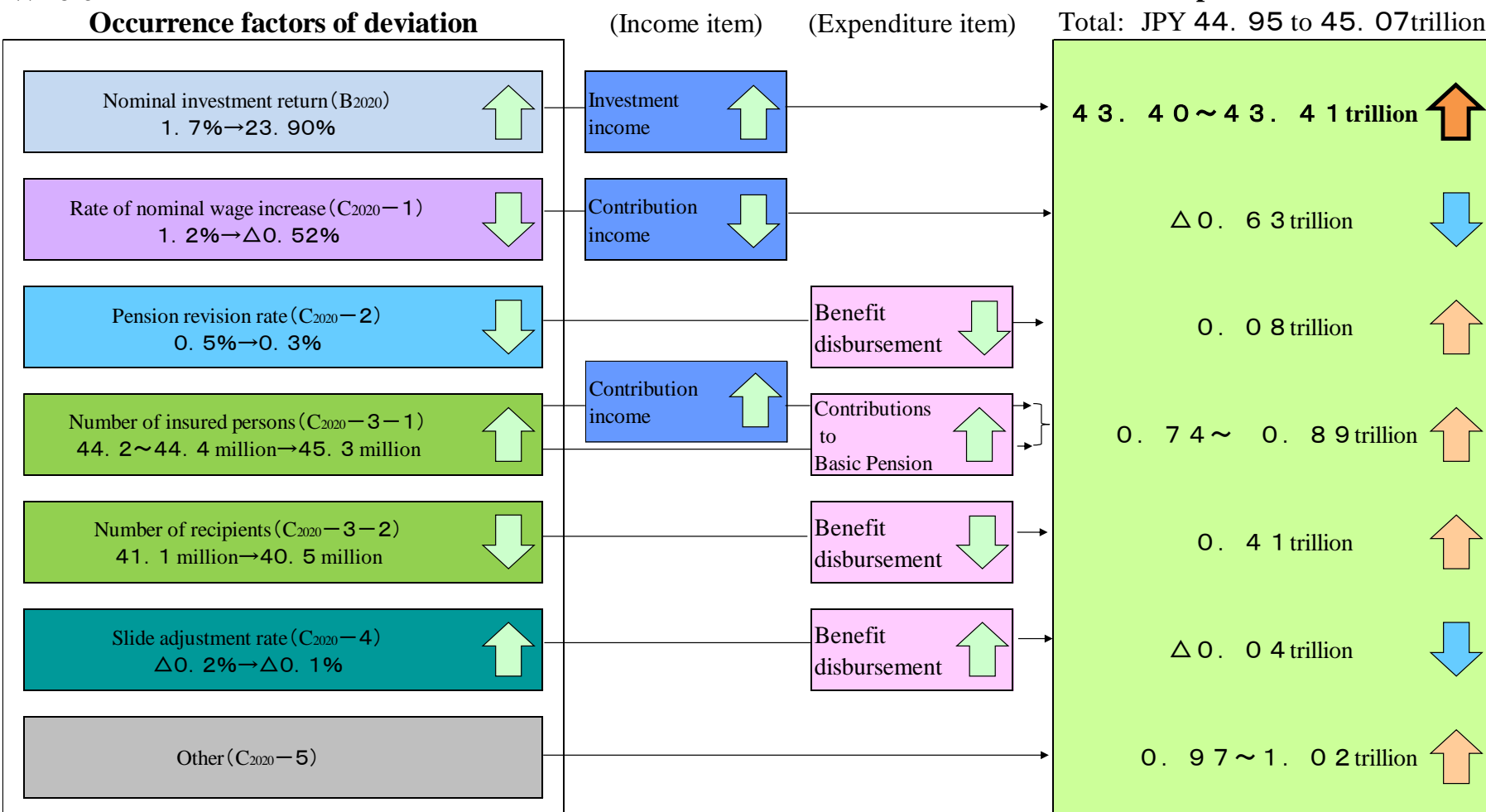


Note: The results are the same for Case I and V.

29. Results of deviation analysis in reserve (deviation that occurred in FY2020, whole EPI)

The divergence in the reserve for whole EPI in FY2020 (JPY 44.95 to 45.07 trillion) was mainly due to the divergence in the nominal investment return (JPY 43.40 to 43.41 trillion), caused by the strong performance of equities in Japan and overseas.

Whole EPI



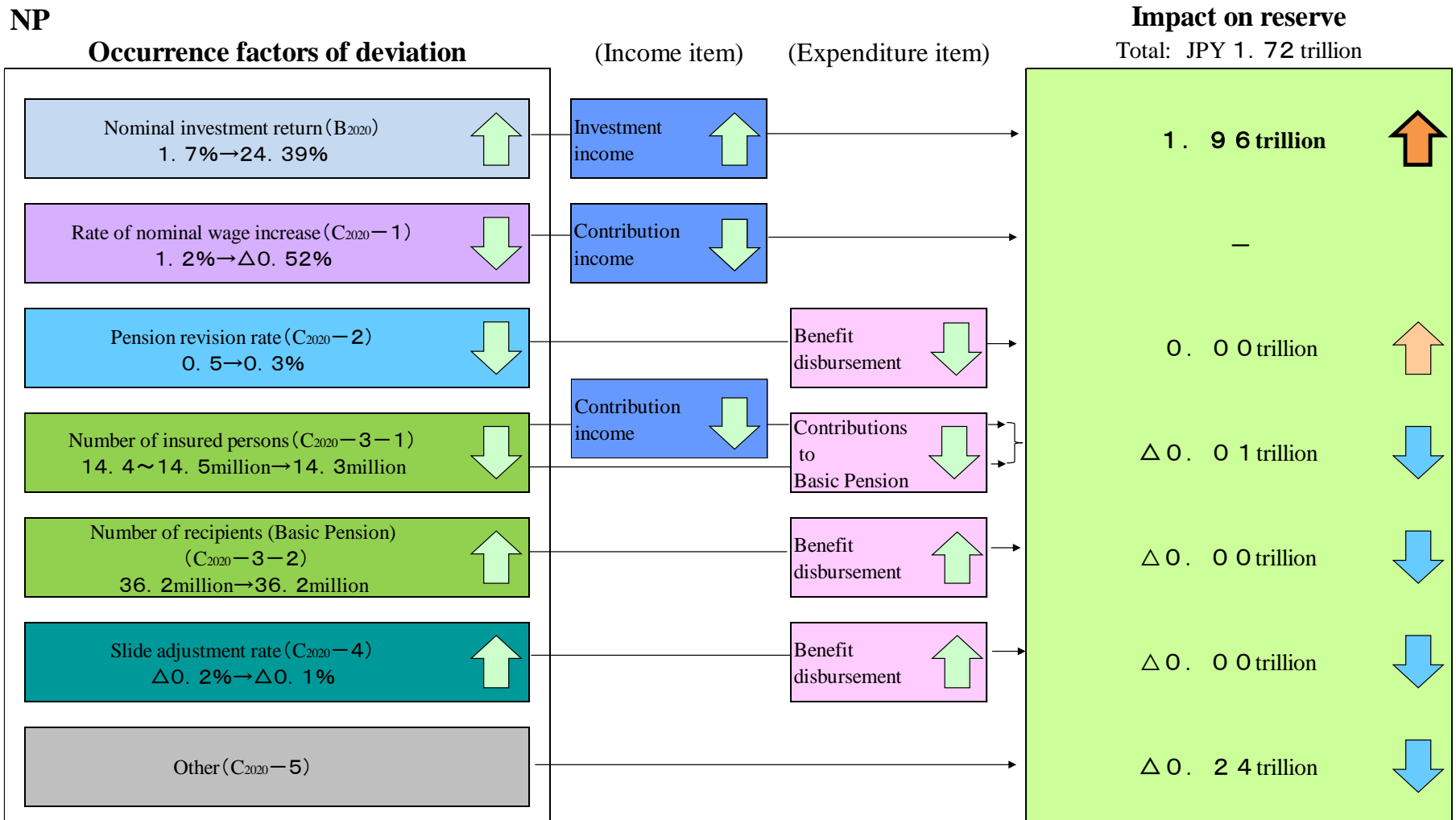
Note: Deviation in reserves is extracted by the factor to be summarized, and the maximum and minimum values are indicated for Cases I, III and V.

30. Results of deviation analysis in reserve (deviation that occurred in FY2020, NP)

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The divergence in the reserve for the National Pension Account of NP in FY2020 (JPY 1.72 trillion) was mainly due to the divergence in the nominal investment return (JPY 1.96 trillion), caused by the strong performance of equities in Japan and overseas.

NP



Note: Deviation in reserves is extracted by the factor to be summarized, and the maximum and minimum values are indicated for Cases I, III and V.

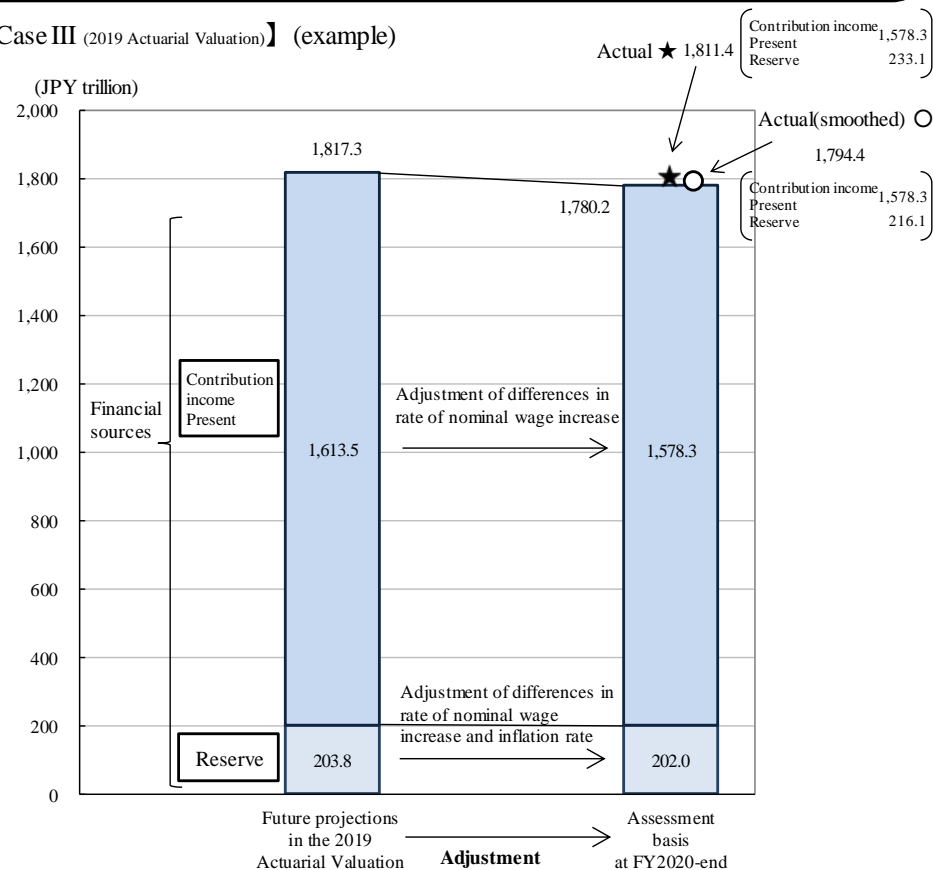
31. Evaluation of the actuarial status for EPI

An analysis of the financial situation of EPI at the end of FY2020 in Cases I, III and V (2019 Actuarial valuation) and Cases III and V (2020 Plan Revision) reveals a positive difference between actual reserves and “baseline reserves for evaluation (projection)” within the range of 1.6 to 1.8% against financial resources (reserves and future premium contribution income).

(Using the reserved amount smoothed for change in market valuation, the range is 0.7% to 0.8%.)

	Case I (2019 Actuarial Valuation)	Case III (2019 Actuarial Valuation)	Case V (2019 Actuarial Valuation)	Case III (2020 Plan Revision)	Case V (2020 Plan Revision)
	JPY trillion	JPY trillion	JPY trillion	JPY trillion	JPY trillion
Actual reserve ①	233.1 [216.1]	233.1 [216.1]	233.1 [216.1]	233.1 [216.1]	233.1 [216.1]
Baseline reserve for assessment (estimate) ②	202.0	202.0	201.7	202.0	201.7
Difference between actual reserve and baseline reserve for assessment (estimate) ③= ①-②	31.1 [14.1]	31.2 [14.2]	31.4 [14.4]	31.2 [14.2]	31.4 [14.4]
Financial sources (reserve and future premium contribution income) ④	1,895.1	1,780.2	1,774.0	1,792.3	1,784.2
Ratio of the difference between actual reserve and baseline reserve for assessment (estimate) to financial resources (excluding national and local government subsidies, etc.) ③/④	1.6 [0.7]	1.7 [0.8]	1.8 [0.8]	1.7 [0.8]	1.8 [0.8]

【Case III (2019 Actuarial Valuation)】 (example)



Note : [] indicates the value when the reserved amount smoothed for change in market valuation is used.

*Baseline reserve for assessment (estimate) is the amount for which the future projections for the reserves are adjusted for the gap between the actual rate of nominal wage increase and inflation rate and those assumed in the actuarial valuation.

- It was confirmed that the trend of the number of NP Category-1 insured persons decreasing and becoming insured by EPI is progressing faster than the future projection of the Actuarial Valuation. If this trend continues, it may enhance the sustainability of NP and contribute to curbing future declines in the benefit levels of BP.
- In addition, the actual fertility rates for 2019 and 2020 were roughly in the middle of the assumed intermediate fertility rate and the assumed low fertility rate in the 2017 population projections, and actual contribution income in 2020 was confirmed to be lower than the future projection.
Should these deviations from future projections continue over the medium to long term, rather than temporarily, which is thought to be partly due to the COVID-19 pandemic and other factors, the impact on finance of public pensions would be significant.
- From the perspective of finance of public pensions, we should pay attention to the long-term trend of actuarial status, regardless of the short-term change, including those of demographic and economic factors.

(Reference)

Pension Actuarial Subcommittee of the Social Security Council

Pension Actuarial Subcommittee of the Social Security Council

- The Pension Actuarial Subcommittee was established in the Social Security Council and is tasked by the cabinet decision to promote the integration of the public pension plans (2001) with reviewing the stability and fairness of employee pension plans when financial reviews and actuarial valuations are conducted and with obtaining reports on the financial status of each plan every fiscal year.
- Following the integration of employees' pension plans in October 2015, the results of actuarial valuation and reports on the settlement of accounts for each fiscal year are requested and discussed from the perspective of ensuring plans stability.

Cabinet decision on “promotion of the integration of public pension plans (2001)”
 It is requested that the Social Security Council establish a subcommittee comprising persons with expertise and experience in the field of pension actuarial science and that the subcommittee be required to report annually on ensuring the stability and fairness of employees' pension plans, in addition to verification at the time of actuarial valuation.

