Economic and Fiscal Projections for Medium to Long Term Analysis

July 21, 2021 Cabinet Office, Government of Japan

Projections are conducted using the Cabinet Office's "Economic and Fiscal Model," incorporating macroeconomy, public finance and social security synthetically. Therefore, the main economic variables such as growth rates, inflation rates and interest rates are not exogenously assumed, but are endogenously obtained within the model. Considerable leeway should be given when interpreting the projections shown here due to various uncertainties.

1. Introduction

Under the concept of "the economy is the foundation of public finance," the government decided in the "Basic Policy 2021¹" to work to overcome deflation and revitalize the economy, while continuing to make efforts for expenditure reform and promote revenue reform toward fiscal consolidation. As for the fiscal consolidation targets, the government decided to maintain its aim for a primary surplus of the central and local governments by FY2025, and at the same time to steadily reduce the public debt to GDP ratio².

This projection is intended to contribute to the discussion of the Council on Economic and Fiscal Policy by checking the progress of the economic revitalization and fiscal consolidation and providing the basic data necessary to consider further efforts, and conducting medium- to long-term analysis, based on the scenarios of economic situations and fiscal assumptions as follows.

2. Scenarios and Assumptions in Macroeconomy³

The projection on macroeconomy until FY2022 is based on the Cabinet Office's "Mid-Year Economic Projection⁴." From FY2023, based on the past performance and current trend of the Japanese economy, the projection shows medium- to long-term macroeconomic prospects such as GDP and inflation for two different cases.

(1) Economic Growth Achieved Case

The Economic Growth Achieved Case offers a projection in which the government's policy goals of overcoming deflation and economic revitalization show solid results at a feasible pace reflecting the past performance.

Specifically, the Economic Growth Achieved Case includes the following assumptions:

- •The total factor productivity (TFP) growth rate rises from the current level (around 0.4%) to around 1.3%, based on the extent and pace⁵ that the Japanese economy actually experienced before it entered deflation.
- The labor force participation rate shifts based on the estimates of labor supply and demand for the "case in which economic growth and labor participation are achieved" shown by the "Labor Policy Study Group" (2019).
- •The number of foreign workers shifts based on the non-Japanese population reported in the "Population Projection for Japan" by the National Institute of Population and Social Security Research and the "Expected Number of Acceptance" of foreign workers related to the status of

¹ "Basic Policy on Economic and Fiscal Management and Reform 2021" (Cabinet Decision, June 18, 2021).

² In light of the current economic and fiscal situation, which remains unstable due to the infectious disease, the impact of the Infectious Disease on economic and fiscal conditions will be verified within FY2021, and based on the results of the verification, the target fiscal year will be reconfirmed.

For further details, see the Appendix.

⁴ The Cabinet Office's "Mid-Year Economic Projection for FY2021" (July 6, 2021, Submitted to the Council on Economic and Fiscal Policy)

Specifically, the total factor productivity (TFP) growth rate rose around 0.9% in 5 years from FY1982 to FY1987.

residence of specified skilled workers.⁶

(2) Baseline Case

The Baseline Case offers a projection in which the economy will shift approximately at the rate of current potential growth.

Specifically, the main differences from the assumptions of the Economic Growth Achieved Case are as follows:

- The total factor productivity (TFP) growth rate moves around 0.7%.⁷
- The labor force participation rate shifts based on the estimates of labor supply and demand for the "case in which economic growth and labor participation are partly achieved" shown by the "Labor Policy Study Group" (2019).

3. Main Assumptions in Public Finances⁸

For Public Finances, based on the following assumptions, the projection shows fiscal prospects which are consistent with the two economic scenarios mentioned in "2."

- •Revenues and expenditures in FY2021 reflect the FY2021 Budget and other factors⁹.
- •Expenditures in FY2022 are calculated by taking into account changes in prices and wages, expenditure reforms carried out thus far, and other factors. It is assumed that the expenditure growth excluding the increase due to aging population and other factors will consequently be curbed by about half of what it would be if the expenditure reform carried out thus far is continued¹⁰. In addition, based on the Cabinet Office's "Mid-Year Economic Projection, public fixed capital formation in FY2022 is assumed to be the average amount in the most recent five years at the nominal level."
- From FY2023, social security expenditures will increase reflecting the aging of population and price and wage developments, and other expenditures will increase along with the inflation rates.
- Revenues from FY2022 will increase based on the assumptions of macroeconomy.

4. <u>Progress and Future Prospects of Economic Revitalization and</u> Fiscal Consolidation

<Progress>

In FY2020, the Japanese economy was in a severe condition due to the impact of the Novel Coronavirus Infectious Disease (hereinafter referred to as the "Infectious Disease") and the GDP growth rate is around -4.6% in real terms and around -3.9% in nominal terms. In the first half of the FY2021, the economy is expected to recover at a moderate pace partly because economic activities

^{6 &}quot;The Basic Policy on Operation of the System Related to Status of Residence of the Specified Skilled Worker" (Cabinet Decision, December 25, 2018)

⁷ Average from January 2002. (From the 14th business cycle.)

⁸ For further details, see the Appendix.

⁹ As for the revenues of the central and local governments, the underlying trend in the settlements for FY2020 based on the economic fundamentals is taken into consideration.

¹⁰ Based on materials submitted to the Council on Economic and Fiscal Policy by council members from the private sector (May 28, 2018) and those by the Cabinet Office (April 26, 2021), the effect on improvement in the primary balance by efforts for increasing spending efficiency is assumed to be about 1.3 trillion yen per year when its impact on the economy is taken into consideration.

have been restricted to prevent the spread of the Infectious Disease. In the latter half of FY2021, the economy will accelerate as service consumption will start to recover along with the promotion of vaccinations and exports and private investment will steadily increase with the support of government expenditure. As a result, GDP for FY 2021 is projected to grow approximately by 3.7% in real terms and 3.1% in nominal terms.

On the fiscal conditions, the primary deficit¹¹ in FY2020 is projected to be around 10.5% due to the increase in expenditures for the supplementary budgets for dealing with the Infectious Disease. The primary deficit in FY2021 is projected to be around 6.8% including the impact of the carryover of the supplementary budgets for FY2020. As a result, the ratio of outstanding debt to GDP is projected to be around 209.2% in FY2020 and around 211.0% in FY2021.

<Future Prospects>

In the Economic Growth Achieved Case, the GDP growth rate is projected to achieve around 2% in real terms and over around 3% in nominal terms as the potential growth rate steadily increases through promoting investment and building a foundation for realizing new driving forces of growth: green society, digitalization, regional revitalization and children / childcare. As a result, although the impact of the Infectious Disease on the economy needs to be carefully examined, nominal GDP is projected to achieve 600 trillion yen around FY2024. The rate of change in consumer prices is projected to be around 2% from FY2025.

On the fiscal conditions, without the expenditure reforms, the primary deficit is projected to be around 0.5% of GDP in FY2025, and turn to surplus in FY2027¹². It is important to continue improvement both from the expenditure and revenue sides while ensuring overcoming deflation and economic revitalization and realizing higher, private demand-led economic growth in terms of both quality and quantity. The ratio of outstanding debt to GDP is projected to steadily decline in the periods of the projection. It should be noted, however, that the existing bonds issued at lower interest rates will be refinanced at higher interest rates sequentially with the long-term nominal interest rate rising.

In the Baseline Case, on the other hand, the GDP growth rate is projected to be around 1% in real terms and in the lower 1% range in nominal terms in the medium to long term. The rate of change in consumer prices is projected to be around 0.7%.

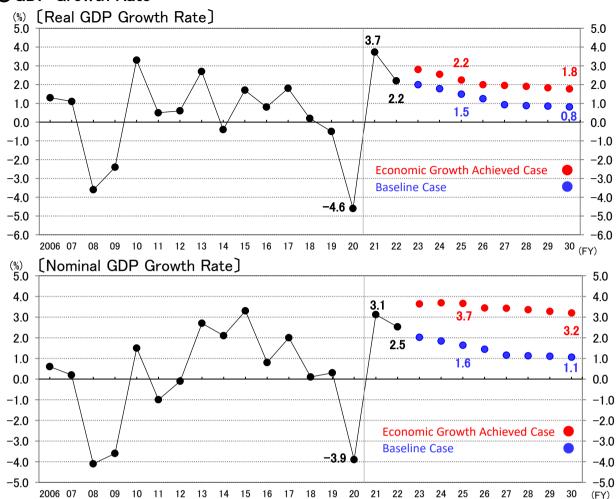
On the fiscal conditions, the primary deficit is projected to be 1.3% of GDP in FY2025, and the primary deficit within the projection period will improve at a modest pace. The ratio of outstanding debt to GDP is projected to be almost flat in the periods of projection.

¹¹ Excluding the expenditures and the fiscal resources for the recovery and reconstruction measures.

¹² Based on the materials submitted to the Council on Economic and Fiscal Policy by council members from the private sector (May 28, 2018) and those by the Cabinet Office (April 26, 2021), the effect on improvement in the primary balance by efforts for increasing spending efficiency is assumed to be about 1.3 trillion yen per year when its impact on the economy is taken into consideration. Calculating mechanically based on this assumption, if the government continues the expenditure reforms carried out thus far, the primary surplus will be achieved in FY2025, around two years earlier.

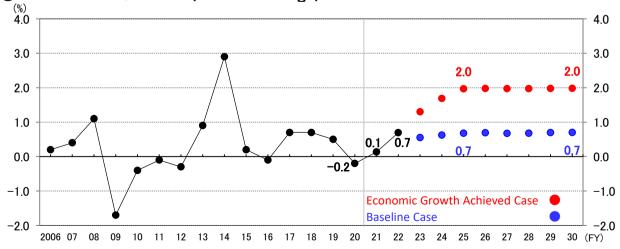
Results of Projection

OGDP Growth Rate



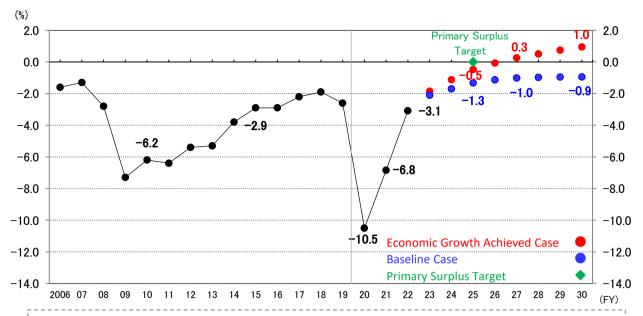
• In the Economic Growth Achieved Case, the GDP growth rate is projected to achieve around 2% in real terms and over around 3% in nominal terms as the potential growth rate steadily increases through promoting investment and building a foundation for realizing new driving forces of growth: green society, digitalization, regional revitalization and children / childcare. As a result, although the impact of the Infectious Disease on the economy needs to be carefully examined, nominal GDP is projected to achieve 600 trillion yen around FY2024.

OConsumer Price Index (Rate of Change)



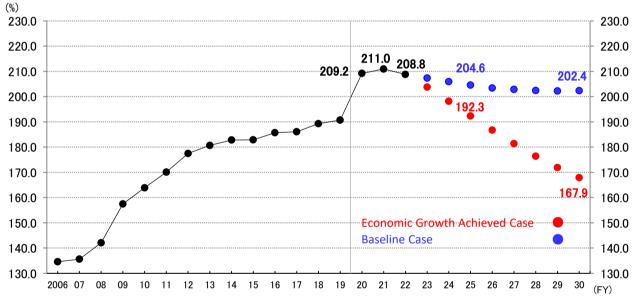
• The rate of change in consumer prices is projected to be around 2% from FY2025.

OPrimary Balance of Central and Local Governments Combined*



• In the Economic Growth Achieved Case, without the expenditure reforms, the primary deficit is projected to be around 0.5% of GDP in FY2025, and turn to surplus in FY2027.

OOutstanding Debt* (Ratio to Nominal GDP)



• In the Economic Growth Achieved Case, the ratio of outstanding debt to GDP is projected to steadily decline in the periods of the projection. It should be noted, however, that the existing bonds issued at lower interest rates will be refinanced at higher interest rates sequentially with the long-term nominal interest rate rising.

• In the Baseline Case, the ratio is projected to be almost flat in the periods of projection.

^{*} Excluding the expenditures and the fiscal resources for the recovery and reconstructions measures.

Result of Projection (Table)

Economic Growth Achieved Case

[Macroeconomy]	(%) [ratio to GDP %] Trillions of Yen

	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030
Real GDP Growth	(▲0.5)	(▲4.6)	(3.7)	(2.2)	(2.8)	(2.5)	(2.2)	(2.0)	(2.0)	(1.9)	(1.8)	(1.8)
Real GNI Growth	(▲0.3)	(▲3.6)	(2.9)	(2.2)	(2.8)	(2.6)	(2.4)	(2.1)	(2.0)	(2.0)	(1.8)	(1.8)
Nominal GDP Growth	(0.3)	(▲3.9)	(3.1)	(2.5)	(3.6)	(3.7)	(3.7)	(3.4)	(3.4)	(3.4)	(3.3)	(3.2)
Nominal GDP	558.3	536.3	553.0	567.0	587.6	609.2	631.5	653.3	675.7	698.4	721.3	744.4
Nominal GNI Per Capita Growth	(0.6)	(▲3.6)	(3.4)	(3.4)	(4.0)	(4.2)	(4.2)	(4.0)	(3.9)	(3.9)	(3.8)	(3.7)
Nominal GNI Per Capita (*Ten thousand yen)	460	443	458	474	493	514	535	556	578	601	623	647
Potential GDP Growth	(0.7)	(0.6)	(1.0)	(1.2)	(1.4)	(1.7)	(2.0)	(2.0)	(2.0)	(1.9)	(1.8)	(1.8)
Change of Price												
Consumer Prices	(0.5)	(▲0.2)	(0.1)	(0.7)	(1.3)	(1.7)	(2.0)	(2.0)	(2.0)	(2.0)	(2.0)	(2.0)
Corporate Goods Prices	(0.1)	(▲1.4)	(3.6)	(0.6)	(0.6)	(0.6)	(0.6)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)
GDP Deflator	(0.9)	(0.6)	(▲0.6)	(0.3)	(8.0)	(1.1)	(1.4)	(1.4)	(1.4)	(1.4)	(1.4)	(1.4)
Unemployment Rate	(2.3)	(2.9)	(2.7)	(2.4)	(2.4)	(2.3)	(2.4)	(2.4)	(2.5)	(2.5)	(2.5)	(2.6)
Long-term Interest Rate	(▲0.1)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.2)	(0.5)	(1.1)	(1.8)	(2.3)	(2.7)
Balance by Sector												
General Government	[▲3.1]	[▲10.5]	[▲7.2]	[▲3.3]	[▲1.9]	[▲0.9]	[▲0.0]	[0.5]	[1.0]	[1.2]	[1.4]	[1.5]
Private	[6.6]	[14.3]	[11.0]	[7.5]	[6.2]	[5.2]	[4.2]	[3.7]	[3.2]	[2.9]	[2.7]	[2.6]
Overseas	[▲3.5]	[▲3.8]	[▲3.8]	[▲4.2]	[▲4.3]	[▲4.3]	[▲4.2]	[▲4.2]	[▲4.2]	[▲ 4.1]	[▲ 4.1]	[▲4.1]

[Central and Local Governments' Public Finances]

 $({\sf Excluding\ the\ expenditures\ and\ the\ fiscal\ resources\ for\ the\ recovery\ and\ reconstruction\ measures})$

[ratio to GDP, %], Trillions of Yen

	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030
Primary Balance	▲ 14.6	▲ 56.4	▲ 37.8	▲ 17.5	▲ 10.8	▲ 6.8	▲ 2.9	▲ 0.4	1.8	3.6	5.4	7.1
(ratio to nominal GDP)	[Δ 2.6]	[▲ 10.5]	[▲6.8]	[▲3.1]	[▲1.8]	[▲ 1.1]	[▲0.5]	[▲0.1]	[0.3]	[0.5]	[8.0]	[1.0]
Central Government	▲ 16.1	▲ 55.9	▲ 37.0	▲ 18.1	▲ 13.1	▲ 11.5	▲ 9.8	▲ 9.0	▲ 8.1	▲ 7.1	▲ 6.4	▲ 5.8
(ratio to nominal GDP)	[▲2.9]	[▲ 10.4]	[▲6.7]	[▲3.2]	[▲2.2]	[▲1.9]	[▲1.6]	[▲1.4]	[▲ 1.2]	[▲1.0]	[▲0.9]	[▲0.8]
Local Government	1.5	▲ 0.5	▲ 0.8	0.6	2.3	4.7	6.8	8.6	9.8	10.7	11.8	12.9
(ratio to nominal GDP)	[0.3]	[▲0.1]	[▲0.1]	[0.1]	[0.4]	[8.0]	[1.1]	[1.3]	[1.5]	[1.5]	[1.6]	[1.7]
Fiscal Balance	▲ 20.6	▲ 62.7	4 5.0	▲ 22.7	▲ 15.6	▲ 11.1	▲ 6.8	▲ 4.0	▲ 2.1	▲ 1.2	▲ 0.7	▲ 1.0
(ratio to nominal GDP)	[▲3.7]	[▲ 11.7]	[▲8.1]	[▲4.0]	[▲2.7]	[▲1.8]	[▲1.1]	[▲0.6]	[▲0.3]	[▲0.2]	[▲0.1]	[▲0.1]
Central Government	▲ 21.0	▲ 60.8	▲ 42.9	▲ 22.1	▲ 16.8	▲ 14.8	▲ 12.7	▲ 11.8	▲ 11.2	▲ 11.3	▲ 12.0	▲ 13.3
(ratio to nominal GDP)	[▲3.8]	[▲11.3]	[▲7.8]	[▲3.9]	[▲2.9]	[▲2.4]	[12.0]	[▲1.8]	[▲1.7]	[▲ 1.6]	[▲1.7]	[▲1.8]
Local Government	0.4	▲ 1.9	▲ 2.1	▲ 0.6	1.2	3.7	5.9	7.8	9.1	10.1	11.3	12.4
(ratio to nominal GDP)	[0.1]	[▲0.4]	[▲0.4]	[▲0.1]	[0.2]	[0.6]	[0.9]	[1.2]	[1.4]	[1.4]	[1.6]	[1.7]
Outstanding Debt	1064.6	1121.6	1166.7	1183.9	1197.5	1207.4	1214.6	1220.1	1225.8	1232.1	1239.7	1250.0
(ratio to nominal GDP)	[190.7]	[209.2]	[211.0]	[208.8]	[203.8]	[198.2]	[192.3]	[186.8]	[181.4]	[176.4]	[171.9]	[167.9]

Trillions of Yen

		FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030
Exper	ditures	101.4	147.6	106.6	100.9	103.0	105.3	107.5	109.9	112.8	116.3	120.5	125.2
	(Policy Expenditures)	79.4	125.7	83.4	78.5	80.2	82.5	84.7	86.8	88.8	90.7	92.8	95.0
	Social Security-related Expenditures	33.5	43.0	35.8	36.8	37.5	38.2	39.0	39.8	40.7	41.7	42.6	43.5
	Local Allocation Tax Grants, etc.	16.0	16.3	15.9	15.2	15.9	17.0	18.0	18.7	19.3	19.7	20.3	21.0
	Others	29.5	66.0	31.1	26.1	26.4	26.8	27.3	27.9	28.4	28.9	29.5	30.1
	Debt Repayment and Interest Payment	22.3	22.3	23.8	22.8	23.2	23.2	23.2	23.5	24.4	26.0	28.0	30.6
Reven	ues	65.5	45.2	63.0	67.1	70.5	74.3	77.8	80.7	83.6	86.4	89.2	92.0
	Tax Revenue	58.4	60.8	57.4	61.4	64.7	68.4	71.8	74.5	77.2	79.9	82.5	85.2
	Other Revenues	7.0	▲ 15.6	5.6	5.7	5.8	5.9	6.1	6.2	6.4	6.5	6.7	6.8
Differ	ence between Expenditures and Revenues	36.6	108.6	43.6	33.9	32.5	31.0	29.7	29.2	29.2	29.9	31.3	33.2
Primary	Balance in General Account of Central Government	▲ 13.9	▲ 80.4	▲ 20.4	▲ 11.4	▲ 9.7	▲ 8.2	▲ 6.9	▲ 6.0	▲ 5.2	▲ 4.3	▲ 3.7	▲ 3.0

[Ordinary Account of Local Government]

Trillions of Yen

		FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030
Expen	ditures	97.9	123.1	96.7	97.0	98.1	99.6	101.9	104.8	107.9	110.8	113.9	117.1
	Debt Repayment and Interest Payment	12.1	11.7	11.8	11.5	11.4	11.2	11.2	11.2	11.4	11.3	11.2	10.9
Reven	ues	84.4	109.4	82.1	83.5	86.1	89.7	93.6	97.1	100.2	103.1	106.3	109.6
	Tax Revenue	43.7	43.0	40.8	42.5	44.1	46.1	48.3	50.4	52.3	54.1	55.9	57.6
Differ	ence between Expenditures and Revenues	13.5	13.8	14.6	13.5	12.0	10.0	8.3	7.7	7.7	7.7	7.6	7.5
Primary	Balance in Ordinary Account of Local Government	1.2	▲ 1.1	▲ 0.8	0.3	1.8	3.8	5.8	7.5	8.6	9.6	10.8	12.1

Notes 1. In "General Account of Central Government", up to FY2019 is based on the Settlement, FY2020 is based on the Settlement Highlight, and FY2021 is based on the FY2021 Budget. In "Ordinary Account of Local Government," FY2019 is based on the Settlement.

^{2. &}quot;Policy Expenditures" is General Account Expenditures excluding interest payments, redemption of the national debt (excluding subsidy bonds) and carry-back of settlement deficit compensation.

^{3.} In "General Account of Central Government," "Other Revenues" in FY2019 and FY2020 consists of non-tax revenues and preceding fiscal year surplus received (FY2019: 14.1 trillion yen, FY2020:

^{15.2} trillion yen) excluding the balance of fiscal resources carried forward to the next year (FY2019: 6.6 trillion yen, FY2020: 30.8 trillion yen).

4. In "Ordinary Account of Local Government," "Revenues" excludes local bonds, reduction of reserve, and the balance of fiscal resources carried forward from total revenues. "Tax Revenue" is the

Baseline Case

[Macroeconomy]	(%), [ratio to GDP, %], Trillions of Yen

	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030
Real GDP Growth	(▲0.5)	(▲4.6)	(3.7)	(2.2)	(2.0)	(1.8)	(1.5)	(1.2)	(0.9)	(0.9)	(0.9)	(8.0)
Real GNI Growth	(▲0.3)	(▲3.6)	(2.9)	(2.2)	(2.0)	(1.7)	(1.5)	(1.3)	(1.0)	(0.9)	(8.0)	(8.0)
Nominal GDP Growth	(0.3)	(▲3.9)	(3.1)	(2.5)	(2.0)	(1.8)	(1.6)	(1.4)	(1.2)	(1.1)	(1.1)	(1.1)
Nominal GDP	558.3	536.3	553.0	567.0	578.4	589.0	598.7	607.3	614.3	621.3	628.1	634.8
Nominal GNI Per Capita Growth	(0.6)	(▲3.6)	(3.4)	(3.4)	(2.4)	(2.4)	(2.2)	(2.0)	(1.7)	(1.7)	(1.7)	(1.7)
Nominal GNI Per Capita (%Ten thousand yen)	460	443	458	474	486	497	508	518	527	536	545	554
Potential GDP Growth	(0.7)	(0.6)	(1.0)	(1.2)	(1.0)	(1.0)	(1.0)	(0.9)	(0.9)	(0.9)	(0.9)	(8.0)
Change of Price												
Consumer Prices	(0.5)	(▲0.2)	(0.1)	(0.7)	(0.6)	(0.6)	(0.7)	(0.7)	(0.7)	(0.7)	(0.7)	(0.7)
Corporate Goods Prices	(0.1)	(▲1.4)	(3.6)	(0.6)	(0.2)	(0.3)	(0.3)	(0.3)	(0.2)	(0.2)	(0.2)	(0.2)
GDP Deflator	(0.9)	(0.6)	(▲0.6)	(0.3)	(0.0)	(0.1)	(0.1)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)
Unemployment Rate	(2.3)	(2.9)	(2.7)	(2.4)	(2.4)	(2.4)	(2.5)	(2.5)	(2.6)	(2.6)	(2.7)	(2.7)
Long-term Interest Rate	(▲0.1)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.1)	(0.3)	(0.7)	(1.1)	(1.4)	(1.4)
Balance by Sector												
General Government	[▲3.1]	[1 0.5]	[▲7.2]	[▲3.3]	[▲2.4]	[▲1.8]	[▲ 1.2]	[▲0.9]	[▲0.7]	[▲0.6]	[▲0.7]	[▲0.9]
Private	[6.6]	[14.3]	[11.0]	[7.5]	[6.5]	[5.9]	[5.3]	[4.9]	[4.6]	[4.5]	[4.5]	[4.6]
Overseas	[▲3.5]	[▲3.8]	[▲3.8]	[▲ 4.2]	[▲4.2]	[▲ 4.1]	[▲4.1]	[▲4.0]	[▲3.9]	[▲3.9]	[▲3.8]	[▲3.7]

【Central and Local Governments' Public Finances】

(Excluding the expenditures and the fiscal resources for the recovery and reconstruction measures)

[ratio to GDP, %], Trillions of Yen

	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030
Primary Balance	▲ 14.6	▲ 56.4	▲ 37.8	▲ 17.5	▲ 12.1	▲ 10.0	▲ 7.9	▲ 6.8	▲ 6.2	▲ 6.0	▲ 6.0	▲ 6.0
(ratio to nominal GDP)	[▲2.6]	[▲10.5]	[▲6.8]	[▲3.1]	[▲2.1]	[▲1.7]	[▲1.3]	[▲ 1.1]	[▲1.0]	[▲1.0]	[▲1.0]	[▲0.9]
Central Government	▲ 16.1	▲ 55.9	▲ 37.0	▲ 18.1	▲ 13.8	▲ 12.8	▲ 11.9	▲ 11.6	▲ 11.4	▲ 11.2	▲ 11.1	▲ 11.2
(ratio to nominal GDP)	[▲2.9]	[▲10.4]	[▲6.7]	[▲3.2]	[▲2.4]	[▲2.2]	[▲2.0]	[▲1.9]	[▲1.8]	[▲1.8]	[▲1.8]	[▲1.8]
Local Government	1.5	▲ 0.5	▲ 0.8	0.6	1.6	2.8	4.0	4.8	5.2	5.1	5.2	5.2
(ratio to nominal GDP)	[0.3]	[▲0.1]	[▲0.1]	[0.1]	[0.3]	[0.5]	[0.7]	[0.8]	[8.0]	[8.0]	[0.8]	[0.8]
Fiscal Balance	▲ 20.6	▲ 62.7	▲ 45.0	▲ 22.7	▲ 16.9	▲ 14.3	▲ 11.7	▲ 10.3	▲ 9.5	▲ 9.8	▲ 10.5	▲ 11.4
(ratio to nominal GDP)	[▲3.7]	[▲11.7]	[▲8.1]	[▲4.0]	[▲2.9]	[▲2.4]	[▲2.0]	[▲1.7]	[▲1.6]	[▲1.6]	[▲1.7]	[▲1.8]
Central Government	▲ 21.0	▲ 60.8	▲ 42.9	▲ 22.1	▲ 17.5	▲ 16.1	▲ 14.7	▲ 14.2	1 4.0	▲ 14.2	▲ 14.9	▲ 15.8
(ratio to nominal GDP)	[▲3.8]	[▲11.3]	[▲7.8]	[▲3.9]	[▲3.0]	[▲2.7]	[▲2.5]	[▲2.3]	[▲2.3]	[▲2.3]	[▲2.4]	[▲2.5]
Local Government	0.4	▲ 1.9	▲ 2.1	▲ 0.6	0.5	1.8	3.0	3.9	4.4	4.4	4.4	4.4
(ratio to nominal GDP)	[0.1]	[▲0.4]	[▲0.4]	[▲0.1]	[0.1]	[0.3]	[0.5]	[0.6]	[0.7]	[0.7]	[0.7]	[0.7]
Outstanding Debt	1064.6	1121.6	1166.7	1183.9	1199.2	1212.9	1224.9	1235.4	1246.3	1257.8	1270.3	1284.6
(ratio to nominal GDP)	[190.7]	[209.2]	[211.0]	[208.8]	[207.3]	[205.9]	[204.6]	[203.4]	[202.9]	[202.5]	[202.2]	[202.4]

[General Account of Central Government]

Trillions of Yen

L GOI	ioral 7 toocante of Contrar Government												
		FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030
Expe	nditures	101.4	147.6	106.6	100.9	102.1	103.4	104.6	105.8	107.1	108.6	110.7	112.9
	(Policy Expenditures)	79.4	125.7	83.4	78.5	79.3	80.6	81.8	82.8	83.6	84.2	85.0	85.8
	Social Security-related Expenditures	33.5	43.0	35.8	36.8	37.3	37.9	38.4	38.8	39.3	39.8	40.3	40.7
	Local Allocation Tax Grants, etc.	16.0	16.3	15.9	15.2	15.4	16.0	16.5	16.9	17.0	16.9	17.1	17.2
	Others	29.5	66.0	31.1	26.1	26.2	26.4	26.5	26.7	26.9	27.0	27.2	27.4
	Debt Repayment and Interest Payment	22.3	22.3	23.8	22.8	23.2	23.2	23.2	23.4	23.9	24.9	26.1	27.5
Reve	nues	65.5	45.2	63.0	67.1	68.6	70.4	72.2	73.6	74.6	75.4	76.2	76.9
	Tax Revenue	58.4	60.8	57.4	61.4	62.9	64.6	66.3	67.7	68.6	69.4	70.1	70.8
	Other Revenues	7.0	▲ 15.6	5.6	5.7	5.7	5.8	5.9	5.9	6.0	6.0	6.1	6.1
Diffe	rence between Expenditures and Revenues	36.6	108.6	43.6	33.9	33.5	33.0	32.4	32.2	32.5	33.2	34.5	36.0
Primar	y Balance in General Account of Central Government	▲ 13.0	▲ 80.4	▲ 20.4	▲ 11.4	A 10.7	▲ 10.2	A 96	A 9.2	▲ 9 ∩	A 87	A 8.8	A 8 9

[Ordinary Account of Local Government]

Trillions of Yen

		FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030
Expen	ditures	97.9	123.1	96.7	97.0	97.4	98.1	99.0	99.8	101.0	101.9	102.7	103.3
	Debt Repayment and Interest Payment	12.1	11.7	11.8	11.5	11.4	11.2	11.2	11.2	11.5	11.5	11.5	11.3
Reven	ues	84.4	109.4	82.1	83.5	84.7	86.3	88.1	89.6	90.7	91.3	92.1	92.9
	Tax Revenue	43.7	43.0	40.8	42.5	43.5	44.4	45.4	46.3	47.1	47.7	48.2	48.7
Differe	ence between Expenditures and Revenues	13.5	13.8	14.6	13.5	12.7	11.8	10.9	10.2	10.3	10.5	10.6	10.4
Primary	Balance in Ordinary Account of Local Government	1.2	▲ 1.1	▲ 0.8	0.3	1.1	1.8	2.8	3.6	3.8	3.6	3.6	3.6

Notes 1. In "General Account of Central Government", up to FY2019 is based on the Settlement, FY2020 is based on the Settlement Highlight, and FY2021 is based on the FY2021 Budget. In "Ordinary Account of Local Government," FY2019 is based on the Settlement.

^{2. &}quot;Policy Expenditures" is General Account Expenditures excluding interest payments, redemption of the national debt (excluding subsidy bonds) and carry-back of settlement deficit compensation.

^{3.} In "General Account of Central Government," "Other Revenues" in FY2019 and FY2020 consists of non-tax revenues and preceding fiscal year surplus received (FY2019: 14.1 trillion yen, FY2020:

^{15.2} trillion yen) excluding the balance of fiscal resources carried forward to the next year (FY2019: 6.6 trillion yen, FY2020: 30.8 trillion yen).

4. In "Ordinary Account of Local Government," "Revenues" excludes local bonds, reduction of reserve, and the balance of fiscal resources carried forward from total revenues. "Tax Revenue" is the total sum of local taxes and local transfer taxes.

[Central and Local Governments' Public Finances]

(Including the expenditures and the fiscal resources for the recovery and reconstruction measures)

Economic Growth Achieved Case

(%), [ratio to GDP, %], Trillions of Yen

	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030
Primary Balance	▲ 15.2	▲ 57.4	▲ 38.3	▲ 17.4	▲ 10.7	▲ 6.3	▲ 2.5	0.2	2.4	4.2	6.0	7.7
(ratio to nominal GDP)	[▲2.7]	[▲10.7]	[▲6.9]	[▲3.1]	[▲1.8]	[▲1.0]	[▲0.4]	[0.0]	[0.4]	[0.6]	[8.0]	[1.0]
Central Government	▲ 16.6	▲ 56.8	▲ 37.5	▲ 18.1	▲ 13.0	▲ 11.0	▲ 9.3	▲ 8.4	▲ 7.4	▲ 6.5	▲ 5.8	▲ 5.2
(ratio to nominal GDP)	[▲3.0]	[▲10.6]	[▲6.8]	[▲3.2]	[▲2.2]	[▲1.8]	[1 1.5]	[1 .3]	[▲1.1]	[▲0.9]	[▲0.8]	[▲0.7]
Local Government	1.4	▲ 0.5	▲ 0.8	0.7	2.4	4.7	6.9	8.6	9.8	10.7	11.8	12.9
(ratio to nominal GDP)	[0.3]	[▲0.1]	[▲0.1]	[0.1]	[0.4]	[0.8]	[1.1]	[1.3]	[1.5]	[1.5]	[1.6]	[1.7]
Fiscal Balance	▲ 21.2	▲ 63.7	▲ 45.5	▲ 22.7	▲ 15.5	▲ 10.6	▲ 6.3	▲ 3.4	▲ 1.5	▲ 0.6	▲ 0.1	▲ 0.3
(ratio to nominal GDP)	[▲3.8]	[▲11.9]	[▲8.2]	[▲4.0]	[Δ 2.6]	[▲1.7]	[▲1.0]	[▲0.5]	[▲0.2]	[▲0.1]	[▲0.0]	[▲0.0]
Central Government	▲ 21.5	▲ 61.7	▲ 43.4	▲ 22.1	▲ 16.7	▲ 14.3	▲ 12.2	▲ 11.2	▲ 10.6	▲ 10.7	▲ 11.4	▲ 12.7
(ratio to nominal GDP)	[▲3.8]	[▲11.5]	[▲7.8]	[▲3.9]	[▲2.8]	[▲2.4]	[▲1.9]	[▲1.7]	[▲1.6]	[▲1.5]	[▲ 1.6]	[▲ 1.7]
Local Government	0.3	▲ 1.9	▲ 2.1	▲ 0.5	1.3	3.7	5.9	7.8	9.1	10.1	11.3	12.4
(ratio to nominal GDP)	[0.0]	[▲0.4]	[▲0.4]	[▲0.1]	[0.2]	[0.6]	[0.9]	[1.2]	[1.4]	[1.4]	[1.6]	[1.7]
Outstanding Debt	1071.3	1129.1	1172.9	1189.9	1203.4	1213.2	1220.2	1225.3	1230.7	1236.7	1244.0	1253.8
(ratio to nominal GDP)	[191.9]	[210.6]	[212.1]	[209.9]	[204.8]	[199.1]	[193.2]	[187.6]	[182.1]	[177.1]	[172.5]	[168.4]

Baseline Case [ratio to GDP, %], Trillions of Yen

	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030
Primary Balance	▲ 15.2	▲ 57.4	▲ 38.3	▲ 17.4	▲ 12.0	▲ 9.5	▲ 7.5	▲ 6.2	▲ 5.5	▲ 5.4	▲ 5.4	▲ 5.3
(ratio to nominal GDP)	[▲2.7]	[▲10.7]	[▲6.9]	[▲3.1]	[Δ 2.1]	[1 .6]	[1 1.2]	[▲1.0]	[▲0.9]	[▲0.9]	[▲0.9]	[▲0.8]
Central Government	▲ 16.6	▲ 56.8	▲ 37.5	▲ 18.1	▲ 13.7	▲ 12.4	▲ 11.4	▲ 11.0	▲ 10.7	▲ 10.5	▲ 10.5	▲ 10.6
(ratio to nominal GDP)	[▲3.0]	[▲10.6]	[▲6.8]	[▲3.2]	[▲2.4]	[Δ 2.1]	[▲1.9]	[▲1.8]	[1 .7]	[▲1.7]	[▲1.7]	[▲1.7]
Local Government	1.4	▲ 0.5	▲ 0.8	0.7	1.7	2.8	4.0	4.8	5.2	5.1	5.2	5.2
(ratio to nominal GDP)	[0.3]	[▲0.1]	[▲0.1]	[0.1]	[0.3]	[0.5]	[0.7]	[8.0]	[8.0]	[0.8]	[0.8]	[0.8]
Fiscal Balance	▲ 21.2	▲ 63.7	▲ 45.5	▲ 22.7	▲ 16.8	▲ 13.8	▲ 11.3	▲ 9.6	▲ 8.9	▲ 9.1	▲ 9.8	▲ 10.8
(ratio to nominal GDP)	[▲3.8]	[▲11.9]	[▲8.2]	[▲4.0]	[▲2.9]	[Δ 2.3]	[▲1.9]	[▲1.6]	[▲1.5]	[▲1.5]	[▲1.6]	[▲1.7]
Central Government	▲ 21.5	▲ 61.7	▲ 43.4	▲ 22.1	▲ 17.4	▲ 15.6	▲ 14.3	▲ 13.6	▲ 13.3	▲ 13.6	▲ 14.3	▲ 15.2
(ratio to nominal GDP)	[▲3.8]	[▲11.5]	[▲7.8]	[▲3.9]	[▲3.0]	[Δ 2.7]	[Δ 2.4]	[▲2.2]	[▲2.2]	[▲2.2]	[Δ 2.3]	[▲2.4]
Local Government	0.3	▲ 1.9	▲ 2.1	▲ 0.5	0.6	1.8	3.0	3.9	4.4	4.4	4.4	4.4
(ratio to nominal GDP)	[0.0]	[▲0.4]	[▲0.4]	[▲0.1]	[0.1]	[0.3]	[0.5]	[0.6]	[0.7]	[0.7]	[0.7]	[0.7]
Outstanding Debt	1071.3	1129.1	1172.9	1189.9	1205.1	1218.6	1230.5	1240.7	1251.2	1262.3	1274.6	1288.5
(ratio to nominal GDP)	[191.9]	[210.6]	[212.1]	[209.9]	[208.3]	[206.9]	[205.5]	[204.3]	[203.7]	[203.2]	[202.9]	[203.0]

(Notes)

- 1. "Consumer Prices" refers to the general index (nationwide), including the direct effects of the increase in the consumption tax rate.
- 2. "Balance by Sector" represents "Net lending/net borrowing" in the System of National Accounts (hereinafter "SNA").
- 3. "Fiscal Balance" (hereinafter "FB") of the central and local governments represents "Net lending/net borrowing" in the SNA. "Primary Balance" (hereinafter "PB") equals FB minus net receivable interest (receivable interest [excluding FISIM] minus payable interest [excluding FISIM]). The PBs of both the central and local governments include some special accounts in addition to the general account. Although the debt repayments and interest payments of the Special Account for the Local Allocation and Local Transfer Tax (hereinafter SALALTT) are classified as "Central Government" in SNA, in accordance with their contributions, here they are divided into central and local governments.

It should be noted that the PB in the "General Account of Central Government" equals the sum of "Tax Revenue" and "Other Revenues" minus "General Account Expenditure Excluding Debt Repayment and Interest Payment." The PB in the "Ordinary Account of Local Government" equals "Revenues" minus "Expenditure" excluding "Debt Repayment and Interest Payment" and "Reserves."

- 4. The figures for "Balance by Sector" for the general government and "Fiscal Balance" and "Primary Balance" of the central and local governments exclude the transfer of debts from the Japan Expressway Holding and Debt Repayment Agency to the general account in FY2008 and the payment from the Japan Expressway Holding and Debt Repayment Agency to the general account in FY2011 as one-off factors.
- 5. "Outstanding Debt" is the sum of general bonds, special bonds for covering public pension funding, local government bonds, and borrowing in SALALTT. The central government's share of the borrowing allocated to the general account in FY2007 is included under outstanding debt in order to maintain the continuity of indices.
- 6. The amount of the "expenditures and the fiscal resources for the recovery and reconstruction measures" is the amount of expenditures for recovery and reconstruction from the Great East Japan Earthquake that exceeds the transfer from the general account, which is compensated by the reduction of other existing expenditures, and is securely financed by such fiscal resources as reconstruction bonds, securing further non-tax revenues, and special taxation for reconstruction, and the amount of the above fiscal resources.

Based on the "Act on Special Measures Concerning the Handling of Environment Pollution by Radioactive Materials Discharged by the NPS Accident Associated with the Tohoku District – Off the Pacific Ocean Earthquake That Occurred on March 11, 2011" (date of promulgation: August 30, 2011), the expenditure concerning the decontamination and interim storage facility project which has been reimbursed from Tokyo Electric Power Company (hereinafter "TEPCO") also includes the expenditures for the recovery and reconstruction measures, deemed to ensure the corresponding resources, considering the progress of payment from TEPCO.

Appendix: Key Assumptions

The GDP growth rate and inflation rate up to FY2019 are from the "Annual Report on National Accounts for 2019" and those for FY2020 are from the "Quarterly Estimates of GDP for January-March 2021 (Second Preliminary)" while those for FY2021 and FY2022 are from the Cabinet Office's "Mid-Year Economic Projection for 2021" (July 6, 2021, submitted to the Council on Economic and Fiscal Policy) and others.

(1) Assumptions on Macroeconomy

Economic Growth Achieved Case

- a) Total Factor Productivity (TFP) Growth Rate
 - The TFP growth rate rises from the current level (around 0.4 %) to around 1.3%, based on the extent and pace the Japanese economy actually experienced before it entered deflation. (Specifically, the TFP growth rate rose around 0.9% in 5 years from FY1982 to FY1987.)

b) Labor Force

<Labor Force Participation (LFP) Rate>

- The LFP rate shifts gradually to FY2030 based on the estimates of labor supply and demand for the "case in which economic growth and labor participation are achieved" shown by the "Labor Policy Study Group" (January 15, 2019) (for example, the LFP rate among females aged 25-44 gradually rises from around 80% in FY2020 to 89% in FY2030, the LFP rate among males aged 65-69 gradually rises from around 62% in FY2020 to 69% in FY2030, and the LFP rate among females aged 65-69 gradually rises from around 40% in FY2020 to 49% in FY2030).

< Foreign Workers>

- Based on the "Population Projection for Japan" by the National Institute of Population and Social Security Research, the non-Japanese population will increase (from 2.44 million in 2019 to 3.15 million in 2030). In addition, in accordance with the "Expected Number of Acceptance" shown in the "Basic Policy on Operation of the System Related to the Status of Residence of the Specified Skilled Worker" (Cabinet Decision, December 25, 2018), the labor force increases with an expansion of acceptance of foreign workers of around 345 thousand persons.

c) World Economy

- < Real GDP Growth Rate of World Economy (considering the export shares from Japan [10 major destination countries])>
- The growth rate moves at around 3.3% to 3.5% annually from FY2023 to FY2025, based on the "World Economic Outlook" (WEO) by the IMF (April 2021). From FY2026 onward, the growth rate remains constant at around 3.3%.
- <Inflation Rate (considering the export shares from Japan [10 major destination countries])>
- The inflation rate moves at around 1.9% to 2.0% annually from FY2023 to FY2025, based on the WEO (April 2021). From FY2026 onward, the inflation rate remains constant at around 2.0%.

<Crude Oil Prices>

- From FY2023 onward, the price moves based on the rate of the "Commodity Markets Outlook" by the World Bank (April 2021), at around 1.6%.

Baseline Case

Differences from the above "Economic Growth Achieved Case" are as follows:

- a) TFP Growth Rate
 - The TFP growth rate stays around 0.7 %. (Average from January 2002. (From the 14th business cycle.))

b) Labor Force

- <Labor Force Participation (LFP) Rate>
- Based on the estimates of labor supply and demand for the "case in which economic growth and labor participation are partly achieved" shown by the "Labor Policy Study Group" (January 15, 2019) (for example, the LFP rate among females aged 25-44 gradually rises from around 80% in FY2020 to 88% in FY2030, the LFP rate among males aged 65-69 gradually rises from around 62% in FY2020 to 64% in FY2030, and the LFP rate among females aged 65-69 gradually rises from around 40% in FY2020 to 45% in FY2030).

c) World Economy

- <Real GDP Growth Rate of World Economy (considering the export shares from Japan [10 major destination countries])>
- The growth rate moves at around 2.5% to 2.7% annually from FY2022, which is about 0.8 percentage points* lower than the rate based on the WEO (April 2021) (around 3.3% to 3.5%).
- * The 50% confidence interval of the projection in the WEO is taken into account.

(2) Tax System

- Tax revenues of the general account of the central government in FY2019 are based on the "FY2019 Settlement," those in FY2020 are based on the "FY2020 Settlement Highlight" and those in FY2021 are based on the "FY2021 Budget."
- Based on the "the Act to Partially Amend the Income Tax Act and Others" (Act Number 11, 2021) and other sources, the legislated tax system is assumed to continue.
- Based on the "Act on Special Measures for Securing Fiscal Resources Necessary to Implement Measures for Reconstruction Following the Great East Japan Earthquake" (Act Number 117, 2011) and the "Act on Temporary Special Provision on Local Tax to Secure Necessary Fiscal Resources for Local Governments to Implement Policies for Disaster Prevention Related to Recovery from the Great East Japan Earthquake" (Act Number 118, 2011), the projections reflect the implementation of the special tax for reconstruction and the rise in the individual inhabitant tax on a per capita basis.

(3) Expenditures

- The expenditures of the general account of the central government in FY2019 are based on the "FY2019 Settlement," those in FY2020 are based on the "FY2020 Settlement Highlight" and those in FY2021 are based on the "FY2021 Budget."
- Expenditures in FY2022 are calculated by taking changes in prices and wages, expenditure reform and other factors into consideration, with an assumption that the expenditure growth excluding the increase due to population aging and other factors will consequently be curbed by about half of what it would be if the expenditure reform carried out thus far is continued. In addition, public fixed capital formation in FY2022 is assumed to be the average amount in the most recent five years at the nominal level based on the Cabinet Office's "Mid-Year Economic Projection."
- From FY2023 onward, it is assumed that social security expenditures will increase reflecting the population aging, price and wage developments and the "Act to Partially Amend the Health Insurance Act and Others to Build Social Security System Oriented to All Generations" (Act Number 66, 2021), while other general expenditures will continue to increase at about the same rate as the inflation rate (constant in real terms). It is assumed that after the hikes of the

consumption tax rate, legislation related to the Comprehensive Reform of Social Security and Tax will enable the gradual addition of certain new expenditures related to the implementation of social security reform and others, under the consideration on enhancement of stabilization of social security and fiscal consolidation in each fiscal year.

- The series of social security-related expenditures is endogenously obtained within the Economic and Fiscal Model based on future demographics and macroeconomic dynamics. Considerable leeway should be given when interpreting the projections since the series is significantly affected by policies and other external factors.
- The supplementary budgets of Tokyo and Osaka prefectures are counted for FY2020.

(4) <u>Assumptions on the Expenditures and Revenue Resources for Recovery and Reconstruction</u> from the Great East Japan Earthquake

- Expenditures are assumed at around 31.3 trillion yen until FY2020 and around 1.6 trillion yen in five years from FY2021, based on the "Recovery and Reconstruction Work for the Five-Year Period Starting in FY2016" (Reconstruction Promotion Conference Decision, June 24, 2015), the "Scale and Funding Sources for Recovery and Reconstruction Work during the Reconstruction including the Five-Year Period Starting in FY2016" (Cabinet Decision, June 30, 2015), the "Reconstruction Efforts from FY2021" (Decision by Reconstruction Promotion Council, July 17, 2020) and others.
- In the projections, it is assumed that around 32.9 trillion yen of revenue resources are secured by the special tax for reconstruction, a reduction of expenditures, non-tax revenues and others based on the "Basic Guidelines for the Third Supplementary Budget in FY2011 and the Fiscal Resources for Reconstruction" (Cabinet decision, October 7, 2011), the "Scale and Funding Sources for Recovery and Reconstruction Work from Now On" (Reconstruction Promotion Conference Decision, January 29, 2013), the "Recovery and Reconstruction Work for the Five-Year Period Starting in FY2016" (Reconstruction Promotion Conference Decision, June 24, 2015), the "Scale and Funding Sources for Recovery and Reconstruction Work during the Reconstruction including the Five-Year Period Starting in FY2016" (Cabinet Decision, June 30, 2015), the "Reconstruction Efforts from FY2021" (Decision by Reconstruction Promotion Council, July 17, 2020) and others.
- The expenditure concerning the decontamination and interim storage project facility which will be reimbursed from TEPCO and the actual payment corresponding to it are assumed to be approximately 5.8 trillion yen in total, based on the "Basic Guideline for Accelerating the Reconstruction of Fukushima from the Nuclear Disaster" (Cabinet Decision, December 20, 2016), and the pattern of expenditure and revenue is assumed based on the progress of implementation and payment to date.