

**Economic and Fiscal Projections for
Medium to Long Term Analysis**

July 31, 2019

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

The government decided “the New Plan to Advance Economic and Fiscal Revitalization¹”, maintaining the basic policy “without economic revitalization, there can be no fiscal consolidation,” and continuing to accelerate and expand three pillars of reform: “overcoming deflation and revitalizing the economy”, “expenditure reforms” and “revenue reforms”. As for the fiscal consolidation targets, the government decided to aim for the primary surplus of the central and local governments by FY2025, and at the same time to steadily reduce the public debt to GDP ratio.

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, conducting medium- to long-term analysis, based on the scenarios of economic situations and fiscal assumptions as follows.

2. Scenarios and Assumptions in Macroeconomy²

The projection on macroeconomy until FY2020 is based on the Cabinet Office’s “Mid-Year Economic Projection”³. From FY2021, 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 policies of Abenomics for overcoming deflation and attaining economic revitalization show solid results at a feasible pace reflecting the past performance.

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

- The total factor productivity (TFP) growth rate rises from the current level (around 0.3%) to around 1.2%, based on the extent and pace⁴ 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 on the “case in which economic growth and labor participation are achieved” shown by the “Labor Policy Study Group” (2019).
- Acceptance of new human resources from overseas expands by the new status of residence with specific skills, increasing to 345 thousand persons from FY2019 to FY2023⁵.

¹ “Basic Policy on Economic and Fiscal Management and Reform 2018” (June 15, 2018) Chapter 3

² For further details, see Appendix.

³ The Cabinet Office’s “Mid-Year Economic Projection for FY2019” (July 29, 2019, submitted to the Council on Economic and Fiscal Policy)

⁴ Specifically, the total factor productivity (TFP) growth rate rose around 0.9% in 5 years from FY1982 to FY1987.

⁵ “The Basic Policy on Operation of the System Related to Status of Residence of the Specified Skilled Worker” (Cabinet Decision, December 25, 2018)

(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 Baseline Case has the following assumptions:

- The total factor productivity (TFP) growth rate keeps around 0.8%⁶.
- The labor force participation rate shifts based on the estimates of labor supply and demand on the “case in which economic growth and labor participation are partly achieved” shown by the “Labor Policy Study Group” (2019).
- Acceptance of new human resources from overseas expands by the new status of residence with specific skills, increasing to 345 thousand persons from FY2019 to FY2023.

3. Main Assumptions in Public Finances⁷

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 FY2019 reflect the FY2019 Budget.
- The consumption tax rate (central and local combined) is assumed to be raised to 10% on October 1, 2019, along with implementation of the Reduced Tax Rate System for Consumption Tax.
- In terms of measures for the consumption tax hike, the Free Early Childhood Education, the Enhancement of Social Security System and the Temporal and Special Measures in the FY2019 Budget are reflected. In FY2020, the Temporal and Special Measures which are currently assumed to continue (the Point Rewards to Consumers via Small and Medium-sized Retail Business, etc.⁸, the Benefits for Housing Purchase, and the Measures for Disaster Prevention, Disaster Mitigation and Building National Resilience) are also reflected. In addition, supports on tax system such as the Extension of Housing Loan Reduction Tax are reflected.
- Expenditures in FY2020 are calculated by taking changes in prices and wages, expenditure reform and other factors into consideration, with an assumption that rate of increase of the expenditure excluding the increase due to population aging and other factors will consequently be half as the wage growth and inflation rate. In addition, based on the Cabinet Office’s “Mid-Year Economic Projection”, public-fixed capital formation in FY2020 is assumed to be the same amount as that in FY2019 at a nominal level, with the related expenditures calculated mechanically based on the trend of the past expenditures.
- Since FY2021, social security expenditures will increase reflecting the aging of population and

⁶ Average from January 2002. (From the 14th business cycle.)

⁷ For further details, see Appendix.

⁸ The Point Rewards to Consumers via Small and Medium-sized Retail Businesses, etc. will be implemented from October 2019 to June 2020.

price and wage developments, and other expenditures will increase along with the inflation rates.

- Revenues from FY2020 will increase based on the two economic scenarios and assumptions of macroeconomy.

4. Progress and Future Prospects of Economic Revitalization and Fiscal Consolidation

<Progress>

In FY2018, the GDP growth rate is around 0.7% in real terms and around 0.5% in nominal terms with weak external demand, while domestic demand was solid. In FY2019, the GDP growth rate is projected to be around 0.9% in real terms and around 1.7% in nominal terms with the improvement in employment and income situation continuing, helped by the effects of various policy measures.

On the fiscal conditions, the primary deficit is projected to be 2.4% of GDP in FY2018 and 2.7% of GDP in FY2019, affected by additional expenditures due to the Supplementary Budget for FY2018 and the Temporal and Special Measures in the FY2019 Budget. The ratio of outstanding debt to GDP is projected to be flat at 191.8% both in FY2018 and FY2019 with the increase in the nominal GDP.

<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 in the early 2020s along with the increase in the potential growth rate. As a result, the nominal GDP is projected to achieve 600 trillion yen around FY2020. The rate of change in consumer prices is projected to reach around 2% from FY2023.

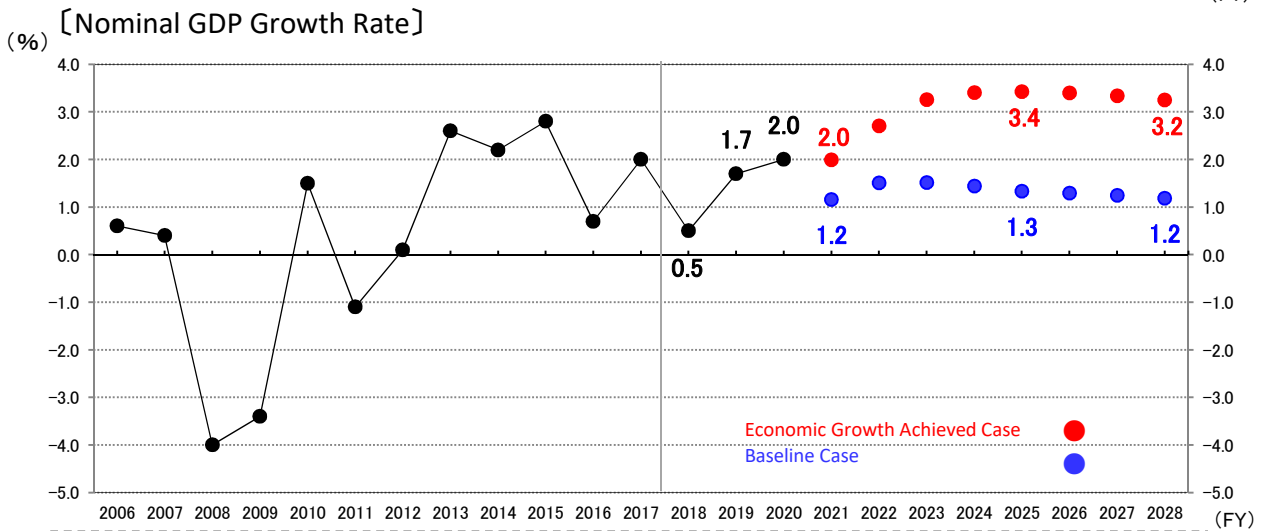
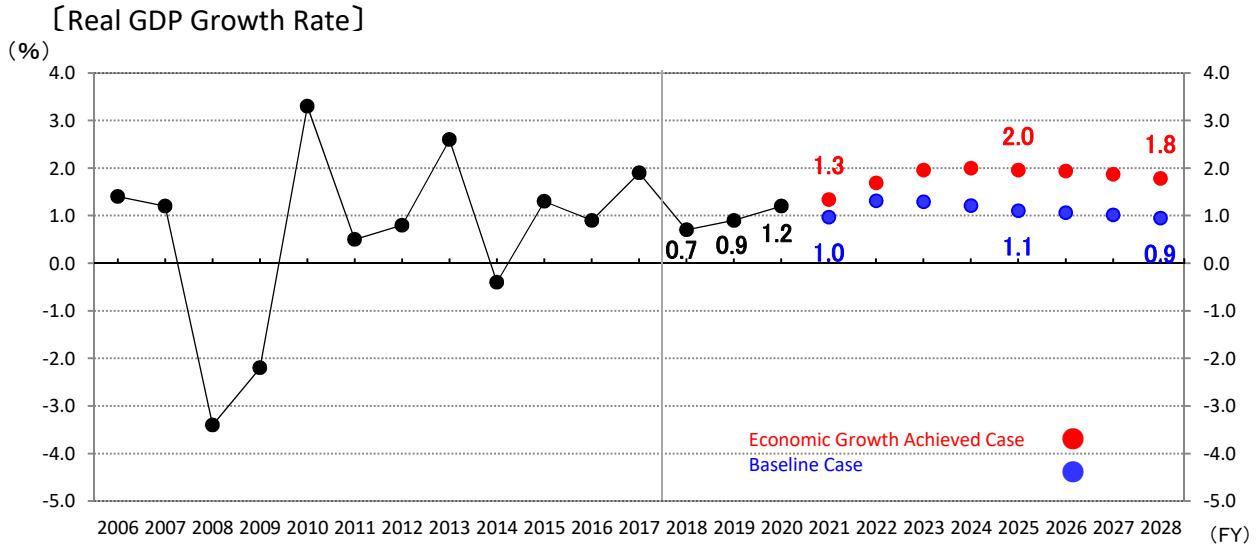
On the fiscal conditions, the primary deficit⁹ is projected to be 0.4% of GDP in FY2025 and to be mostly balanced in FY2026. The ratio of outstanding debt to GDP is projected to steadily decline in the periods of the projection. It should be noted, however, that the existing bonds issued at lower interest rates will be refinanced at higher interest rates sequentially with the long term nominal interest rate rising.

In the Baseline Case, however, the GDP growth rate is projected to be around 1% in real terms and mid-1% in nominal terms in the medium to long term. The rate of change in consumer prices is projected to be around 0.8%.

On the fiscal conditions, the primary deficit is projected to be 1.2% of GDP in FY2025, and the primary deficit within the projection period improves at a modest pace. The ratio of outstanding debt to GDP is projected to stop declining from the mid-2020s.

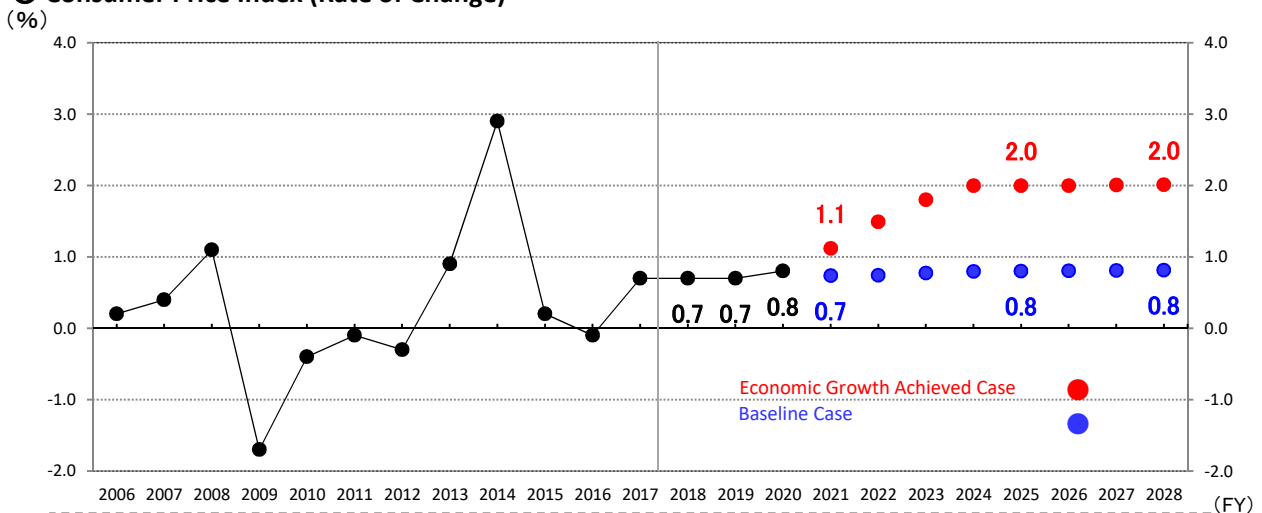
⁹ Excluding the expenditures and the fiscal resources for the recovery and reconstruction measures.

Results of Projection



• 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 in the early 2020s along with the increase in the potential growth. As a result, nominal GDP is projected to achieve 600 trillion yen around FY2020.

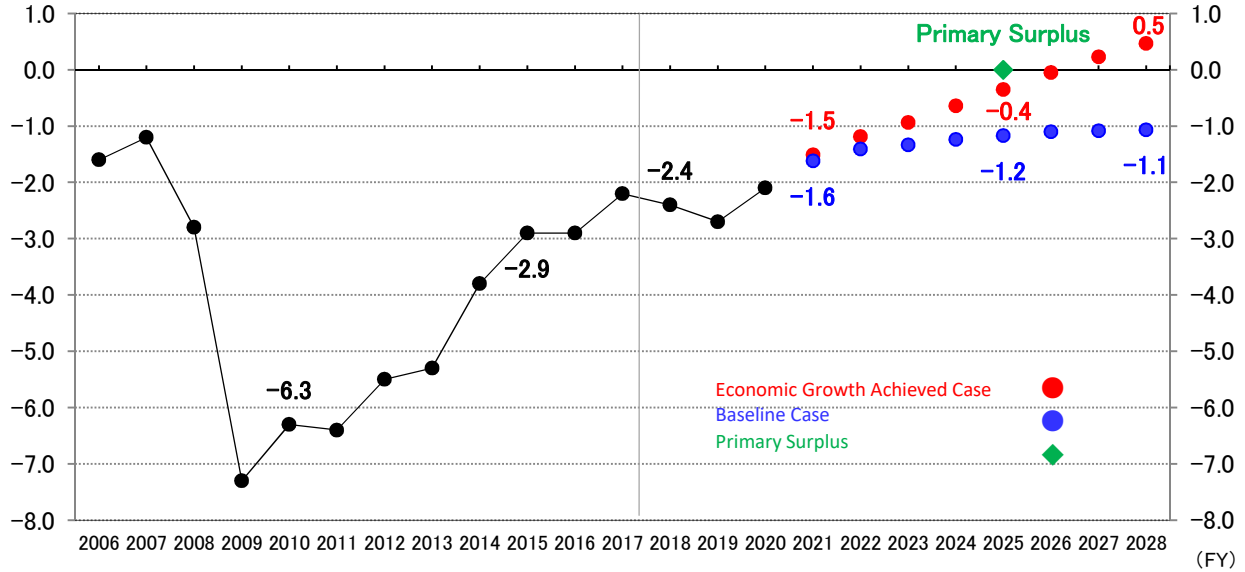
○ Consumer Price Index (Rate of Change)



• In the Economic Growth Achieved Case, the rate of change in consumer prices is projected to reach at around 2% from FY2023.

○ Primary Balance of Central and Local Governments Combined*

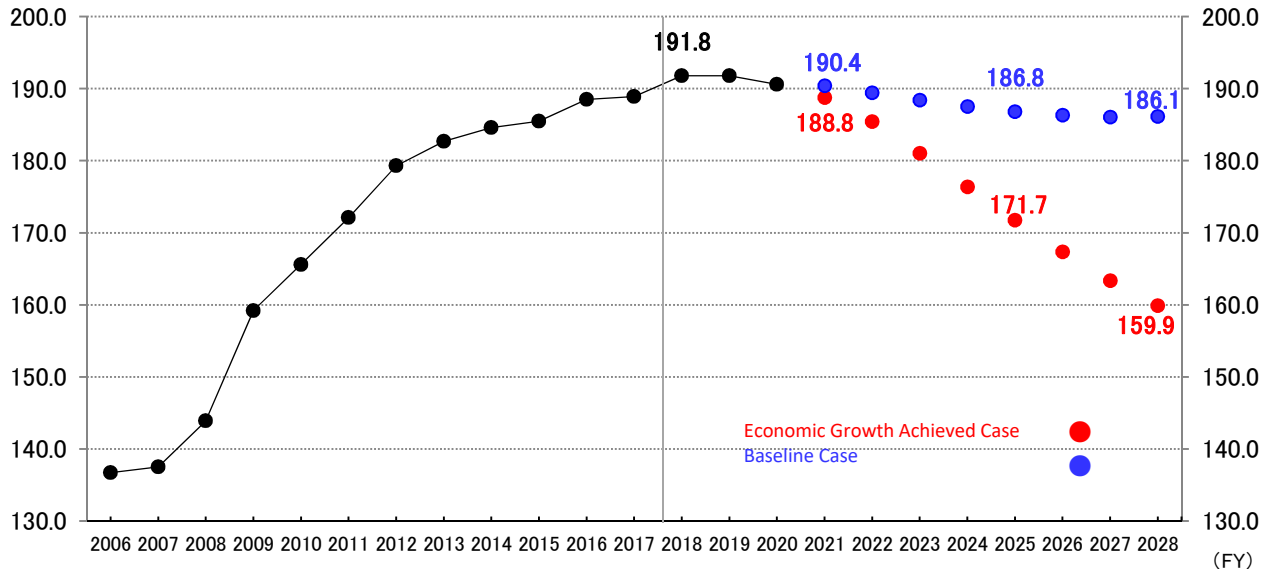
(%) (Ratio to Nominal GDP)



• In the Economic Growth Achieved Case, the primary deficit is projected to be 0.4% of GDP in FY2025 and to be mostly balanced in FY2026.

○ Outstanding 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 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 stop declining after the mid-2020s.

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

Result of Projection (Table)

Economic Growth Achieved Case

【Macroeconomy】

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

	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Real GDP Growth	(1.9)	(0.7)	(0.9)	(1.2)	(1.3)	(1.7)	(2.0)	(2.0)	(2.0)	(1.9)	(1.9)	(1.8)
Real GNI Growth	(1.5)	(0.2)	(1.5)	(1.2)	(1.4)	(1.7)	(1.8)	(1.9)	(1.8)	(1.8)	(1.7)	(1.7)
Nominal GDP Growth	(2.0)	(0.5)	(1.7)	(2.0)	(2.0)	(2.7)	(3.3)	(3.4)	(3.4)	(3.4)	(3.3)	(3.2)
Nominal GDP	547.5	550.3	559.9	571.2	582.6	598.3	617.8	638.9	660.8	683.2	706.0	729.0
Nominal GNI Per Capita Growth	(2.4)	(0.9)	(2.4)	(2.3)	(2.5)	(3.1)	(3.5)	(3.7)	(3.7)	(3.7)	(3.7)	(3.7)
Nominal GNI Per Capita (※Ten thousand yen)	448	452	462	473	485	500	517	537	557	577	599	620
Potential GDP Growth	(1.0)	(1.1)	(1.1)	(1.2)	(1.4)	(1.6)	(1.8)	(2.0)	(2.0)	(1.9)	(1.9)	(1.8)
Change of Price												
Consumer Prices	(0.7)	(0.7)	(0.7)	(0.8)	(1.1)	(1.5)	(1.8)	(2.0)	(2.0)	(2.0)	(2.0)	(2.0)
Corporate Goods Prices	(2.7)	(2.2)	(1.1)	(1.2)	(0.7)	(0.8)	(0.8)	(0.8)	(0.7)	(0.7)	(0.8)	(0.8)
GDP Deflator	(0.1)	(▲0.2)	(0.8)	(0.8)	(0.6)	(1.0)	(1.3)	(1.4)	(1.4)	(1.4)	(1.4)	(1.4)
Unemployment Rate	(2.7)	(2.4)	(2.3)	(2.3)	(2.3)	(2.4)	(2.4)	(2.4)	(2.5)	(2.5)	(2.5)	(2.6)
Long-term Interest Rate	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.4)	(0.7)	(1.3)	(2.0)	(2.5)	(2.9)
Balance by Sector												
General Government	[▲2.7]	[▲3.0]	[▲3.2]	[▲2.4]	[▲1.7]	[▲1.1]	[▲0.6]	[▲0.2]	[0.3]	[0.7]	[1.1]	[1.5]
Private	[6.8]	[6.5]	[7.0]	[6.4]	[5.8]	[4.9]	[4.2]	[3.6]	[3.0]	[2.6]	[2.2]	[1.7]
Overseas	[▲4.0]	[▲3.5]	[▲3.8]	[▲4.0]	[▲4.1]	[▲3.9]	[▲3.6]	[▲3.4]	[▲3.3]	[▲3.3]	[▲3.3]	[▲3.2]

【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

	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Primary Balance	▲ 12.1	▲ 13.3	▲ 15.1	▲ 12.1	▲ 8.8	▲ 7.1	▲ 5.8	▲ 4.1	▲ 2.3	▲ 0.3	1.6	3.4
(ratio to nominal GDP)	[▲2.2]	[▲2.4]	[▲2.7]	[▲2.1]	[▲1.5]	[▲1.2]	[▲0.9]	[▲0.6]	[▲0.4]	[▲0.0]	[0.2]	[0.5]
Central Government	▲ 13.9	▲ 15.2	▲ 16.6	▲ 15.1	▲ 12.8	▲ 11.9	▲ 11.4	▲ 10.6	▲ 9.8	▲ 8.9	▲ 8.1	▲ 7.4
(ratio to nominal GDP)	[▲2.5]	[▲2.8]	[▲3.0]	[▲2.6]	[▲2.2]	[▲2.0]	[▲1.8]	[▲1.7]	[▲1.5]	[▲1.3]	[▲1.1]	[▲1.0]
Local Government	1.8	1.9	1.5	3.0	4.0	4.8	5.6	6.5	7.4	8.5	9.7	10.8
(ratio to nominal GDP)	[0.3]	[0.3]	[0.3]	[0.5]	[0.7]	[0.8]	[0.9]	[1.0]	[1.1]	[1.3]	[1.4]	[1.5]
Fiscal Balance	▲ 19.5	▲ 20.5	▲ 22.8	▲ 18.3	▲ 14.4	▲ 12.3	▲ 10.6	▲ 9.0	▲ 7.8	▲ 7.0	▲ 6.8	▲ 7.3
(ratio to nominal GDP)	[▲3.6]	[▲3.7]	[▲4.1]	[▲3.2]	[▲2.5]	[▲2.1]	[▲1.7]	[▲1.4]	[▲1.2]	[▲1.0]	[▲1.0]	[▲1.0]
Central Government	▲ 19.7	▲ 20.9	▲ 22.9	▲ 19.7	▲ 16.9	▲ 15.7	▲ 15.0	▲ 14.4	▲ 14.2	▲ 14.6	▲ 15.7	▲ 17.3
(ratio to nominal GDP)	[▲3.6]	[▲3.8]	[▲4.1]	[▲3.4]	[▲2.9]	[▲2.6]	[▲2.4]	[▲2.2]	[▲2.2]	[▲2.1]	[▲2.2]	[▲2.4]
Local Government	0.2	0.4	0.1	1.4	2.5	3.4	4.4	5.4	6.5	7.7	8.8	9.9
(ratio to nominal GDP)	[0.0]	[0.1]	[0.0]	[0.2]	[0.4]	[0.6]	[0.7]	[0.8]	[1.0]	[1.1]	[1.3]	[1.4]
Outstanding Debt	1034.1	1055.4	1073.8	1088.6	1099.6	1109.4	1118.5	1126.6	1134.7	1143.3	1153.4	1165.5
(ratio to nominal GDP)	[188.9]	[191.8]	[191.8]	[190.6]	[188.8]	[185.4]	[181.0]	[176.3]	[171.7]	[167.3]	[163.4]	[159.9]

【General Account of Central Government】

Trillions of Yen

	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Expenditures	98.1	99.0	101.5	103.6	101.9	103.5	105.5	107.8	110.8	114.5	119.0	124.1
General Account Expenditure Excluding Debt Repayment and Interest Payment	75.6	76.4	77.9	81.3	79.5	81.1	82.9	84.8	86.7	88.6	90.8	93.0
Social Security-related Expenditures	32.5	32.6	34.1	36.2	36.8	37.5	38.2	39.1	40.0	40.9	41.8	42.8
Local Allocation Tax Grants, etc.	15.6	16.0	16.0	16.4	16.7	17.1	17.7	18.2	18.7	19.2	19.9	20.5
Others	27.5	27.9	27.9	28.7	26.1	26.5	27.0	27.5	28.0	28.6	29.1	29.7
Debt Repayment and Interest Payment	22.5	22.5	23.5	22.3	22.4	22.4	22.6	23.1	24.1	25.9	28.2	31.1
Revenues	65.7	66.0	68.8	70.8	71.9	73.8	76.2	78.9	81.6	84.4	87.2	90.1
Tax Revenue	58.8	60.4	62.5	65.6	66.7	68.5	70.8	73.4	75.9	78.6	81.3	84.1
Other Revenues	6.9	5.7	6.3	5.2	5.2	5.3	5.4	5.5	5.6	5.8	5.9	6.0
Difference between Expenditures and Revenues	33.6	34.4	32.7	32.8	30.0	29.8	29.3	29.0	29.3	30.1	31.8	33.9
Primary Balance in General Account of Central Government	▲ 9.9	▲ 10.4	▲ 9.2	▲ 10.5	▲ 7.7	▲ 7.3	▲ 6.7	▲ 5.9	▲ 5.1	▲ 4.2	▲ 3.5	▲ 2.9

【Ordinary Account of Local Government】

Trillions of Yen

	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Expenditures	95.5	96.7	96.9	99.7	98.8	100.3	102.0	103.7	106.0	108.5	111.7	115.0
Debt Repayment and Interest Payment	12.6	12.2	11.9	11.7	11.7	11.6	11.4	11.0	10.8	10.8	10.7	10.7
Revenues	82.7	84.5	84.7	88.9	88.8	90.7	93.2	95.8	98.6	101.5	104.8	108.2
Tax Revenue	42.2	43.3	43.8	45.2	45.6	46.8	48.2	49.8	51.5	53.3	55.2	57.1
Difference between Expenditures and Revenues	12.8	12.2	12.2	10.8	10.0	9.6	8.8	7.9	7.4	7.0	6.9	6.8
Primary Balance in Ordinary Account of Local Government	2.5	2.0	1.8	3.1	3.9	4.3	5.1	5.8	6.7	7.7	9.0	10.3

- Notes
1. In "General Account of Central Government," up to FY2017 is based on the Settlement, FY2018 is based on the Settlement Highlight, and FY2019 is based on the FY2019 Budget. In "Ordinary Account of Local Government," FY2017 is based on the Settlement.
 2. "General Account Expenditure Excluding Debt Repayment and Interest Payment" excludes carry-back of settlement deficit compensation.
 3. In "General Account of Central Government," "Other Revenues" in FY2017 and FY2018 consists of non-tax revenues and preceding fiscal year surplus received (excluding the balance of fiscal resources carried forward to the next year (FY2017: 4.3 trillion yen, FY2018: 5.1 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.

Baseline Case

【Macroeconomy】

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

	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Real GDP Growth	(1.9)	(0.7)	(0.9)	(1.2)	(1.0)	(1.3)	(1.3)	(1.2)	(1.1)	(1.1)	(1.0)	(0.9)
Real GNI Growth	(1.5)	(0.2)	(1.5)	(1.2)	(1.0)	(1.3)	(1.1)	(1.1)	(0.9)	(0.9)	(0.8)	(0.8)
Nominal GDP Growth	(2.0)	(0.5)	(1.7)	(2.0)	(1.2)	(1.5)	(1.5)	(1.4)	(1.3)	(1.3)	(1.2)	(1.2)
Nominal GDP	547.5	550.3	559.9	571.2	577.8	586.5	595.4	604.0	612.0	619.9	627.7	635.1
Nominal GNI Per Capita Growth	(2.4)	(0.9)	(2.4)	(2.3)	(1.7)	(1.9)	(1.9)	(1.8)	(1.7)	(1.7)	(1.6)	(1.6)
Nominal GNI Per Capita (※Ten thousand yen)	448	452	462	473	481	490	499	508	517	526	534	543
Potential GDP Growth	(1.0)	(1.1)	(1.1)	(1.2)	(1.2)	(1.2)	(1.1)	(1.1)	(1.1)	(1.1)	(1.0)	(0.9)
Change of Price												
Consumer Prices	(0.7)	(0.7)	(0.7)	(0.8)	(0.7)	(0.7)	(0.8)	(0.8)	(0.8)	(0.8)	(0.8)	(0.8)
Corporate Goods Prices	(2.7)	(2.2)	(1.1)	(1.2)	(0.4)	(0.4)	(0.4)	(0.4)	(0.4)	(0.4)	(0.4)	(0.5)
GDP Deflator	(0.1)	(▲0.2)	(0.8)	(0.8)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)
Unemployment Rate	(2.7)	(2.4)	(2.3)	(2.3)	(2.4)	(2.4)	(2.4)	(2.4)	(2.5)	(2.5)	(2.5)	(2.6)
Long-term Interest Rate	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.1)	(0.3)	(0.8)	(1.3)	(1.6)	(1.7)
Balance by Sector												
General Government	[▲2.7]	[▲3.0]	[▲3.2]	[▲2.4]	[▲1.9]	[▲1.4]	[▲1.2]	[▲1.0]	[▲0.8]	[▲0.6]	[▲0.6]	[▲0.5]
Private	[6.8]	[6.5]	[7.0]	[6.4]	[5.8]	[5.3]	[4.7]	[4.2]	[3.9]	[3.5]	[3.3]	[2.9]
Overseas	[▲4.0]	[▲3.5]	[▲3.8]	[▲4.0]	[▲4.0]	[▲3.9]	[▲3.5]	[▲3.2]	[▲3.0]	[▲2.9]	[▲2.6]	[▲2.4]

【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

	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Primary Balance	▲ 12.1	▲ 13.3	▲ 15.1	▲ 12.1	▲ 9.4	▲ 8.3	▲ 7.9	▲ 7.5	▲ 7.2	▲ 6.8	▲ 6.8	▲ 6.8
(ratio to nominal GDP)	[▲2.2]	[▲2.4]	[▲2.7]	[▲2.1]	[▲1.6]	[▲1.4]	[▲1.3]	[▲1.2]	[▲1.2]	[▲1.1]	[▲1.1]	[▲1.1]
Central Government	▲ 13.9	▲ 15.2	▲ 16.6	▲ 15.1	▲ 13.0	▲ 12.4	▲ 12.3	▲ 11.8	▲ 11.4	▲ 11.1	▲ 11.1	▲ 11.1
(ratio to nominal GDP)	[▲2.5]	[▲2.8]	[▲3.0]	[▲2.6]	[▲2.3]	[▲2.1]	[▲2.1]	[▲2.0]	[▲1.9]	[▲1.8]	[▲1.8]	[▲1.8]
Local Government	1.8	1.9	1.5	3.0	3.7	4.1	4.3	4.3	4.2	4.3	4.3	4.4
(ratio to nominal GDP)	[0.3]	[0.3]	[0.3]	[0.5]	[0.6]	[0.7]	[0.7]	[0.7]	[0.7]	[0.7]	[0.7]	[0.7]
Fiscal Balance	▲ 19.5	▲ 20.5	▲ 22.8	▲ 18.3	▲ 15.0	▲ 13.4	▲ 12.8	▲ 12.0	▲ 11.8	▲ 12.1	▲ 13.2	▲ 14.6
(ratio to nominal GDP)	[▲3.6]	[▲3.7]	[▲4.1]	[▲3.2]	[▲2.6]	[▲2.3]	[▲2.1]	[▲2.0]	[▲1.9]	[▲2.0]	[▲2.1]	[▲2.3]
Central Government	▲ 19.7	▲ 20.9	▲ 22.9	▲ 19.7	▲ 17.2	▲ 16.2	▲ 15.8	▲ 15.2	▲ 15.0	▲ 15.4	▲ 16.6	▲ 17.9
(ratio to nominal GDP)	[▲3.6]	[▲3.8]	[▲4.1]	[▲3.4]	[▲3.0]	[▲2.8]	[▲2.7]	[▲2.5]	[▲2.5]	[▲2.5]	[▲2.6]	[▲2.8]
Local Government	0.2	0.4	0.1	1.4	2.2	2.8	3.1	3.2	3.2	3.3	3.4	3.3
(ratio to nominal GDP)	[0.0]	[0.1]	[0.0]	[0.2]	[0.4]	[0.5]	[0.5]	[0.5]	[0.5]	[0.5]	[0.5]	[0.5]
Outstanding Debt	1034.1	1055.4	1073.8	1088.6	1100.2	1111.1	1121.8	1132.5	1143.3	1155.0	1167.8	1182.3
(ratio to nominal GDP)	[188.9]	[191.8]	[191.8]	[190.6]	[190.4]	[189.4]	[188.4]	[187.5]	[186.8]	[186.3]	[186.1]	[186.1]

【General Account of Central Government】

Trillions of Yen

	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Expenditures	98.1	99.0	101.5	103.6	101.6	102.6	103.7	104.7	106.1	108.0	110.5	113.3
General Account Expenditure Excluding Debt Repayment and Interest Payment	75.6	76.4	77.9	81.3	79.2	80.2	81.2	82.0	82.9	83.6	84.6	85.6
Social Security-related Expenditures	32.5	32.6	34.1	36.2	36.7	37.2	37.8	38.4	38.9	39.4	40.0	40.6
Local Allocation Tax Grants, etc.	15.6	16.0	16.0	16.4	16.5	16.7	17.0	17.1	17.2	17.3	17.5	17.7
Others	27.5	27.9	27.9	28.7	26.0	26.2	26.4	26.6	26.8	27.0	27.2	27.4
Debt Repayment and Interest Payment	22.5	22.5	23.5	22.3	22.4	22.4	22.5	22.7	23.2	24.3	25.9	27.7
Revenues	65.7	66.0	68.8	70.8	71.2	72.2	73.3	74.5	75.5	76.5	77.4	78.4
Tax Revenue	58.8	60.4	62.5	65.6	66.1	67.0	68.1	69.2	70.1	71.1	72.0	72.9
Other Revenues	6.9	5.7	6.3	5.2	5.1	5.2	5.3	5.3	5.3	5.4	5.4	5.5
Difference between Expenditures and Revenues	33.6	34.4	32.7	32.8	30.4	30.4	30.4	30.2	30.6	31.5	33.1	35.0
Primary Balance in General Account of Central Government	▲ 9.9	▲ 10.4	▲ 9.2	▲ 10.5	▲ 8.0	▲ 8.0	▲ 7.8	▲ 7.6	▲ 7.4	▲ 7.2	▲ 7.2	▲ 7.3

【Ordinary Account of Local Government】

Trillions of Yen

	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Expenditures	95.5	96.7	96.9	99.7	98.5	99.4	100.1	100.7	101.5	102.3	103.3	104.4
Debt Repayment and Interest Payment	12.6	12.2	11.9	11.7	11.7	11.6	11.4	11.0	10.8	10.8	10.8	10.9
Revenues	82.7	84.5	84.7	88.9	88.3	89.3	90.3	91.2	92.1	93.1	94.1	95.1
Tax Revenue	42.2	43.3	43.8	45.2	45.4	46.0	46.7	47.4	48.0	48.7	49.3	49.9
Difference between Expenditures and Revenues	12.8	12.2	12.2	10.8	10.2	10.1	9.8	9.5	9.3	9.3	9.2	9.3
Primary Balance in Ordinary Account of Local Government	2.5	2.0	1.8	3.1	3.7	3.8	4.0	3.9	3.9	4.0	4.1	4.1

- Notes
1. In "General Account of Central Government," up to FY2017 is based on the Settlement, FY2018 is based on the Settlement Highlight, and FY2019 is based on the FY2019 Budget. In "Ordinary Account of Local Government," FY2017 is based on the Settlement.
 2. "General Account Expenditure Excluding Debt Repayment and Interest Payment" excludes carry-back of settlement deficit compensation.
 3. In "General Account of Central Government," "Other Revenues" in FY2017 and FY2018 consists of non-tax revenues and preceding fiscal year surplus received (excluding the balance of fiscal resources carried forward to the next year (FY2017: 4.3 trillion yen, FY2018: 5.1 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

	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Primary Balance	▲ 12.8	▲ 14.0	▲ 15.8	▲ 12.4	▲ 8.7	▲ 6.4	▲ 4.9	▲ 3.3	▲ 1.5	0.4	1.9	3.8
(ratio to nominal GDP)	[▲2.3]	[▲2.5]	[▲2.8]	[▲2.2]	[▲1.5]	[▲1.1]	[▲0.8]	[▲0.5]	[▲0.2]	[0.1]	[0.3]	[0.5]
Central Government	▲ 14.2	▲ 15.8	▲ 17.1	▲ 15.3	▲ 12.6	▲ 11.2	▲ 10.6	▲ 9.8	▲ 9.0	▲ 8.1	▲ 7.7	▲ 7.1
(ratio to nominal GDP)	[▲2.6]	[▲2.9]	[▲3.1]	[▲2.7]	[▲2.2]	[▲1.9]	[▲1.7]	[▲1.5]	[▲1.4]	[▲1.2]	[▲1.1]	[▲1.0]
Local Government	1.5	1.8	1.4	2.9	3.9	4.8	5.6	6.5	7.4	8.5	9.7	10.8
(ratio to nominal GDP)	[0.3]	[0.3]	[0.2]	[0.5]	[0.7]	[0.8]	[0.9]	[1.0]	[1.1]	[1.3]	[1.4]	[1.5]
Fiscal Balance	▲ 20.3	▲ 21.2	▲ 23.5	▲ 18.6	▲ 14.4	▲ 11.5	▲ 9.8	▲ 8.2	▲ 7.0	▲ 6.2	▲ 6.5	▲ 7.0
(ratio to nominal GDP)	[▲3.7]	[▲3.9]	[▲4.2]	[▲3.2]	[▲2.5]	[▲1.9]	[▲1.6]	[▲1.3]	[▲1.1]	[▲0.9]	[▲0.9]	[▲1.0]
Central Government	▲ 20.1	▲ 21.5	▲ 23.5	▲ 19.9	▲ 16.8	▲ 15.0	▲ 14.2	▲ 13.6	▲ 13.4	▲ 13.9	▲ 15.4	▲ 17.0
(ratio to nominal GDP)	[▲3.7]	[▲3.9]	[▲4.2]	[▲3.5]	[▲2.9]	[▲2.5]	[▲2.3]	[▲2.1]	[▲2.0]	[▲2.0]	[▲2.2]	[▲2.3]
Local Government	▲ 0.2	0.3	▲ 0.0	1.3	2.4	3.5	4.4	5.4	6.4	7.7	8.8	9.9
(ratio to nominal GDP)	[▲0.0]	[0.1]	[▲0.0]	[0.2]	[0.4]	[0.6]	[0.7]	[0.8]	[1.0]	[1.1]	[1.3]	[1.4]
Outstanding Debt	1040.6	1061.8	1080.1	1094.7	1105.3	1114.8	1123.4	1131.2	1138.9	1147.2	1157.0	1168.8
(ratio to nominal GDP)	[190.1]	[192.9]	[192.9]	[191.7]	[189.7]	[186.3]	[181.8]	[177.1]	[172.4]	[167.9]	[163.9]	[160.3]

Baseline Case

[ratio to GDP, %], Trillions of Yen

	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Primary Balance	▲ 12.8	▲ 14.0	▲ 15.8	▲ 12.4	▲ 9.3	▲ 7.5	▲ 7.1	▲ 6.7	▲ 6.4	▲ 6.1	▲ 6.5	▲ 6.4
(ratio to nominal GDP)	[▲2.3]	[▲2.5]	[▲2.8]	[▲2.2]	[▲1.6]	[▲1.3]	[▲1.2]	[▲1.1]	[▲1.0]	[▲1.0]	[▲1.0]	[▲1.0]
Central Government	▲ 14.2	▲ 15.8	▲ 17.1	▲ 15.3	▲ 12.9	▲ 11.7	▲ 11.5	▲ 11.0	▲ 10.6	▲ 10.3	▲ 10.8	▲ 10.8
(ratio to nominal GDP)	[▲2.6]	[▲2.9]	[▲3.1]	[▲2.7]	[▲2.2]	[▲2.0]	[▲1.9]	[▲1.8]	[▲1.7]	[▲1.7]	[▲1.7]	[▲1.7]
Local Government	1.5	1.8	1.4	2.9	3.6	4.2	4.4	4.3	4.2	4.3	4.3	4.4
(ratio to nominal GDP)	[0.3]	[0.3]	[0.2]	[0.5]	[0.6]	[0.7]	[0.7]	[0.7]	[0.7]	[0.7]	[0.7]	[0.7]
Fiscal Balance	▲ 20.3	▲ 21.2	▲ 23.5	▲ 18.6	▲ 14.9	▲ 12.7	▲ 11.9	▲ 11.2	▲ 11.0	▲ 11.4	▲ 12.9	▲ 14.3
(ratio to nominal GDP)	[▲3.7]	[▲3.9]	[▲4.2]	[▲3.2]	[▲2.6]	[▲2.2]	[▲2.0]	[▲1.9]	[▲1.8]	[▲1.8]	[▲2.0]	[▲2.2]
Central Government	▲ 20.1	▲ 21.5	▲ 23.5	▲ 19.9	▲ 17.0	▲ 15.6	▲ 15.0	▲ 14.4	▲ 14.2	▲ 14.7	▲ 16.3	▲ 17.6
(ratio to nominal GDP)	[▲3.7]	[▲3.9]	[▲4.2]	[▲3.5]	[▲2.9]	[▲2.7]	[▲2.5]	[▲2.4]	[▲2.3]	[▲2.4]	[▲2.6]	[▲2.8]
Local Government	▲ 0.2	0.3	▲ 0.0	1.3	2.1	2.8	3.1	3.2	3.2	3.3	3.4	3.3
(ratio to nominal GDP)	[▲0.0]	[0.1]	[▲0.0]	[0.2]	[0.4]	[0.5]	[0.5]	[0.5]	[0.5]	[0.5]	[0.5]	[0.5]
Outstanding Debt	1040.6	1061.8	1080.1	1094.7	1105.9	1116.4	1126.8	1137.0	1147.6	1158.9	1171.4	1185.5
(ratio to nominal GDP)	[190.1]	[192.9]	[192.9]	[191.7]	[191.4]	[190.3]	[189.2]	[188.3]	[187.5]	[186.9]	[186.6]	[186.7]

(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 (hereafter SNA).
3. "Fiscal Balance" (hereafter FB) of the central and local governments represents "Net lending/net borrowing" in the SNA. "Primary Balance" (hereafter 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 (hereafter SALALTT) are classified as "Central Government" in SNA, in accordance with their contributions, here 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 the "Revenues" minus "Expenditure" excluding "Debt Repayment and Interest Payment" and "Reserves."
4. The figures for "Balance by Sector" for 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 the 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 (hereafter 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 FY2017 are from the Revision of the Annual Report on National Accounts for 2017, those for FY2018 are from the “Quarterly Estimates of GDP for January-March 2019 (Second Preliminary)” and those for FY2019 and FY2020 are from the Cabinet Office’s “Mid-Year Economic Projection for FY2019” (July 29, 2019, 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 0.3 %) to around 1.2%, 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

- The labor force participation (LFP) rate shifts gradually to FY2028 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 79% in FY2018 to 88% in FY2028, the LFP rate among males aged 65-69 gradually rises from around 59% in FY2018 to 66% in FY2028, and the LFP rate among females aged 65-69 gradually rises from around 38% in FY2018 to 47% in FY2028).

In addition, in accordance with the acceptance number shown in the “Basic Policy on Operation of the System Related to Status of Residence of the Specified Skilled Worker” (Cabinet Decision, December 25, 2018), the labor force population increases to 345 thousand people in 5 years with expansion of foreign labor.

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 3.4% to 3.6% annually from FY2021 to FY2024, based on the World Economic Outlook (WEO) by the IMF (April 2019). From FY2025 onward, the growth rate remains constant at around 3.4%.

<Inflation Rate (considering the export shares from Japan [10 major destination countries])>

- The inflation rate moves at around 1.9% to 2.1% annually from FY2021 to FY2024, based on the WEO (April 2019). From FY2025 onward, the inflation rate remains constant at around 2.1%.

<Crude Oil Prices>

- From FY2021 onward, the price moves based on the rate of the World Energy Outlook by the IEA (November 2018), at around 4.3%.

Baseline Case

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

a) TFP Growth Rate

- The TFP growth rate keeps around 0.8 %. (Average from January 2002. (From the 14 th business cycle.))

b) Labor Force

- 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 79% in FY2018 to 87% in FY2028, the LFP rate among males aged 65-69 gradually rises from around 59% in FY2018 to 61% in FY2028, and the LFP rate among females aged 65-69 gradually rises from around 38% in FY2018 to 43% in FY2028).

In addition, in accordance with the acceptance number shown in the “Basic Policy on Operation of the System Related to Status of Residence of the Specified Skilled Worker” (Cabinet Decision, December 25, 2018), the labor force population increases to 345 thousand people in 5 years with expansion of foreign labor.

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 2.7% annually from FY2021, which is about 0.8 percentage points* lower than the rate based on the WEO (April 2019) (from around 3.4% to 3.6% annually).

* Difference between the baseline projection and the lower bound of the 50% confidence interval in the WEO (April 2019).

(2) Tax System

- Tax revenues of the general account of the central government in FY2017 are based on the FY2017 Settlement, those in FY2018 are based on the FY2018 Settlement Highlight, and those in FY2019 are based on the FY2019 Budget.
- Based on the “FY2019 Tax Reform” (Cabinet Decision, December 21, 2018) 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” (date of promulgation and enforcement: December 2, 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” (date of promulgation and enforcement: December 2, 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.
- The consumption tax rate (central and local combined) is assumed to be raised to 10% on October 1, 2019, along with the implementation of the Reduced Tax Rate System for Consumption Tax. The distribution of the increase in consumption tax revenue from 5% to 10% (central and local combined) is assumed to be 346/500 for central and 154/500 for local. It is assumed that the increase in the revenue of the government from the consumption tax hikes will be gradually realized by FY2021 due to the gap between the time of the hikes (October 2019) and the taxable period of enterprises, interim measures concerning long-term contracts and the amount of time until the local consumption tax is delivered to local governments.

(3) Expenditures

- The expenditures of the general account of the central government in FY2017 are based on the FY2017 Settlement, those in FY2018 are based on the FY2018 Settlement Highlight, and those in FY2019 are based on the FY2019 Budget.
- In terms of measures for the consumption tax hike, in addition to measures implied in the Temporal and Special Measures in the FY2019 Budget, the Temporal and Special Measures in FY2020 are assumed to continue (the Point Rewards to Consumers via Small and Medium-sized Retail Business, etc., the Benefits for Housing Purchase and the Measures for Disaster Prevention, Disaster Mitigation, and Building National Resilience). The expenditures in FY2020 for the Point Rewards to Consumers via Small and Medium-sized Retail Business, etc. and the Benefits for Housing Purchase are estimated by those implementation periods. The expenditures for Disaster Prevention, Disaster Mitigation, and Building National Resilience in FY2020 are mechanically estimated by considering the amount and the ratio covered by the central and local governments

in the FY2018 Second Supplementary Budget, the FY2019 Budget and the other expenditures, based on the “Three-year Emergency Response Plan for Disaster Prevention, Disaster Mitigation, and Building National Resilience” (Cabinet Decision, December 14, 2018).

- Expenditures in FY2020 are calculated by taking changes in prices and wages, expenditure reform and other factors into consideration, with an assumption that rate of increase of the expenditure excluding the increase due to population aging and other factors will consequently be half as the wage growth and inflation rate. In addition, based on the Cabinet Office’s “Mid-Year Economic Projection”, public-fixed capital formation in FY2020 is assumed to be the same amount as in FY2019 at a nominal level, with the related expenditures calculated mechanically based on the trend of the past expenditures.
- From FY2021 onward, it is assumed that social security expenditures will increase reflecting the aging of population and price and wage developments, and that 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.
- As for the expenditures concerning the Human Resource Development Revolution of the “New Economic Policy Package,” it is assumed to be included in the social security expenditures under the supposition of full implementation in FY2020. Details about the ratio of the expenditures of the central government and local governments, etc. are assumed based on the FY2019 Budget and the “Direction of Designing a System for Tuition-Free Childhood and Higher Education” (agreed in the ministerial council on December 28, 2018).
- 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.

(4) Assumptions on the Expenditures and Financial Resources for Recovery and Reconstruction from the Great East Japan Earthquake

- From FY2020 onward, an expenditure pattern is assumed 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) and others such as the progress of implementation so far.
- In the projections, it is assumed that around 32 trillion yen is 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) and others.
- The expenditure concerning the decontamination and interim storage project facility which will be reimbursed from TEPCO and the actual payment corresponding with it are assumed to be approximately 5.6 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.