

Economic and Fiscal Projections for
Medium to Long Term Analysis

January 25, 2017
Cabinet Office, Japan

Projections are conducted by the Cabinet Office's "Economic and Fiscal Model," incorporating the 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, because of various uncertainties.

1. Introduction

The government commits to the basic principle of "Without economic revitalization, there can be no fiscal consolidation" and aims to achieve both a primary surplus in FY2020 and a 600 trillion yen economy.

This projection is intended to contribute to the discussion of the Council on Economic and Fiscal Policy by revealing the progress of the economic revitalization and fiscal consolidation and providing the basic data necessary to consider measures to achieve the targets.

Specifically, for the macroeconomy, based on the past performance of the Japanese economy, the projection shows medium to long term macroeconomic prospects, such as GDP and inflation, in two different cases, the Economic revitalization case and the Baseline case, to enable comparison. For public finance, the projection shows fiscal prospects consistent with each economic case. Thereby, the projection suggests the effects of the Integrated Economic and Fiscal Reforms and the extent to which further efforts are needed to achieve the fiscal consolidation targets.

2. Scenario and Assumptions in the Macroeconomy¹

(1) Economic Revitalization Case

The Economic Revitalization Case offers a projection in which the Japanese economy will retrieve the performance before deflation, as the economic and fiscal policies for overcoming deflation and attaining economic revitalization have sound effects. In the medium to long term, the annual economic growth rate is projected to reach more than 2% in real terms and more than 3% in nominal terms. The rate of change in the consumer price (excluding the direct effects of the increase in the consumption tax rate) is projected to be stable, at around 2%, in the medium to long term.

The Economic Revitalization Case has the following three assumptions.

- The total factor productivity (TFP) growth rate remains as low as the current level (around 0.8% in FY2015) until FY2016, and then rises to around 2.2% (the historical average from 1983 to 1993,² the period before the Japanese economy entered deflation) to the beginning of the 2020s.
- Based on the estimates of labor supply and demand in “Report of Labor Policy

¹ For further details, see Appendix.

² Specifically, it is the period from the beginning of the 10th business cycle (January-March 1983) to the end of the 11th business cycle (October-December 1993). It is not meant to focus on the bubble economy.

Study Group” (2015), the labor force participation rate gradually rises from FY2015 to FY2025, chiefly among females and the elderly.

- The world economic growth rate³ moves at around 3.4% to 3.5% annually from FY2018 to FY2021, based on the World Economic Outlook (WEO) by the IMF (October 2016), and then remains constant, at around 3.4%.

(2) Baseline Case

The Baseline Case offers a projection in which the economy will grow approximately at the rate of current potential growth. In this case, in the medium to long term, the annual economic growth rate is projected to be less than 1% in real terms and mid-1% in nominal terms.

The Baseline Case has the following three assumptions.

- The total factor productivity (TFP) growth rate converges, from the current level (around 0.8% in FY2015), to around 1.0%⁴ until the beginning of the 2020s.
- The labor force participation rate remains constant, at the current level.
- The world economic growth rate moves at around 2.8% to 2.9% annually from FY2018 to FY2021, about 0.5 percentage points⁵ lower than the rate based on the World Economic Outlook (WEO) by the IMF (October 2016) (from around 3.4% to 3.5% annually), and then remains constant, at around 2.8%.

3. Main Assumptions in Public Finances⁶

(1) Expenditures and revenues in FY2016 and FY2017 reflect the FY2016 Third Supplementary Budget and the Draft FY2017 Budget.

(2) Expenditures and revenues from FY2018 onward have the following assumptions.

- Social security expenditures are assumed to increase, reflecting population aging, wage growth, the inflation rate and other factors, and other general expenditures are assumed to continue to increase at about the same rate as the inflation rate.
- Revenues are assumed to increase in line with the macroeconomic conditions based on the two economic scenarios.
- 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 rate for

³ The real growth rate considering the export shares from Japan of 10 major destination countries.

⁴ The historical average of the total factor productivity (TFP) growth rate from the beginning of the 12th business cycle (October-December 1993) to the end of the 15th business cycle (October-December 2012).

⁵ Difference between the baseline projection and the lower bound of the 50% confidence interval in the WEO (October 2016).

⁶ For further details, see Appendix.

consumption tax,⁷ and social security expenditures are assumed to be enhanced to a certain extent.

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

(1) Progress and Future Prospect of Economic Revitalization and Fiscal Consolidation

<Progress>

The real GDP growth rate, after being 2.6% in FY2013, turned negative in FY2014, when the consumption tax rate was raised, but it rose to 1.3% in FY2015 and is projected to move at around mid-1% until FY2017. The potential GDP growth rate in FY2015, estimated after incorporating the benchmark year revision of GDP statistics, was 0.8% and in FY2016 is projected to rise to around 1.1%. The GDP deflator has been positive since FY2014. As a result, the nominal GDP growth rate is projected to be 2.3% on average between FY2013 and FY2017.

The primary deficit of central and local governments in FY2015 (approximately 3.0% of GDP, excluding the expenditures and the fiscal resources for the recovery and reconstruction measures) met the fiscal target of halving the ratio of deficit to GDP from the FY2010 rate (6.3% of GDP). The primary balance is projected to worsen in FY2016, however, as a result of a decline in tax revenues due to the deterioration of corporate profits caused by the rising yen and the decline in property income caused by fluctuations of financial and capital markets on the revenue side, and of the effects of the “Economic Measures for Realizing Investment for the Future” on the expenditure side. On the other hand, due to low interest rates as well as the progress of fiscal consolidation, the ratio of outstanding debt to GDP has only gradually increased, by approximately 10%pts from FY2012 to FY2016.

<Future Prospect>

In the Economic Revitalization Case, the GDP growth rate is projected to realize more than 2% in real terms and more than 3% in nominal terms from FY2019 onward, and achieve the 600 trillion yen economy in FY2020. In the Baseline Case, however, the GDP growth rate is projected to remain less than 1% in real terms and mid-1% in nominal terms in the medium to long term, and achieve the 600 trillion yen economy in FY2023.

⁷ This projection incorporates the financial sources funded by deferring the introduction of the total aggregate system in social security as a part of the stable and permanent financial sources secured based on the Act for Partial Revision of the Income Tax Act and Other Acts in response to the decline in tax revenue due to implementing the reduced rate for consumption tax. As for the unincorporated remainder of the necessary amounts, the above act provides that it will be secured by taking legislative measures on revenues or expenditures, or other measures by the end of FY2018.

With a decline in tax revenue projection in FY2017, mainly due to the decline of tax revenues in FY2016 and weaker consumption compared to the previous projection, as one of the backgrounds, the primary deficit of the Economic Revitalization Case in FY2020 is projected to increase from the previous projection and remain approximately 8.3 trillion yen, and it is important to continue enhancing “Integrated Economic and Fiscal Reforms.”

In the Economic Revitalization Case, the ratio of outstanding debt to GDP is projected to decline from FY2017 toward FY2025. It should be noted, however, that the long term interest rate is projected to be higher than the nominal GDP growth rate after FY2023, and the existing bonds issued at lower interest rates will be refinanced at higher interest rates sequentially.

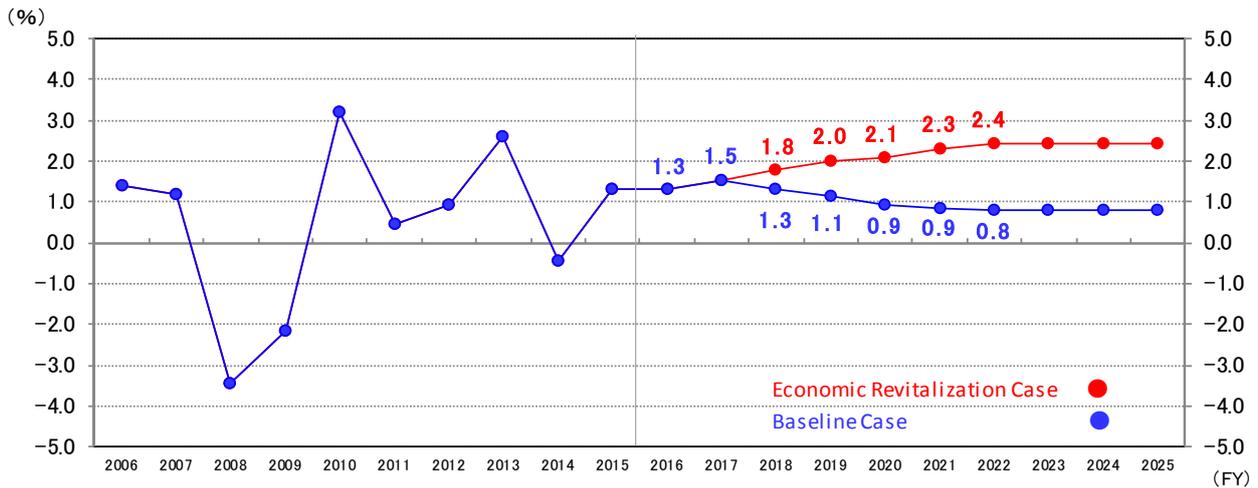
(2) The Benchmark at the Interim Progress Assessment

According to “The Plan to Advance Economic and Fiscal Revitalization,”⁸ the progress towards achieving the targets will be assessed in FY2018, the final year of the Intensive Reform Period, by using the benchmark of about 1% of the primary deficit to GDP ratio in FY2018. Since the consumption tax hike was postponed to October 2019 after the decision of the plan, its effects need to be considered at the interim progress assessment in FY2018.

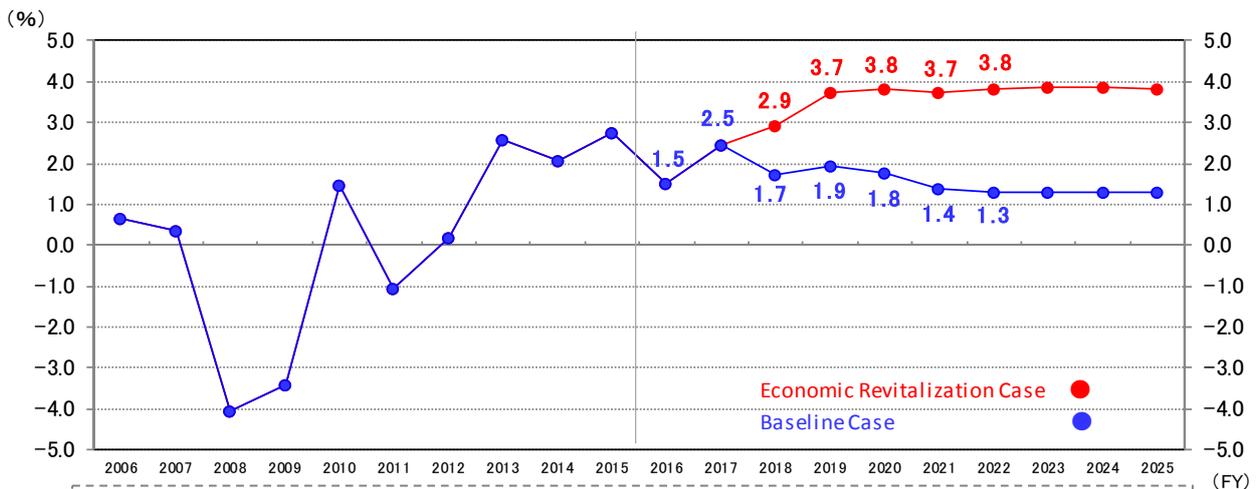
⁸ Chapter 3, “Basic Policy on Economic and Fiscal Management and Reform 2015” (Cabinet Decision, June 30, 2015).

Results of Projections

○ GDP Growth Rate 〔Real GDP Growth Rate〕

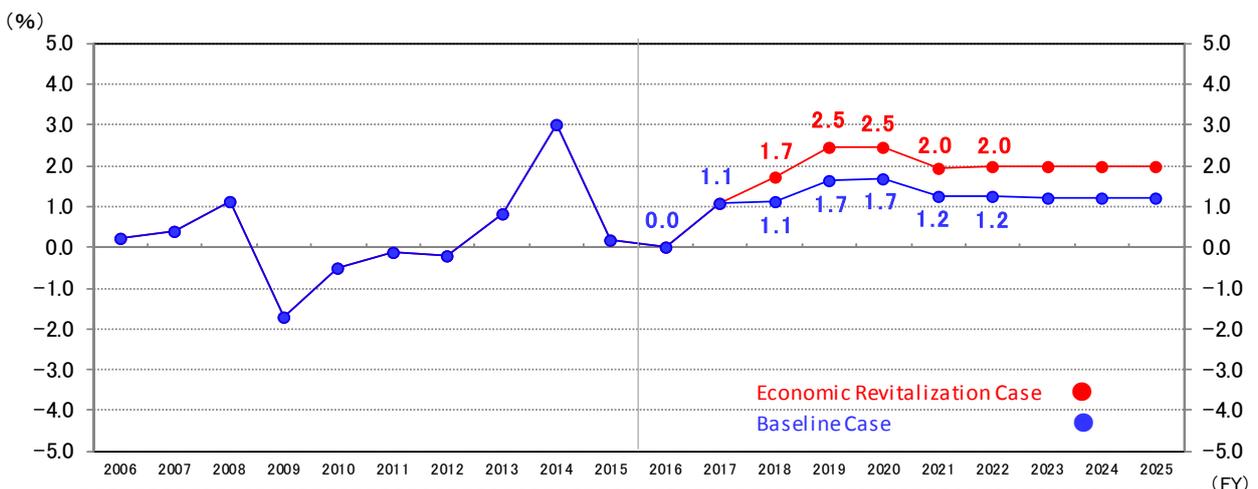


〔Nominal GDP Growth Rate〕



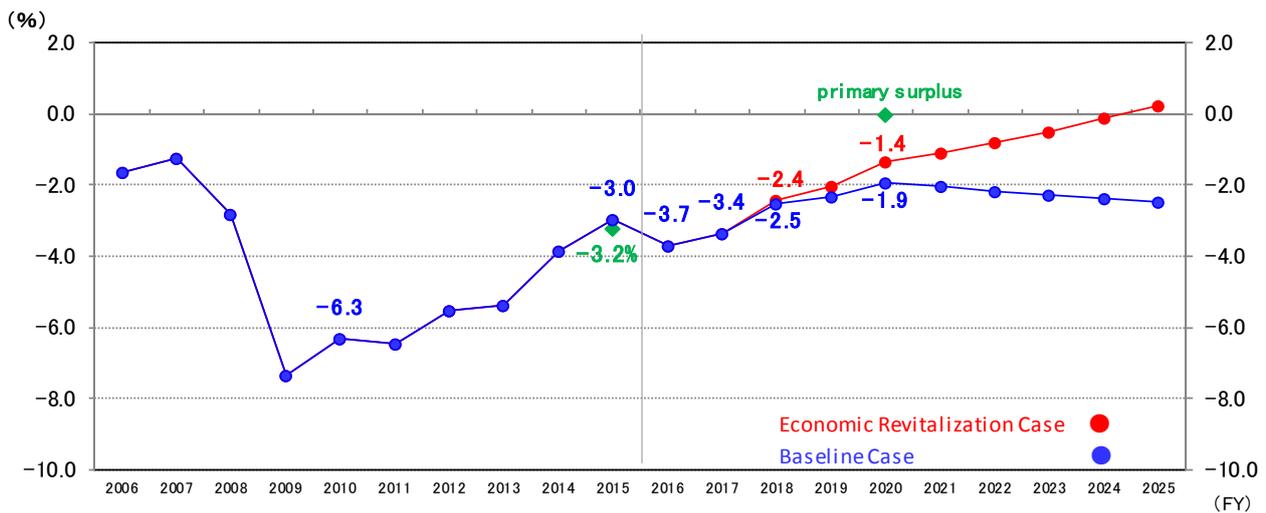
• In the Economic Revitalization Case, the real GDP growth rate is projected to reach more than 2% in the medium to long term, and the nominal GDP growth rate is projected to reach more than 3% in the medium to long term and achieve the 600 trillion yen target around FY2020 (approximately 613.6 trillion yen in FY2020).

○ Consumer Price Index (Rate of Change)



• In the Economic Revitalization Case, the rate of change in Consumer Price Index is projected to be stable at around 2% in the medium to long term, although it will temporarily increase, reacting to the consumption tax rate hike in FY2019 and FY2020.

○ Primary Balance of Central and Local Government Combined* (ratio to nominal GDP)



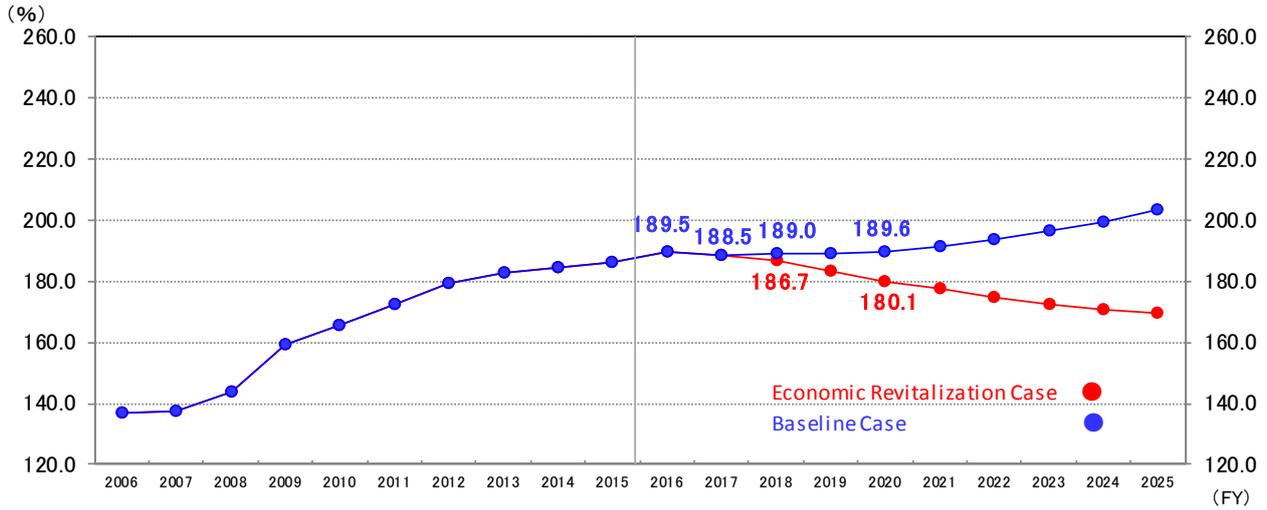
- The primary deficit of central and local governments achieved the fiscal target of halving the ratio of deficit to GDP from the FY2010 rate by FY2015 (approximately 3.0 percent of GDP; 15.8 trillion yen in FY2015).
- In the Economic Revitalization Case, the primary deficit is projected to remain approximately 13.8 trillion yen (2.4% of GDP) in FY2018, the year to review the progress of reform measures during the Intensive Reform Period (FY2016–2018) by the benchmark of about 1% of GDP, and approximately 8.3 trillion yen (1.4% of GDP) in FY2020, the target year for reducing the deficit to zero, and it is important to continue enhancing “Integrated Economic and Fiscal Reforms.”

This projection incorporates the financial sources funded by deferring the introduction of the total aggregate system in social security as a part of the stable and permanent financial sources secured based on the Act for Partial Revision of the Income Tax Act and Other Acts (promulgated in March 31, 2016) in response to the decline in tax revenue due to enforcing the reduced rate for consumption tax. As for the unincorporated remainder of the necessary amounts, the above act provides that it will be secured by taking legislative measures on revenues or expenditures, or other measures.

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

** According to “The Plan to Advance Economic and Fiscal Revitalization,” the progress towards achieving the targets will be assessed in FY2018, the final year of the Intensive Reform Period (FY2016-2018), by using the benchmark of about 1% of the primary deficit to GDP ratio in FY2018. Since the consumption tax hike was postponed to October 2019 after the decision of the plan, its effects need to be considered at the interim progress assessment in FY2018.

○ Outstanding Debt* (ratio to nominal GDP)



• In the Economic Revitalization Case, the ratio of outstanding debt to GDP (excluding the reconstruction bonds) is projected to decline toward FY2025, although it should be noted that the long term interest rate is projected to be higher than the nominal GDP growth rate after FY2023, and the existing bonds issued at lower interest rates will be refinanced at higher interest rates sequentially.

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

Result of Projections (Table)

Economic Revitalization Case

【Macroeconomy】

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

	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025
Real GDP Growth	(1.3)	(1.3)	(1.5)	(1.8)	(2.0)	(2.1)	(2.3)	(2.4)	(2.4)	(2.4)	(2.4)
Real GNI Growth	(2.7)	(1.5)	(1.7)	(2.2)	(2.1)	(2.0)	(2.2)	(2.3)	(2.4)	(2.4)	(2.4)
Nominal GDP Growth	(2.8)	(1.5)	(2.5)	(2.9)	(3.7)	(3.8)	(3.7)	(3.8)	(3.8)	(3.8)	(3.8)
Nominal GDP	532.2	540.2	553.5	569.6	590.9	613.6	636.3	660.8	686.2	712.6	739.9
Nominal GNI Per Capita Growth	(3.2)	(1.5)	(3.0)	(3.7)	(4.2)	(4.1)	(3.9)	(4.1)	(4.2)	(4.2)	(4.3)
Nominal GNI Per Capita (※Ten thousand yen)	436	443	456	473	493	513	533	555	578	602	628
Potential GDP Growth	(0.8)	(1.1)	(1.4)	(1.6)	(1.8)	(2.0)	(2.3)	(2.4)	(2.4)	(2.4)	(2.4)
Change of Price											
Consumer Prices	(0.2)	(0.0)	(1.1)	(1.7)	(2.5)	(2.5)	(2.0)	(2.0)	(2.0)	(2.0)	(2.0)
Corporate Goods Prices	(▲3.3)	(▲2.0)	(2.0)	(0.8)	(1.9)	(1.9)	(1.0)	(1.0)	(1.0)	(1.0)	(1.0)
GDP Deflator	(1.4)	(0.2)	(0.9)	(1.1)	(1.7)	(1.7)	(1.4)	(1.4)	(1.4)	(1.4)	(1.4)
Unemployment Rate	(3.3)	(3.1)	(2.9)	(2.9)	(2.9)	(2.9)	(3.0)	(3.0)	(3.0)	(3.0)	(3.1)
Long term Interest Rate	(0.3)	(0.0)	(0.0)	(0.5)	(1.5)	(2.6)	(3.1)	(3.6)	(4.0)	(4.4)	(4.4)
Balance by Sector											
General Government	[▲3.3]	[▲5.1]	[▲5.1]	[▲3.8]	[▲3.2]	[▲2.2]	[▲2.1]	[▲1.9]	[▲1.8]	[▲1.6]	[▲1.4]
Private	[6.6]	[8.7]	[9.2]	[8.5]	[8.3]	[7.4]	[7.3]	[7.2]	[7.1]	[6.9]	[6.7]
Overseas	[▲3.3]	[▲3.6]	[▲4.1]	[▲4.7]	[▲5.0]	[▲5.1]	[▲5.2]	[▲5.2]	[▲5.3]	[▲5.3]	[▲5.3]

【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

	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025
Primary Balance	▲15.8	▲20.0	▲18.6	▲13.8	▲12.1	▲8.3	▲7.0	▲5.3	▲3.3	▲0.9	1.6
(ratio to nominal GDP)	[▲3.0]	[▲3.7]	[▲3.4]	[▲2.4]	[▲2.1]	[▲1.4]	[▲1.1]	[▲0.8]	[▲0.5]	[▲0.1]	[0.2]
Central Government	▲19.0	▲20.8	▲20.8	▲16.3	▲15.2	▲13.2	▲12.9	▲12.4	▲11.8	▲11.0	▲9.7
(ratio to nominal GDP)	[▲3.6]	[▲3.9]	[▲3.8]	[▲2.9]	[▲2.6]	[▲2.2]	[▲2.0]	[▲1.9]	[▲1.7]	[▲1.5]	[▲1.3]
Local Government	3.2	0.9	2.2	2.5	3.1	4.9	5.8	7.1	8.5	10.0	11.4
(ratio to nominal GDP)	[0.6]	[0.2]	[0.4]	[0.4]	[0.5]	[0.8]	[0.9]	[1.1]	[1.2]	[1.4]	[1.5]
Fiscal Balance	▲23.8	▲28.1	▲27.2	▲21.5	▲20.6	▲18.6	▲19.7	▲21.3	▲23.2	▲25.1	▲26.8
(ratio to nominal GDP)	[▲4.5]	[▲5.2]	[▲4.9]	[▲3.8]	[▲3.5]	[▲3.0]	[▲3.1]	[▲3.2]	[▲3.4]	[▲3.5]	[▲3.6]
Central Government	▲24.9	▲26.4	▲27.0	▲22.3	▲21.8	▲21.4	▲23.3	▲25.7	▲28.5	▲31.4	▲33.9
(ratio to nominal GDP)	[▲4.7]	[▲4.9]	[▲4.9]	[▲3.9]	[▲3.7]	[▲3.5]	[▲3.7]	[▲3.9]	[▲4.2]	[▲4.4]	[▲4.6]
Local Government	1.1	▲1.6	▲0.2	0.8	1.2	2.8	3.6	4.4	5.3	6.3	7.1
(ratio to nominal GDP)	[0.2]	[▲0.3]	[0.0]	[0.1]	[0.2]	[0.5]	[0.6]	[0.7]	[0.8]	[0.9]	[1.0]
Outstanding Debt	990.1	1023.6	1043.2	1063.4	1084.1	1104.8	1128.3	1155.0	1184.9	1218.4	1255.1
(ratio to nominal GDP)	[186.0]	[189.5]	[188.5]	[186.7]	[183.5]	[180.1]	[177.3]	[174.8]	[172.7]	[171.0]	[169.6]

【General Account of Central Government】

Trillions of Yen

	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025
Expenditures	98.2	100.1	97.5	98.6	101.8	106.7	111.9	117.8	124.0	130.6	137.0
General Account Expenditure Excluding Debt Repayment and Interest Payment	75.8	77.9	73.9	74.9	77.0	79.6	81.6	83.8	86.0	88.2	90.1
Social Security related Expenditures	31.4	32.5	32.5	33.2	34.3	35.9	36.8	37.8	38.8	39.8	40.8
Social Allocation Tax Grants, etc.	16.8	15.3	15.6	15.5	16.3	16.7	17.3	18.0	18.7	19.4	19.7
Others	27.6	30.1	25.9	26.2	26.5	27.0	27.5	28.0	28.5	29.0	29.6
Debt Repayment and Interest Payment	22.5	22.2	23.5	23.7	24.8	27.1	30.3	34.0	38.0	42.4	46.9
Revenues	63.6	61.2	63.1	65.1	68.4	72.8	75.4	78.1	81.0	84.1	87.3
Tax Revenue	56.3	55.9	57.7	59.6	62.9	67.1	69.6	72.2	75.0	77.9	81.0
Other Revenues	7.3	5.3	5.4	5.5	5.6	5.7	5.8	5.9	6.0	6.2	6.3
Difference between Expenditures and Revenues	34.9	39.0	34.4	33.5	33.4	33.9	36.6	39.7	43.0	46.5	49.7
Primary Balance in the General Account of Central Government	▲12.1	▲16.7	▲10.8	▲9.8	▲8.6	▲6.8	▲6.2	▲5.7	▲5.0	▲4.1	▲2.8

【Ordinary Account of Local Government】

Trillions of Yen

	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025
Expenditures	95.7	97.8	95.0	95.7	98.1	100.3	102.3	104.5	106.8	109.0	111.6
Debt Repayment and Interest Payment	14.0	12.8	12.6	11.8	12.0	12.1	12.3	12.5	12.8	13.0	13.5
Revenues	82.2	83.4	82.2	83.9	86.7	90.7	93.4	96.6	100.0	103.6	107.0
Tax Revenue	41.7	41.4	42.4	43.9	45.5	47.8	49.2	51.0	52.9	55.0	57.2
Difference between Expenditures and Revenues	13.5	14.4	12.8	11.8	11.4	9.7	8.9	7.9	6.8	5.4	4.7
Primary Balance in the Ordinary Account of Local Government	3.5	1.4	2.8	3.0	3.6	5.4	6.3	7.5	9.0	10.5	11.8

- Notes
1. In "General Account of Central Government," up to FY2015 is based on the Settlement, FY2016 is based on the FY2016 Third Supplementary Budget, and FY2017 is based on the Draft FY2017 Budget. In "Ordinary Account of Local Government," FY2015 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 FY2015 consists of non-tax revenues and preceding fiscal year surplus received (excluding the balance carried forward fiscal resources to FY2016 (3.6 trillion yen)).
 5. In "Ordinary Account of Local Government," "Revenues" excludes local bonds, reduction of reserve, and the balance carried forward fiscal resources 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

	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025
Real GDP Growth	(1.3)	(1.3)	(1.5)	(1.3)	(1.1)	(0.9)	(0.9)	(0.8)	(0.8)	(0.8)	(0.8)
Real GNI Growth	(2.7)	(1.5)	(1.7)	(1.8)	(1.3)	(0.8)	(0.8)	(0.7)	(0.7)	(0.8)	(0.8)
Nominal GDP Growth	(2.8)	(1.5)	(2.5)	(1.7)	(1.9)	(1.8)	(1.4)	(1.3)	(1.3)	(1.3)	(1.3)
Nominal GDP	532.2	540.2	553.5	563.1	573.9	584.0	592.0	599.7	607.5	615.4	623.4
Nominal GNI Per Capita Growth	(3.2)	(1.5)	(3.0)	(2.5)	(2.5)	(2.1)	(1.7)	(1.7)	(1.8)	(1.9)	(1.9)
Nominal GNI Per Capita (※Ten thousand yen)	436	443	456	468	479	490	498	507	516	525	536
Potential GDP Growth	(0.8)	(1.1)	(1.4)	(1.3)	(0.9)	(0.7)	(0.8)	(0.8)	(0.8)	(0.8)	(0.8)
Change of Price											
Consumer Prices	(0.2)	(0.0)	(1.1)	(1.1)	(1.7)	(1.7)	(1.2)	(1.2)	(1.2)	(1.2)	(1.2)
Corporate Goods Prices	(▲3.3)	(▲2.0)	(2.0)	(0.4)	(1.4)	(1.5)	(0.7)	(0.7)	(0.7)	(0.7)	(0.7)
GDP Deflator	(1.4)	(0.2)	(0.9)	(0.4)	(0.8)	(0.8)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)
Unemployment Rate	(3.3)	(3.1)	(2.9)	(2.9)	(3.0)	(3.0)	(3.0)	(3.0)	(3.0)	(3.1)	(3.1)
Long term Interest Rate	(0.3)	(0.0)	(0.0)	(0.4)	(0.9)	(1.4)	(1.6)	(1.7)	(1.8)	(1.9)	(1.9)
Balance by Sector											
General Government	[▲3.3]	[▲5.1]	[▲5.1]	[▲3.9]	[▲3.6]	[▲2.8]	[▲3.0]	[▲3.2]	[▲3.4]	[▲3.7]	[▲3.9]
Private	[6.6]	[8.7]	[9.2]	[8.7]	[8.5]	[7.6]	[7.7]	[7.8]	[8.0]	[8.2]	[8.5]
Overseas	[▲3.3]	[▲3.6]	[▲4.1]	[▲4.7]	[▲4.9]	[▲4.9]	[▲4.8]	[▲4.7]	[▲4.6]	[▲4.6]	[▲4.6]

【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

	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025
Primary Balance	▲15.8	▲20.0	▲18.6	▲14.1	▲13.3	▲11.3	▲12.1	▲13.0	▲13.8	▲14.6	▲15.4
(ratio to nominal GDP)	[▲3.0]	[▲3.7]	[▲3.4]	[▲2.5]	[▲2.3]	[▲1.9]	[▲2.0]	[▲2.2]	[▲2.3]	[▲2.4]	[▲2.5]
Central Government	▲19.0	▲20.8	▲20.8	▲16.3	▲15.9	▲14.7	▲15.8	▲16.9	▲18.0	▲19.1	▲19.9
(ratio to nominal GDP)	[▲3.6]	[▲3.9]	[▲3.8]	[▲2.9]	[▲2.8]	[▲2.5]	[▲2.7]	[▲2.8]	[▲3.0]	[▲3.1]	[▲3.2]
Local Government	3.2	0.9	2.2	2.2	2.6	3.5	3.6	3.9	4.2	4.4	4.5
(ratio to nominal GDP)	[0.6]	[0.2]	[0.4]	[0.4]	[0.4]	[0.6]	[0.6]	[0.7]	[0.7]	[0.7]	[0.7]
Fiscal Balance	▲23.8	▲28.1	▲27.2	▲21.7	▲21.0	▲19.7	▲21.6	▲24.1	▲26.7	▲29.4	▲32.2
(ratio to nominal GDP)	[▲4.5]	[▲5.2]	[▲4.9]	[▲3.9]	[▲3.7]	[▲3.4]	[▲3.6]	[▲4.0]	[▲4.4]	[▲4.8]	[▲5.2]
Central Government	▲24.9	▲26.4	▲27.0	▲22.2	▲21.9	▲21.4	▲23.4	▲26.0	▲28.6	▲31.3	▲33.9
(ratio to nominal GDP)	[▲4.7]	[▲4.9]	[▲4.9]	[▲3.9]	[▲3.8]	[▲3.7]	[▲4.0]	[▲4.3]	[▲4.7]	[▲5.1]	[▲5.4]
Local Government	1.1	▲1.6	▲0.2	0.5	0.9	1.7	1.8	1.9	2.0	1.9	1.7
(ratio to nominal GDP)	[0.2]	[▲0.3]	[0.0]	[0.1]	[0.2]	[0.3]	[0.3]	[0.3]	[0.3]	[0.3]	[0.3]
Outstanding Debt	990.1	1023.6	1043.2	1064.0	1085.5	1107.4	1132.2	1160.6	1192.5	1228.1	1267.4
(ratio to nominal GDP)	[186.0]	[189.5]	[188.5]	[189.0]	[189.1]	[189.6]	[191.3]	[193.5]	[196.3]	[199.5]	[203.3]

【General Account of Central Government】

Trillions of Yen

	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025
Expenditures	98.2	100.1	97.5	98.3	100.7	103.8	107.3	111.0	114.9	118.9	122.7
General Account Expenditure Excluding Debt Repayment and Interest Payment	75.8	77.9	73.9	74.6	76.4	78.2	80.0	81.9	83.8	85.6	87.2
Social Security related Expenditures	31.4	32.5	32.5	33.1	34.0	35.4	36.1	36.9	37.6	38.3	39.0
Social Allocation Tax Grants, etc.	16.8	15.3	15.6	15.4	16.2	16.4	17.2	18.0	18.9	19.7	20.2
Others	27.6	30.1	25.9	26.0	26.1	26.4	26.7	27.0	27.3	27.6	28.0
Debt Repayment and Interest Payment	22.5	22.2	23.5	23.7	24.3	25.6	27.3	29.1	31.1	33.3	35.4
Revenues	63.6	61.2	63.1	64.2	66.4	69.2	70.1	71.0	71.9	72.7	73.7
Tax Revenue	56.3	55.9	57.7	58.8	61.0	63.7	64.6	65.4	66.2	67.1	68.0
Other Revenues	7.3	5.3	5.4	5.4	5.5	5.5	5.6	5.6	5.6	5.7	5.7
Difference between Expenditures and Revenues	34.9	39.0	34.4	34.0	34.3	34.6	37.2	40.1	43.1	46.1	49.0
Primary Balance in the General Account of Central Government	▲12.1	▲16.7	▲10.8	▲10.3	▲9.9	▲9.0	▲9.9	▲10.9	▲11.9	▲12.9	▲13.6

【Ordinary Account of Local Government】

Trillions of Yen

	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025
Expenditures	95.7	97.8	95.0	95.3	97.0	98.6	99.8	101.3	102.7	104.2	106.0
Debt Repayment and Interest Payment	14.0	12.8	12.6	11.8	12.0	12.0	12.1	12.2	12.3	12.4	12.8
Revenues	82.2	83.4	82.2	83.4	85.2	87.6	89.0	90.6	92.3	93.8	95.2
Tax Revenue	41.7	41.4	42.4	43.6	44.4	45.8	45.9	46.4	46.9	47.4	47.9
Difference between Expenditures and Revenues	13.5	14.4	12.8	11.9	11.9	10.9	10.9	10.7	10.5	10.3	10.7
Primary Balance in the Ordinary Account of Local Government	3.5	1.4	2.8	2.9	3.1	4.0	4.2	4.5	4.8	5.0	5.1

- Notes
1. In "General Account of Central Government," up to FY2015 is based on the Settlement, FY2016 is based on the FY2016 Third Supplementary Budget, and FY2017 is based on the Draft FY2017 Budget. In "Ordinary Account of Local Government," FY2015 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 FY2015 consists of non-tax revenues and preceding fiscal year surplus received (excluding the balance carried forward fiscal resources to FY2016 (3.6 trillion yen)).
 5. In "Ordinary Account of Local Government," "Revenues" excludes local bonds, reduction of reserve, and the balance carried forward fiscal resources 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 Revitalization Case

[ratio to GDP, %], Trillions of Yen

	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025
Primary Balance	▲ 15.6	▲ 20.7	▲ 19.2	▲ 14.3	▲ 12.6	▲ 8.5	▲ 6.9	▲ 4.9	▲ 2.9	▲ 0.6	2.0
(ratio to nominal GDP)	[▲2.9]	[▲3.8]	[▲3.5]	[▲2.5]	[▲2.1]	[▲1.4]	[▲1.1]	[▲0.7]	[▲0.4]	[▲0.1]	[0.3]
Central Government	▲ 18.2	▲ 21.5	▲ 21.4	▲ 16.9	▲ 15.8	▲ 13.5	▲ 12.8	▲ 12.1	▲ 11.5	▲ 10.6	▲ 9.4
(ratio to nominal GDP)	[▲3.4]	[▲4.0]	[▲3.9]	[▲3.0]	[▲2.7]	[▲2.2]	[▲2.0]	[▲1.8]	[▲1.7]	[▲1.5]	[▲1.3]
Local Government	2.6	0.8	2.1	2.6	3.2	5.0	5.9	7.2	8.6	10.0	11.4
(ratio to nominal GDP)	[0.5]	[0.1]	[0.4]	[0.5]	[0.5]	[0.8]	[0.9]	[1.1]	[1.2]	[1.4]	[1.5]
Fiscal Balance	▲ 23.6	▲ 28.9	▲ 27.9	▲ 22.1	▲ 21.1	▲ 18.8	▲ 19.7	▲ 21.1	▲ 23.0	▲ 24.9	▲ 26.7
(ratio to nominal GDP)	[▲4.4]	[▲5.3]	[▲5.0]	[▲3.9]	[▲3.6]	[▲3.1]	[▲3.1]	[▲3.2]	[▲3.3]	[▲3.5]	[▲3.6]
Central Government	▲ 24.2	▲ 27.1	▲ 27.6	▲ 22.9	▲ 22.4	▲ 21.7	▲ 23.3	▲ 25.5	▲ 28.4	▲ 31.3	▲ 33.7
(ratio to nominal GDP)	[▲4.5]	[▲5.0]	[▲5.0]	[▲4.0]	[▲3.8]	[▲3.5]	[▲3.7]	[▲3.9]	[▲4.1]	[▲4.4]	[▲4.6]
Local Government	0.5	▲ 1.7	▲ 0.3	0.8	1.3	2.9	3.6	4.5	5.4	6.3	7.1
(ratio to nominal GDP)	[0.1]	[▲0.3]	[▲0.1]	[0.1]	[0.2]	[0.5]	[0.6]	[0.7]	[0.8]	[0.9]	[1.0]
Outstanding Debt	997.2	1032.8	1051.2	1071.1	1091.7	1112.8	1136.1	1162.2	1191.7	1225.0	1261.5
(ratio to nominal GDP)	[187.4]	[191.2]	[189.9]	[188.0]	[184.8]	[181.4]	[178.5]	[175.9]	[173.7]	[171.9]	[170.5]

Baseline Case

[ratio to GDP, %], Trillions of Yen

	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025
Primary Balance	▲ 15.6	▲ 20.7	▲ 19.2	▲ 14.6	▲ 13.8	▲ 11.4	▲ 12.0	▲ 12.6	▲ 13.4	▲ 14.3	▲ 15.1
(ratio to nominal GDP)	[▲2.9]	[▲3.8]	[▲3.5]	[▲2.6]	[▲2.4]	[▲2.0]	[▲2.0]	[▲2.1]	[▲2.2]	[▲2.3]	[▲2.4]
Central Government	▲ 18.2	▲ 21.5	▲ 21.4	▲ 16.9	▲ 16.4	▲ 15.0	▲ 15.7	▲ 16.6	▲ 17.7	▲ 18.7	▲ 19.6
(ratio to nominal GDP)	[▲3.4]	[▲4.0]	[▲3.9]	[▲3.0]	[▲2.9]	[▲2.6]	[▲2.7]	[▲2.8]	[▲2.9]	[▲3.0]	[▲3.1]
Local Government	2.6	0.8	2.1	2.3	2.6	3.5	3.7	4.0	4.3	4.4	4.5
(ratio to nominal GDP)	[0.5]	[0.1]	[0.4]	[0.4]	[0.5]	[0.6]	[0.6]	[0.7]	[0.7]	[0.7]	[0.7]
Fiscal Balance	▲ 23.6	▲ 28.9	▲ 27.9	▲ 22.3	▲ 21.5	▲ 19.9	▲ 21.5	▲ 23.7	▲ 26.4	▲ 29.2	▲ 32.0
(ratio to nominal GDP)	[▲4.4]	[▲5.3]	[▲5.0]	[▲4.0]	[▲3.7]	[▲3.4]	[▲3.6]	[▲4.0]	[▲4.3]	[▲4.7]	[▲5.1]
Central Government	▲ 24.2	▲ 27.1	▲ 27.6	▲ 22.9	▲ 22.5	▲ 21.7	▲ 23.4	▲ 25.7	▲ 28.4	▲ 31.1	▲ 33.6
(ratio to nominal GDP)	[▲4.5]	[▲5.0]	[▲5.0]	[▲4.1]	[▲3.9]	[▲3.7]	[▲4.0]	[▲4.3]	[▲4.7]	[▲5.0]	[▲5.4]
Local Government	0.5	▲ 1.7	▲ 0.3	0.6	0.9	1.8	1.9	2.0	2.0	1.9	1.6
(ratio to nominal GDP)	[0.1]	[▲0.3]	[▲0.1]	[0.1]	[0.2]	[0.3]	[0.3]	[0.3]	[0.3]	[0.3]	[0.3]
Outstanding Debt	997.2	1032.8	1051.2	1071.6	1093.2	1115.3	1139.9	1167.7	1199.0	1234.3	1273.4
(ratio to nominal GDP)	[187.4]	[191.2]	[189.9]	[190.3]	[190.5]	[191.0]	[192.6]	[194.7]	[197.4]	[200.6]	[204.3]

(Notes)

1. "Consumer Prices" refers to the general index (nationwide).
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 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 the "Revenues" minus "Expenditure" excluding "Debt Repayment and Interest Payment" and "Reserves."

4. The figures for "Balance by Sector" for general government, "Fiscal Balance" and "Primary Balance" of central and local government 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 the reconstruction bonds, securing further non-tax revenues, special taxation for reconstruction, and the amount of the above fiscal resources.
7. The target of halving the ratio of the central and local governments' primary balance deficit to GDP from the FY2010 rate by FY2015 is 3.2%, which is calculated on the basis of the ratio of deficit in FY2010, which is 6.3%.

Appendix: Key Assumptions

The GDP growth rate and inflation rate up to FY2015 are from the Annual Report on National Accounts for 2015 and other sources, and those for FY2016 and FY2017 are from the Fiscal 2017 Economic Outlook and Basic Stance for Economic and Fiscal Management (Cabinet Decision, January 20, 2017) and other sources.

(1) Assumptions on the Macroeconomy

Economic Revitalization Case

a) Total Factor Productivity (TFP) Growth Rate

* The TFP growth rate remains as low as the current level (around 0.8% in FY2015) until FY2016, and then rises to around 2.2% (the historical average from the 10th business cycle [January-March 1983] to the 11th business cycle [October-December 1993]) to the beginning of the 2020s.

b) Labor Force

* Based on the estimates of labor supply and demand for the “case in which desirable economic growth and labor force participation (LFP) are achieved” in “Report of Labor Policy Study Group” (December 1, 2015), the LFP rate of each gender and age group gradually rises, chiefly among females and the elderly (for example, the LFP rate among females aged 30-34 gradually rises from around 71% in FY2015 to 81% in FY2024, the LFP rate among males aged 65-69 gradually rises from around 54% in FY2015 to 64% in FY2024, and the LFP rate among females aged 65-69 gradually rises from around 32% in FY2015 to 37% in FY2024).

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 3.5% annually from FY2018 to FY2021, based on the World Economic Outlook (WEO) by the IMF (October 2016). From FY2022 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 1.8% to 2.0% annually from FY2018 to FY2021, based on the WEO (October 2016). From FY2022 onward, the inflation rate remains constant, at around 2.0%.

<Crude Oil Prices>

From FY2018 onward, the price moves based on the rate of the World Energy Outlook by the IEA (November 2016), at around 4.3%.

<Nominal Exchange Rate>

From FY2018 onward, although the rate is influenced by the spread between domestic and overseas in the short term, it is assumed to maintain the real exchange rate constant in the long term (the nominal exchange rate changes to offset the difference in the inflation rates between Japan and the rest of the world).

Baseline Case

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

a) TFP Growth Rate

- * The TFP growth rate converges, from the current level (around 0.8% in FY2015), to around 1.0% (the historical average from the 12th business cycle [October-December 1993] to the 15th business cycle [October-December 2012]) to the beginning of the 2020s.

b) Labor Force

- * The LFP rate for each gender and age group remains constant, at the current level.

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 2.8% to 2.9% annually, about 0.5 percentage points* lower than the rate based on the WEO (October 2016) from FY2018 to FY2021 (from around 3.4% to 3.5% annually). From FY2022 onward, the world economy growth rate remains constant, at around 2.8%.

* Difference between the baseline projection and the lower bound of the 50% confidence interval in the WEO (October 2016).

(2) Tax System

- * Tax revenues of the general account of central government in FY2015 are based on the FY2015 Settlement, in FY2016 on the FY2016 Third Supplementary Budget, and in FY2017 on the Draft FY2017 Budget.

- * Based on the FY2017 Tax Reform (Cabinet Decision, December 22, 2016), 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 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 rate for consumption tax. The projection incorporates the financial sources funded by deferring the introduction of the total aggregate system in social security as a part of the stable and permanent financial sources secured based on the Act for Partial Revision of the Income Tax Act and Other Acts in response to the decline in tax revenue due to implementing the reduced rate for consumption tax. As for the unincorporated remainder of the necessary amounts, the above act provides that it will be secured by taking legislative measures on revenues or expenditures, or other measures by the end of FY2018.

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 the local government.

(3) Expenditures

- * Expenditures of the general account of central government in FY2015 are based on the FY2015 Settlement, in FY2016 on the FY2016 Third Supplementary Budget, and in FY2017 on the Draft FY2017 Budget.
- * From FY2018 onward, it is assumed that social security expenditures will increase reflecting population aging, wage growth, inflation rate and other factors, 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 other factors, 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, and considerable leeway should be given when interpreting the projection since the series is significantly affected by policy and other external factors.

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

- * From FY2017 onward, an expenditure pattern is assumed based on “Recovery and Reconstruction Work for the Five-Year Period Starting in FY2016” (Reconstruction Promotion Conference Decision, June 24, 2015), “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 other sources, such as the implementation so far.
- * In the projections, it is assumed that 32 trillion yen is secured by the special tax for reconstruction, a reduction of expenditures, non-tax revenues and other factors based on the “Basic Guidelines for the Third Supplementary Budget in FY2011 and the Fiscal Resources for Reconstruction” (Cabinet decision on October 7, 2011), “Scale and Funding Sources for Recovery and Reconstruction Work from Now On” (Reconstruction Promotion Conference Decision, January 29, 2013), “Recovery and Reconstruction Work for the Five-Year Period Starting in FY2016” (Reconstruction Promotion Conference Decision, June 24, 2015), “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 other sources.