Economic and Fiscal Projections for Medium to Long Term Analysis

July 18, 2017 Cabinet Office, Japan

Projections are conducted by 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, 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 a 600 trillion yen economy and a primary surplus by FY2020, and, at the same time, 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 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 macroeconomy, based on the past performance of the Japanese economy, the projection shows medium- to long-term macroeconomic prospects such as GDP and inflation for 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 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 rises from the current level (around 0.6% in FY2016) to around 2.2% (the historical average from 1983 to 1993², the period before the time when 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 Study Group" (2015), the labor force participation rate gradually rises from FY2016 to

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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.

FY2025, chiefly among females and the elderly.

• The world economic growth rate³ moves at around 3.3% to 3.4% annually from FY2019 to FY2022, based on the World Economic Outlook (WEO) by the IMF (April 2017), and then remains constant, at around 3.3%.

(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 high 0% in real terms and low 1% in nominal terms.

The Baseline Case has the following three assumptions:

- The total factor productivity (TFP) growth rate converges to around 1.0% to the beginning of the 2020s.
- The labor force participation rate remains constant, at the current level.
- The world economic growth rate moves at around 2.7% annually from FY2019, about 0.6 percentage points⁴ lower than the rate based on the World Economic Outlook (WEO) by the IMF (April 2017) (from around 3.3% to 3.4% annually).

3. Main Assumptions in Public Finances⁵

- (1) Expenditures in FY2018 are calculated by taking changes in wages, prices, expenditure reform and other factors into consideration, with an assumption that the rate of increase of the expenditure excluding the increase due to population aging and other factors will consequently be half as high as the wage growth and inflation rate.
- (2) Expenditures and revenues from FY2019 onward have the following assumptions:
 - Social security expenditures are assumed to increase reflecting population aging, wage growth, inflation rate and others, and other general expenditures to continue to increase at about the same rate as the inflation rate.
 - Revenues are assumed to increase consistent 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 consumption tax⁶, and social security expenditures are to be enhanced to a certain extent.

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

⁴ Difference between the baseline projection and the lower bound of the 50% confidence interval in the WEO (April 2017).

⁵ For further details, see Appendix.

⁶ 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.

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

(1) Progress and Future Prospects of Economic Revitalization and Fiscal Consolidation Progress>

The real GDP growth rate turned negative in FY2014, after 2.6% in FY2013, when the consumption tax rate was raised, but it rose to 1.2% in FY2015 and 2016. And it is projected to be 1.5% in FY2017 along with further extension of the positive economic cycle. The nominal GDP growth rate is projected to be 2.2% 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 deficit is projected to be 3.5% of GDP in FY2016, however, as a result of a decline in tax revenues due to the deterioration of corporate profits caused by rising yen on the revenue side, and of the effects of the "Economic Measures for Realizing Investment for the Future" on the expenditure side. In FY2017, the primary deficit is projected to be 3.3% of GDP.

The ratio of outstanding debt to GDP has only gradually increased by approximately 10% from FY2012 to FY2017, due to low interest rates as well as the progress of fiscal consolidation.

<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 FY2020 onward, and achieve the 600 trillion yen economy around FY2020. In the Baseline Case, however, the GDP growth rate is projected to remain high 0% in real terms and low 1% in nominal terms in the medium to long term, and achieve the 600 trillion yen economy around FY2023.

With, on the one side, there is a decline in the growth rate projection in FY2018 compared to the previous projection, and on the other side, taking into expenditure reform and other factors, the same as previous projections in summer, the primary deficit of the Economic Revitalization Case in FY2020 is projected to be subequal to the previous projection and remain approximately 8.2 trillion yen.

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 FY2024, and

the existing bonds issued at lower interest rates will be refinanced at higher interest rates sequentially. On the contrary, in the Baseline Case, the ratio is projected to increase moderately after 2021. Therefore, it is important to continue enhancing "Integrated Economic and Fiscal Reforms."

(2) The Benchmark at the Interim Progress Assessment

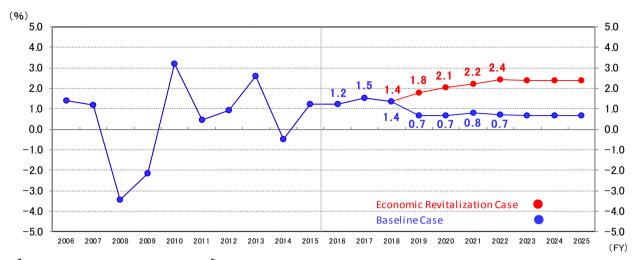
According to "The Plan to Advance Economic and Fiscal Revitalization," the progress towards achieving the targets will be assessed in FY2018, the final year of the Intensive Reform Period, by using the benchmark of about 1% of the primary deficit to GDP ratio in FY2018. Since the consumption tax hike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

⁷ Chapter 3, "Basic Policy on Economic and Fiscal Management and Reform 2015" (Cabinet Decision, June 30, 2015).

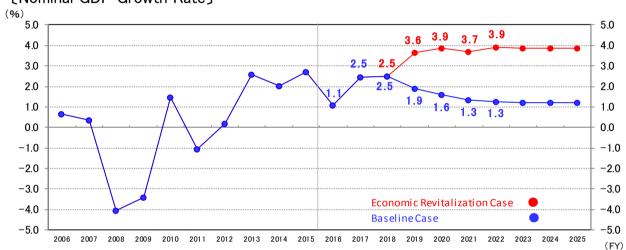
Results of Projections

OGDP Growth Rate

[Real GDP Growth

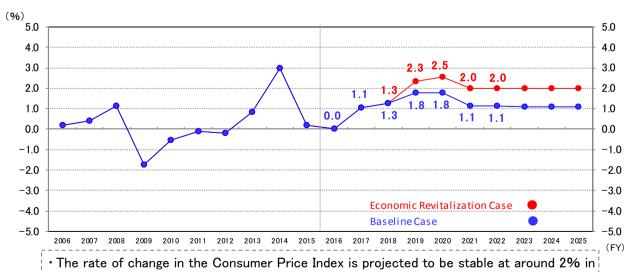


[Nominal GDP Growth Rate]



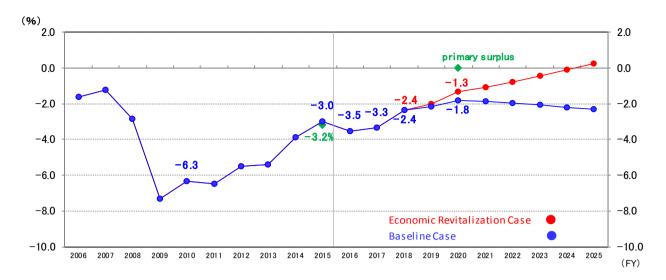
• In the Economic Revitalization Case, the real GDP growth rate is projected to reach more than 2% in the medium to long term, and the nominal GDP growth rate is projected to reach more than 3% in the medium to long term and achieve the 600 trillion yen target around FY2020.

OConsumer Price Index (Rate of Change)



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

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

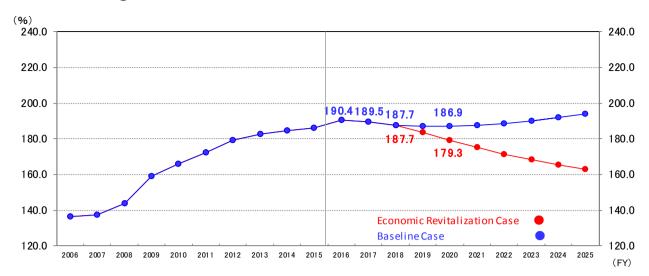


- The primary deficit of central and local governments achieved the fiscal target of halving the ratio of deficit to GDP from the FY2010 rate by FY2015 (approximately 3.0 percent of GDP; 15.8 trillion yen in FY2015).
- In the Economic Revitalization Case, the primary deficit is projected to remain at approximately 13.4 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 8.2 trillion yen (1.3% 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 on 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.

OOutstanding 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 FY2024, and the existing bonds issued at lower interest rates will be refinanced at higher interest rates sequentially.
- •In the Baseline Case, the ratio is projected to increase moderately after FY2021.
- •Therefore, it is important to continue enhancing "Integrated Economic and Fiscal Reforms."
- * Excluding the expenditures and the fiscal resources for the recovery and reconstruction measures.

Result of Projections (Table)

Economic Revitalization Case

	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025
Real GDP Growth	(1.2)	(1.2)	(1.5)	(1.4)	(1.8)	(2.1)	(2.2)	(2.4)	(2.4)	(2.4)	(2.4)
Real GNI Growth	(2.7)	(0.9)	(1.7)	(1.5)	(2.2)	(2.0)	(2.1)	(2.3)	(2.2)	(2.2)	(2.2)
Nominal GDP Growth	(2.7)	(1.1)	(2.5)	(2.5)	(3.6)	(3.9)	(3.7)	(3.9)	(3.8)	(3.8)	(3.9)
Nominal GDP	531.8	537.5	550.7	564.4	585.0	607.6	630.0	654.6	679.8	706.0	733.2
Nominal GNI Per Capita Growth	(3.0)	(0.7)	(3.0)	(2.7)	(4.0)	(4.1)	(4.0)	(4.2)	(4.1)	(4.1)	(4.2)
Nominal GNI Per Capita (%Ten thousand yen)	434	437	450	463	481	501	521	543	565	589	613
Potential GDP Growth	(0.8)	(0.8)	(1.4)	(1.6)	(1.8)	(2.1)	(2.2)	(2.4)	(2.4)	(2.4)	(2.4)
Change of Price											
Consumer Prices	(0.2)	(0.0)	(1.1)	(1.3)	(2.3)	(2.5)	(2.0)	(2.0)	(2.0)	(2.0)	(2.0)
Corporate Goods Prices	(▲3.3)	(▲2.4)	(2.1)	(1.2)	(1.5)	(1.5)	(0.6)	(0.6)	(0.5)	(0.5)	(0.5)
GDP Deflator	(1.5)	(▲0.2)	(0.9)	(1.1)	(1.8)	(1.8)	(1.5)	(1.4)	(1.4)	(1.4)	(1.4)
Unemployment Rate	(3.3)	(3.0)	(2.8)	(2.7)	(2.7)	(2.7)	(2.7)	(2.8)	(2.8)	(2.8)	(2.9)
Long-term Interest Rate	(0.3)	(▲0.1)	(0.1)	(0.1)	(0.7)	(1.4)	(2.5)	(3.2)	(3.7)	(4.1)	(4.3)
Balance by Sector											
General Government	[▲3.3]	[▲4.7]	[▲4.9]	[▲3.5]	[▲2.6]	[▲ 1.2]	[▲ 1.0]	[▲0.7]	[▲0.5]	[▲0.3]	[0.0]
Private	[6.6]	[8.3]	[8.8]	[7.7]	[7.2]	[6.1]	[6.0]	[5.7]	[5.3]	[4.9]	[4.3]
Overseas	[▲3.3]	[▲3.6]	[▲3.9]	[4.2]	[▲4.6]	[▲4.9]	[▲5.0]	[▲5.0]	[▲4.8]	[▲4.6]	[4.2]

【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

	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025
Primary Balance	▲ 15.8	▲ 18.9	▲ 18.4	▲ 13.4	▲ 11.7	▲ 8.2	▲ 6.9	▲ 5.0	▲ 3.0	▲ 0.7	1.8
(ratio to nominal GDP)	[▲3.0]	[▲3.5]	[🛦 3.3]	[▲ 2.4]	[▲ 2.0]	[1.3]	[▲1.1]	[▲0.8]	[▲ 0.4]	[▲ 0.1]	[0.2]
Central Government	▲ 19.0	▲ 20.3	▲ 20.7	▲ 16.3	▲ 15.2	▲ 13.6	▲ 13.3	▲ 12.7	▲ 12.0	▲ 11.0	▲ 9.6
(ratio to nominal GDP)	[▲3.6]	[▲3.8]	[▲3.8]	[▲2.9]	[▲2.6]	[12.2]	[▲ 2.1]	[▲1.9]	[▲1.8]	[▲ 1.6]	[1.3]
Local Government	3.2	1.3	2.3	2.8	3.5	5.5	6.4	7.7	9.0	10.3	11.3
(ratio to nominal GDP)	[0.6]	[0.3]	[0.4]	[0.5]	[0.6]	[0.9]	[1.0]	[1.2]	[1.3]	[1.5]	[1.5]
Fiscal Balance	▲ 23.8	▲ 27.6	▲ 27.9	▲ 20.9	▲ 18.9	▲ 15.7	▲ 15.7	▲ 16.2	▲ 17.4	▲ 18.8	▲ 20.3
(ratio to nominal GDP)	[▲4.5]	[▲5.1]	[▲ 5.1]	[▲3.7]	[▲3.2]	[▲2.6]	[▲ 2.5]	[▲ 2.5]	[▲ 2.6]	[▲ 2.7]	[▲ 2.8]
Central Government	▲ 24.9	▲ 26.7	▲ 27.9	▲ 22.1	▲ 20.9	▲ 19.9	▲ 21.0	▲ 22.8	▲ 25.1	▲ 27.7	▲ 30.0
(ratio to nominal GDP)	[▲4.7]	[▲5.0]	[▲5.1]	[▲3.9]	[▲3.6]	[A 3.3]	[A 3.3]	[▲3.5]	[▲ 3.7]	[▲3.9]	[▲4.1]
Local Government	1.1	▲ 0.9	0.1	1.2	2.0	4.2	5.3	6.6	7.7	8.9	9.7
(ratio to nominal GDP)	[0.2]	[▲ 0.2]	[0.0]	[0.2]	[0.3]	[0.7]	[0.8]	[1.0]	[1.1]	[1.3]	[1.3]
Outstanding Debt	990.1	1023.6	1043.2	1059.5	1075.2	1089.4	1105.0	1122.8	1143.4	1167.6	1194.8
(ratio to nominal GDP)	[186.2]	[190.4]	[189.5]	[187.7]	[183.8]	[179.3]	[175.4]	[171.5]	[168.2]	[165.4]	[163.0]

[General Account of Central Government]

Trillions of Yen

		FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025
Expen	ditures	98.2	97.5	97.5	96.8	99.0	102.9	107.1	112.5	118.6	125.1	131.5
	General Account Expenditure Excluding Debt Repayment and Interest Payment	75.8	75.5	73.9	74.3	76.1	78.9	81.0	83.3	85.6	87.8	89.8
	Social Security-related Expenditures	31.4	32.2	32.5	33.1	34.2	35.8	36.7	37.7	38.8	39.8	40.9
	Local Allocation Tax Grants, etc.	16.8	15.3	15.6	15.3	15.8	16.5	17.1	17.9	18.6	19.2	19.6
	Others	27.6	27.9	25.9	25.9	26.1	26.7	27.2	27.7	28.2	28.8	29.3
	Debt Repayment and Interest Payment	22.5	22.1	23.5	22.5	22.9	24.0	26.1	29.2	33.1	37.3	41.7
Reven	ues	63.6	59.9	63.1	63.8	67.0	71.4	74.0	77.0	80.0	83.1	86.3
	Tax Revenue	56.3	55.5	57.7	59.1	62.2	66.5	69.0	71.8	74.7	77.6	80.7
	Other Revenues	7.3	4.5	5.4	4.7	4.8	4.9	5.0	5.2	5.3	5.4	5.6
Difference	fference between Expenditures and Revenues		38.0	34.4	33.0	32.0	31.5	33.1	35.6	38.7	42.0	45.2
Primary Bal	ance in the General Account of Central Government	▲ 12.1	▲ 15.5	▲ 10.8	▲ 10.5	▲ 9.1	▲ 7.5	▲ 7.0	▲ 6.3	▲ 5.6	▲ 4.7	▲ 3.5

[Ordinary Account of Local Government]

Trillions of Yen

		FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025
Expen	ditures	94.6	97.8	95.0	95.4	97.9	100.1	102.2	104.9	108.2	111.5	115.7
	Debt Repayment and Interest Payment	12.9	12.8	12.6	11.8	12.0	11.9	12.0	12.0	12.1	12.1	12.3
Reveni	Revenues		83.6	82.2	83.6	85.9	90.1	92.6	95.8	99.2	102.7	106.3
	Tax Revenue	41.7	41.6	42.4	44.1	45.5	47.7	49.1	51.0	53.0	55.1	57.3
Differenc	difference between Expenditures and Revenues		14.2	12.8	11.8	11.9	10.1	9.6	9.1	9.0	8.8	9.4
Primary Bala	nary Balance in the Ordinary Account of Local Government		1.6	2.7	3.5	3.6	5.4	6.2	7.3	8.7	10.1	11.5

- Notes 1. In "General Account of Central Government," up to FY2015 is based on the FY2015 Settlement, in FY2016 on the FY2016 Settlement highlight, and in FY2017 on the FY2017 Budget.
 - 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" consists of non-tax revenues and preceding fiscal year surplus received (excluding the balance carried forward fiscal resources to the next year (FY2015: 3.6 trillion yen, FY2016: 4.7 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]

Macroeconomy (%), [ratio to GDP, %], Trillions of Yen													
	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025		
Real GDP Growth	(1.2)	(1.2)	(1.5)	(1.4)	(0.7)	(0.7)	(0.8)	(0.7)	(0.7)	(0.7)	(0.7)		
Real GNI Growth	(2.7)	(0.9)	(1.7)	(1.5)	(1.1)	(0.6)	(0.8)	(0.7)	(0.6)	(0.5)	(0.5)		
Nominal GDP Growth	(2.7)	(1.1)	(2.5)	(2.5)	(1.9)	(1.6)	(1.3)	(1.3)	(1.2)	(1.2)	(1.2)		
Nominal GDP	531.8	537.5	550.7	564.4	575.2	584.4	592.3	599.7	606.9	614.2	621.6		
Nominal GNI Per Capita Growth	(3.0)	(0.7)	(3.0)	(2.7)	(2.3)	(2.0)	(1.8)	(1.7)	(1.6)	(1.6)	(1.6)		
Nominal GNI Per Capita (%Ten thousand yen)	434	437	450	463	473	483	491	499	508	516	524		
Potential GDP Growth	(0.8)	(0.8)	(1.1)	(1.1)	(1.0)	(1.0)	(0.8)	(0.7)	(0.7)	(0.7)	(0.7)		
Change of Price													
Consumer Prices	(0.2)	(0.0)	(1.1)	(1.3)	(1.8)	(1.8)	(1.1)	(1.1)	(1.1)	(1.1)	(1.1)		
Corporate Goods Prices	(▲3.3)	(▲2.4)	(2.1)	(1.2)	(1.3)	(1.4)	(0.4)	(0.4)	(0.3)	(0.3)	(0.3)		
GDP Deflator	(1.5)	(▲0.2)	(0.9)	(1.1)	(1.2)	(1.0)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)		
Unemployment Rate	(3.3)	(3.0)	(2.8)	(2.7)	(2.7)	(2.8)	(2.8)	(2.9)	(2.9)	(2.9)	(2.9)		
Long-term Interest Rate	(0.3)	(▲0.1)	(0.1)	(0.1)	(0.5)	(0.9)	(1.3)	(1.5)	(1.6)	(1.7)	(1.8)		
Balance by Sector	1												
General Government	[▲3.3]	[4.7]	[▲4.9]	[▲3.6]	[1.7]	[1.8]	[1.8]	[\(\) 2.0]	[1.1]	[12.3]	[▲2.4]		
Private	[6.6]	[8.3]	[8.8]	[7.7]	[7.2]	[6.5]	[6.8]	[6.9]	[6.8]	[6.6]	[6.3]		
Overseas	[▲3.3]	[▲3.6]	[▲3.9]	[4.2]	[4.5]	[▲4.7]	[4.9]	[▲4.9]	[44.6]	[4.3]	[▲3.9]		

【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

(Esterating the esperializates and the install resources)									,		
	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025
Primary Balance	▲ 15.8	▲ 18.9	▲ 18.4	▲ 13.4	▲ 12.3	▲ 10.7	▲ 11.1	▲ 11.9	▲ 12.6	▲ 13.5	▲ 14.2
(ratio to nominal GDP)	[A 3.0]	[▲3.5]	[▲ 3.3]	[▲ 2.4]	[▲2.1]	[▲1.8]	[▲1.9]	[▲ 2.0]	[▲ 2.1]	[▲ 2.2]	[▲ 2.3]
Central Government	▲ 19.0	▲ 20.3	▲ 20.7	▲ 16.3	▲ 15.1	▲ 14.1	▲ 14.6	▲ 15.1	▲ 15.5	▲ 15.9	▲ 15.9
(ratio to nominal GDP)	[▲3.6]	[▲3.8]	[▲3.8]	[▲2.9]	[▲ 2.6]	[▲2.4]	[▲2.5]	[▲2.5]	[▲ 2.6]	[▲ 2.6]	[▲ 2.6]
Local Government	3.2	1.3	2.3	2.8	2.7	3.4	3.5	3.2	2.9	2.4	1.7
(ratio to nominal GDP)	[0.6]	[0.3]	[0.4]	[0.5]	[0.5]	[0.6]	[0.6]	[0.5]	[0.5]	[0.4]	[0.3]
Fiscal Balance	▲ 23.8	▲ 27.6	▲ 27.9	▲ 20.9	▲ 19.3	▲ 17.7	▲ 18.6	▲ 20.3	▲ 22.4	▲ 24.8	▲ 27.1
(ratio to nominal GDP)	[4.5]	[▲5.1]	[▲5.1]	[▲ 3.7]	[▲3.4]	[▲3.0]	[▲3.1]	[▲3.4]	[▲ 3.7]	[▲4.0]	[▲4.4]
Central Government	▲ 24.9	▲ 26.7	▲ 27.9	▲ 22.1	▲ 20.6	▲ 19.8	▲ 20.8	▲ 22.3	▲ 23.9	▲ 25.6	▲ 27.1
(ratio to nominal GDP)	[▲4.7]	[▲5.0]	[▲5.1]	[▲3.9]	[▲3.6]	[▲3.4]	[▲3.5]	[▲3.7]	[▲3.9]	[▲4.2]	[▲4.4]
Local Government	1.1	▲ 0.9	0.1	1.2	1.3	2.1	2.2	2.0	1.5	0.9	0.0
(ratio to nominal GDP)	[0.2]	[▲ 0.2]	[0.0]	[0.2]	[0.2]	[0.4]	[0.4]	[0.3]	[0.2]	[0.1]	[0.0]
Outstanding Debt	990.1	1023.6	1043.2	1059.5	1076.0	1092.2	1110.0	1130.1	1152.7	1177.9	1205.6
(ratio to nominal GDP)	[186.2]	[190.4]	[189.5]	[187.7]	[187.1]	[186.9]	[187.4]	[188.4]	[189.9]	[191.8]	[194.0]

[General Account of Central Government]

Trillions of Yen

		FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025
Expen	ditures	98.2	97.5	97.5	96.8	98.4	101.1	103.4	106.3	109.2	112.2	114.9
	General Account Expenditure Excluding Debt Repayment and Interest Payment	75.8	75.5	73.9	74.3	75.6	77.7	78.9	80.1	81.3	82.5	83.3
	Social Security-related Expenditures	31.4	32.2	32.5	33.1	34.1	35.6	36.2	37.0	37.8	38.5	39.2
	Local Allocation Tax Grants, etc.	16.8	15.3	15.6	15.3	15.5	15.8	16.0	16.3	16.4	16.5	16.3
	Others	27.6	27.9	25.9	25.9	26.0	26.3	26.6	26.9	27.2	27.4	27.7
	Debt Repayment and Interest Payment	22.5	22.1	23.5	22.5	22.8	23.4	24.6	26.1	27.9	29.8	31.6
Reven	ues	63.6	59.9	63.1	63.8	65.9	68.6	69.5	70.3	71.1	72.0	72.8
	Tax Revenue	56.3	55.5	57.7	59.1	61.1	63.8	64.7	65.4	66.2	67.0	67.8
	Other Revenues	7.3	4.5	5.4	4.7	4.8	4.8	4.8	4.9	4.9	5.0	5.0
Difference	fference between Expenditures and Revenues		38.0	34.4	33.0	32.5	32.5	33.9	35.9	38.1	40.3	42.1
Primary Bal	ance in the General Account of Central Government	▲ 12.1	▲ 15.5	▲ 10.8	▲ 10.5	▲ 9.7	▲ 9.1	▲ 9.4	▲ 9.8	▲ 10.2	▲ 10.5	▲ 10.5

[Ordinary Account of Local Government]

Trillions of Yen

		FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025
Expen	ditures	94.6	97.8	95.0	94.9	96.9	98.4	99.3	100.6	102.3	104.3	106.9
	Debt Repayment and Interest Payment	12.9	12.8	12.6	11.8	12.0	11.9	11.9	11.9	11.9	11.8	12.1
Reven	ues	82.2	83.6	82.2	83.6	84.9	87.3	88.4	89.4	90.3	91.2	91.8
	Tax Revenue		41.6	42.4	44.1	45.0	46.3	46.7	47.3	47.8	48.4	49.0
Difference	e between Expenditures and Revenues	12.3	14.2	12.8	11.3	12.0	11.0	10.9	11.2	12.0	13.1	15.1
Primary Bal	ance in the Ordinary Account of Local Government	3.5	1.6	2.7	3.5	3.0	3.7	3.6	3.3	3.0	2.6	1.9

- Notes 1. In "General Account of Central Government," up to FY2015 is based on the FY2015 Settlement, in FY2016 on the FY2016 Settlement highlight, and in FY2017 on the FY2017 Budget.
 - 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" consists of non-tax revenues and preceding fiscal year surplus received (excluding the balance carried forward fiscal resources to the next year (FY2015: 3.6 trillion yen, FY2016: 4.7 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
	112013	112010	112017	112016	112017	112020	1 1 2021	1 1 2022	112023	112024	112023
Primary Balance	▲ 15.6	▲ 19.2	▲ 19.5	▲ 14.8	▲ 12.1	▲ 8.0	▲ 6.5	▲ 4.6	▲ 2.6	▲ 0.4	2.1
(ratio to nominal GDP)	[▲2.9]	[▲ 3.6]	[▲3.5]	[▲ 2.6]	[▲ 2.1]	[▲1.3]	[▲1.0]	[▲0.7]	[▲0.4]	[▲0.1]	[0.3]
Central Government	▲ 18.2	▲ 20.5	▲ 21.7	▲ 17.7	▲ 15.6	▲ 13.6	▲ 13.0	▲ 12.3	▲ 11.6	▲ 10.7	▲ 9.2
(ratio to nominal GDP)	[▲ 3.4]	[▲3.8]	[▲3.9]	[▲ 3.1]	[▲ 2.7]	[12.2]	[▲ 2.1]	[▲1.9]	[▲ 1.7]	[▲ 1.5]	[▲ 1.3]
Local Government	2.6	1.3	2.2	2.9	3.5	5.6	6.5	7.7	9.0	10.3	11.3
(ratio to nominal GDP)	[0.5]	[0.2]	[0.4]	[0.5]	[0.6]	[0.9]	[1.0]	[1.2]	[1.3]	[1.5]	[1.5]
Fiscal Balance	▲ 23.6	▲ 27.9	▲ 28.9	▲ 22.3	▲ 19.2	▲ 15.6	▲ 15.4	▲ 15.9	▲ 17.1	▲ 18.6	▲ 20.1
(ratio to nominal GDP)	[▲ 4.4]	[▲5.2]	[▲ 5.3]	[▲3.9]	[▲3.3]	[▲ 2.6]	[▲ 2.4]	[▲ 2.4]	[▲ 2.5]	[▲ 2.6]	[▲ 2.7]
Central Government	▲ 24.2	▲ 26.9	▲ 28.9	▲ 23.6	▲ 21.3	▲ 19.9	▲ 20.7	▲ 22.5	▲ 24.9	▲ 27.5	▲ 29.8
(ratio to nominal GDP)	[▲4.5]	[▲5.0]	[\$\ldot 5.3]	[▲ 4.2]	[▲ 3.6]	[▲3.3]	[▲3.3]	[▲3.4]	[▲3.7]	[▲3.9]	[▲ 4.1]
Local Government	0.5	▲ 1.0	0.0	1.3	2.1	4.3	5.3	6.6	7.8	8.9	9.7
(ratio to nominal GDP)	[0.1]	[▲0.2]	[0.0]	[0.2]	[0.4]	[0.7]	[0.8]	[1.0]	[1.1]	[1.3]	[1.3]
Outstanding Debt	997.2	1032.8	1051.2	1067.1	1082.8	1097.2	1112.6	1129.8	1149.9	1173.9	1200.9
(ratio to nominal GDP)	[187.5]	[192.2]	[190.9]	[189.1]	[185.1]	[180.6]	[176.6]	[172.6]	[169.1]	[166.3]	[163.8]

Baseline Case

[ratio to GDP, %], Trillions of Yen

	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025
Primary Balance	▲ 15.6	▲ 19.2	▲ 19.5	▲ 14.8	▲ 12.6	▲ 10.6	▲ 10.7	▲ 11.5	▲ 12.2	▲ 13.1	▲ 13.9
(ratio to nominal GDP)	[▲ 2.9]	[▲ 3.6]	[▲3.5]	[▲ 2.6]	[▲ 2.2]	[▲1.8]	[▲1.8]	[▲1.9]	[▲ 2.0]	[▲ 2.1]	[▲ 2.2]
Central Government	▲ 18.2	▲ 20.5	▲ 21.7	▲ 17.7	▲ 15.4	▲ 14.1	▲ 14.2	▲ 14.8	▲ 15.2	▲ 15.6	▲ 15.6
(ratio to nominal GDP)	[▲ 3.4]	[▲3.8]	[▲ 3.9]	[▲ 3.1]	[▲ 2.7]	[▲ 2.4]	[▲ 2.4]	[▲ 2.5]	[▲2.5]	[▲ 2.5]	[▲2.5]
Local Government	2.6	1.3	2.2	2.9	2.8	3.5	3.5	3.3	2.9	2.4	1.7
(ratio to nominal GDP)	[0.5]	[0.2]	[0.4]	[0.5]	[0.5]	[0.6]	[0.6]	[0.6]	[0.5]	[0.4]	[0.3]
Fiscal Balance	▲ 23.6	▲ 27.9	▲ 28.9	▲ 22.3	▲ 19.6	▲ 17.6	▲ 18.2	▲ 20.0	▲ 22.0	▲ 24.5	▲ 26.9
(ratio to nominal GDP)	[▲4.4]	[▲5.2]	[▲ 5.3]	[▲3.9]	[▲ 3.4]	[▲3.0]	[▲3.1]	[▲ 3.3]	[▲ 3.6]	[4 4.0]	[▲ 4.3]
Central Government	▲ 24.2	▲ 26.9	▲ 28.9	▲ 23.6	▲ 21.0	▲ 19.8	▲ 20.5	▲ 22.0	▲ 23.6	▲ 25.4	▲ 26.8
(ratio to nominal GDP)	[▲4.5]	[▲ 5.0]	[▲ 5.3]	[▲4.2]	[▲ 3.7]	[▲ 3.4]	[▲3.5]	[▲ 3.7]	[▲3.9]	[▲4.1]	[▲4.3]
Local Government	0.5	▲ 1.0	0.0	1.3	1.4	2.2	2.3	2.0	1.5	0.9	0.0
(ratio to nominal GDP)	[0.1]	[▲ 0.2]	[0.0]	[0.2]	[0.2]	[0.4]	[0.4]	[0.3]	[0.3]	[0.1]	[0.0]
Outstanding Debt	997.2	1032.8	1051.2	1067.1	1083.6	1100.0	1117.6	1137.1	1159.1	1184.0	1211.5
(ratio to nominal GDP)	[187.5]	[192.2]	[190.9]	[189.1]	[188.4]	[188.2]	[188.7]	[189.6]	[191.0]	[192.8]	[194.9]

(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 (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 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, and 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 others, those for FY2016 are from the Quarterly Estimates of GDP January-March 2017, and those for FY2017 and FY2018 are from the Cabinet Office's Mid-Year Economic Projection for FY2017 (July 14, 2017) and others.

(1) Assumptions on the Macroeconomy

Economic Revitalization Case

- a) Total Factor Productivity (TFP) Growth Rate
- * The TFP growth rate rises to around 2.2% from the current level (around 0.6% in FY2016) (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 73% in FY2016 to 81% in FY2025, the LFP rate among males aged 65-69 gradually rises from around 55% in FY2016 to 64% in FY2025, and the LFP rate among females aged 65-69 gradually rises from around 34% in FY2016 to 37% in FY2025).

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 3.4% annually from FY2019 to FY2022, based on the World Economic Outlook (WEO) by the IMF (April 2017). From FY2023 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 2.0% to 2.2% annually from FY2019 to FY2022, based on the WEO (April 2017). From FY2023 onward, the inflation rate remains constant, at around 2.2%.

<Crude Oil Prices>

From FY2019 onward, the price moves based on the rate of the World Energy Outlook by the IEA (November 2016), at around 4.3%.

Baseline Case

Differences from the above "Economic Revitalization Case" are as follows:

- a) TFP Growth Rate
- * The TFP growth rate rises to around 1.0% 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 2.7% annually, about 0.6 percentage points* lower than the rate based on the WEO (April 2017) after FY2019 (from around 3.3% to 3.4% annually).

* Difference between the baseline projection and the lower bound of the 50% confidence interval in the WEO (April 2017).

(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 Settlement highlight, and in FY2017 on the FY2017 Budget.
- * Based on the Act for Partial Revision of the Income Tax Act and Others (date of promulgation: March 31, 2017), 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 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 Settlement highlight, and in FY2017 on the FY2017 Budget.
- * Expenditures in FY2018 are calculated by taking changes in wages, prices, expenditure reform and other factors into consideration, with an assumption that the rate of increase

of the expenditure excluding the increase due to population aging and other factors will consequently be half as high as the wage growth and inflation rates.

In "Basic Policy on Economic and Fiscal Management and Reform 2015" (Cabinet Decision July 30, 2015), regarding general expenditures of the central government, the government is making efforts for expenditure reform in line with the past achievements of the Abe Cabinet, without presupposing an increase except in social security expenditure due to population aging, while taking into account a decline in total population and changes in wages and prices. The reflection of the Basic Policy in the Draft Budget of FY2018 will be embodied in the process of the budget formulation for FY2018.

- * From FY2019 onward, it is assumed that social security expenditures will increase reflecting population aging, wage growth, inflation rate and others, 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.
- * 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) <u>Assumptions on the Expenditures and Financial Resources for Recovery and Reconstruction from the Great East Japan Earthquake</u>

- * From FY2018 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 others, 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 others 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 others.