

## 1. Summary of operations implemented using FILP funds

As a core institution providing Official Development Assistance (ODA), Japan International Cooperation Agency (JICA) supports developing countries by providing concessional funds with low interest rates and super-long terms to finance development efforts for economic and social development and poverty reduction.

- ODA Loan: Lending, to governments or others in developing areas, for the execution of development projects (projects deemed to contribute to economic and social development in developing areas and also deemed to be necessary for the promotion of economic relations between such areas and Japan), or for the accomplishment of plans related to the economic stability of such areas.
- Private Sector Investment Finance (PSIF): Debt or equity finance to corporations or others in Japan or in developing areas, for the execution of development projects.

## 2. Amount of lending under FY2019 FILP

(Unit: billion yen)

FY2019 FILP	Estimated outstanding amount of FILP lending at the end of FY2018
549.2	2,487.0

## 3. Estimated policy cost analysis of the project

## (1) Policy cost

(Unit: billion yen)

Category	FY2018	FY2019	Fluctuation
1. Government expenditure (subsidies, etc.)	-	-	-
2. Government revenue (payments to the government, etc.)*	-739.5	-	+739.5
3. Opportunity cost of capital investments, etc.	876.9	454.8	-422.1
<b>Total (1+2+3=policy cost(A))</b>	<b>137.4</b>	<b>454.8</b>	<b>+317.4</b>
Analysis period (years)	50 years	49 years	-1 year

## (2) Breakdown of policy cost by the time of the provision of funds

(Unit: billion yen)

Category	FY2018	FY2019	Fluctuation
(A) Policy cost (previously cited)	137.4	454.8	+317.4
1) Opportunity cost of capital investments, etc. provided before the beginning of the analysis period	3,661.6	3,154.4	-507.2
2) Policy cost expected to be newly accrued during the analysis period	-3,524.2	-2,699.6	+824.6
Government expenditure (subsidies, etc.)	-	-	-
Government revenue (payments to the government, etc.)*	-739.5	-	+739.5
Opportunity cost of surplus, etc.	-2,805.6	-2,717.9	+87.8
Opportunity cost of capital investments, etc.	21.0	18.3	-2.7

## (3) Year-to-Year comparison analysis

(Computing any fluctuation from previous year)

(Unit: billion yen)

Policy cost		FY2018	FY2019	Simple fluctuation
		Simple comparison (before adjustment)	137.4	454.8
Past year comparison (after adjustment)	1) Adjusting initial years (Analysis results after adjusting initial year to that for FY2019 analysis)		2) Adjusting assumed interest rates (Analysis results of re-estimation using assumed interest rate for FY2018)	Real fluctuation (2-1)
		153.0	431.0	+278.0

[Real fluctuation factor analysis]

## ○Factors behind policy cost increase

- Increase in cost due to increase in loan losses (+176.8 billion yen)
- Increase in cost through new loans provided in FY2019 (+91.8 billion yen)
- Others (Increase in administrative cost due to new financing, etc.) (+67.4 billion yen)

## ○Factors behind policy cost decrease

- Decrease in cost due to finalization of FY2017 results and revision of FY2018 projections (-58.1 billion yen)

## (4) Breakdown of policy cost by causative factor

(Unit: billion yen)

(A) Policy cost in FY2019 (previously cited)	454.8
1) Prepayments	-
2) Loan losses	449.7
3) Others (including profit spread)	5.1

## (5) Sensitivity analysis (cases where assumptions change)

(Unit: billion yen)

(A) Policy cost (previously cited)	Case for raising lending and fundraising rates by 1 %	Fluctuation	1. Government expenditure (subsidies, etc.)			2. Government revenue (payments to the government, etc.)*			3. Opportunity cost of capital investments, etc.		
454.8	1,461.3	+1,006.5	-	-	-	-2,181.9	-	-	-	+3,188.4	

(A) Policy cost (previously cited)	Case for raising the bad loan write-off by 10 %	Fluctuation	1. Government expenditure (subsidies, etc.)			2. Government revenue (payments to the government, etc.)*			3. Opportunity cost of capital investments, etc.		
454.8	526.5	+71.7	-	-	-	-	-	-	-	+71.7	

(Note) Components in each column may not add up to the total because of rounding.

\* Government revenue (payments to the government, etc.) is booked as a negative amount. Example: -10 b. yen for 10 b. yen in payments to government, etc.

4. Outline of estimation and project prospect employed in the analysis

[Outline of estimation]

- 1) The estimation covers the Finance and Investment Account.
- 2) Scale of account: Outstanding balance of financing as of the end of FY2017 was 12,172.9 billion yen, and planned amount of financing for FY2018 and FY2019 is 2,758.0 billion yen.
- 3) The analysis period is 49 years from FY2019 to FY2067, when the longest-term loans will have be repaid.
- 4) The standard interest rates of JICA apply to new loans.

[Project prospect]

- 1) Prepayments are not expected, because ODA loans are provided at extremely concessional conditions.
- 2) For the administrative expenses of FY2019, the expense associated with new financing and the one associated with the management of past financing are distinguished and the latter will be decreased according to the transition of the balance from FY2020.
- 3) The estimated charge-off amount in sovereign loan is based on internal country ratings in order to reflect the unique characteristics of the Paris Club and other public organizations as much as possible, while, in the case of non-sovereign loans, it is calculated using external statistical data widely used by private financial institutions. The loan loss provision ratio for both loans is as given below.

FY	Result				Estimated	Planned	Assumptions for calculation
	2014	2015	2016	2017	2018	2019	2020 to 2067 (cumulative ratio)
Charge-off ratio	-	-	-	-	-	-	5.4%

5. Reasons for granting of subsidies, mechanism and underlying laws

This account receives capital investment from the General Account of the Government, as financial resources needed for providing highly negotiable loans with long terms and low interest rates to developing areas as Official Development Assistance.

(Underlying laws and regulations)

- Capital investment

“Japan International Cooperation Agency Act”

Article 5-2: The Government may, when it finds necessary, make additional capital contributions to the Agency within the amounts prescribed by the budget.

- Payment to the National Treasury

“Japan International Cooperation Agency Act”

Article 31-4: With respect to the Accounts for the Finance and Investment for each business year, if the calculation of profits and losses resulted in a profit, the Agency shall use it to make up the losses carried forward from the preceding business year, and if there is still any residual amount, shall accumulate such amount as a reserve fund for finance and investment until it reaches the amount equal to the amount of stated capital allocated for the Accounts for the Finance and Investment.

Article 31-7: The Agency shall pay the balance, obtained by deducting the amount accumulated as the reserve fund for finance and investment pursuant to the provision of paragraph 4 from the residual amount prescribed in said paragraph, to the National Treasury by May 31 of the following business year.

6. Special remarks

As for the financing related to the Finance and Investment operations, the Japan International Cooperation Agency Act restricts the type of loans that can be extended to those with concessional lending conditions in terms of interest rate, repayment period, etc. This is to prevent the lending conditions from overburdening the recipient developing countries. JICA is conducting the operations in compliance with this provision of the Act. As a result, there has emerged a structure where JICA frequently lends funds at lower interest rates than the JICA’s borrowing interest rates by providing concessional funds with long terms and low interest rates.

(Reference) Outcome and social and economic benefits of operations

<Lending and equity finance>

- Accumulated amount of loan and equity participation commitments during FY1961-2017: ¥37.3848 trillion
- Accumulated amount of loan and equity participation disbursements during FY1961-2017: ¥27.0626 trillion
- Loan and equity commitments in FY2017: ¥1.8884 trillion
- Loan and equity disbursements in FY2017: ¥1.1385 trillion
- Loan outstanding balance as of the end of FY2017: ¥12.1729 trillion

<Social and economic benefits>

- Contribution to the establishment and maintenance of good relationships with developing countries through continued assistance from Japan;
- Contribution to economic and social development, poverty reduction, environmental conservation, and stabilization of national economy in developing countries by improving infrastructure and alleviating poverty;
- Contribution to stability and development in the international community through tackling global issues (global warming, etc.), peace-building, and responding to disasters;
- Contribution to improvement in policy framework as well as human resource development in developing countries through intellectual assistance;
- Promotion of economic and personnel exchanges between Japan and developing countries through application of the experience, technologies, and know-how possessed by the private sector, local governments, NGOs, and universities.

(Reference 1) Survey on the impact of Japanese ODA on economic development in developing countries

• According to the verification of correlation between ODA and GDP using data from 1970 to 2007, an increase in ODA equivalent to 1% of GDP of the aid receiving country raises the growth rate of GDP per capital by about 0.30%. (C. Arndt, S. Jones and F. Tarp (2015) "Assessing Foreign Aid's Long-Run Contribution to Growth and Development")

• The impact of ODA loan on the economic growth (growth rate of GDP per capital) is found positive regardless of the difference of the policy and institutional environment. It was measured by analyzing the impact of ODA loan and ODA grant respectively, using data from 1970 to 1997.

(Kohama, H., Sawada, Y. and Kono, H. (2003) "Aid, Policies, and Growth Reconsidered")

• According to the empirical analysis on whether foreign aid facilitates FDI flows into the aid recipient country, the foreign aid from Japan has a positive effect on FDI flows of Japanese companies, while aid from other donor countries (the paper analyzed foreign aid from Japan, U.S., United Kingdom, Germany and France) reveals no such effect. (Kimura, H. and Todo, Y. (2007) "Is Foreign Aid a Vanguard of FDI? A Gravity-Equation Approach")

(Reference 2) ODA loan social benefit index

• The average EIRR (Economic Internal Rate of Return) of ODA loan projects which were completed and evaluated between FY2008 and FY2017 was 18.25%.

(EIRR is an indicator to show the socio-economic benefits of development projects.) (JICA survey implemented in FY2018)

(Reference 3) Direct and indirect contributions to Sustainable Development Goals (SDGs) financed by yen loans (JICA survey implemented in FY2018)

(Safe drinking water: Goal 6)

Based on ex-post project evaluations implemented from FY2008 to FY2017, supply of safe drinking water to about 79.31 million people through waterworks projects around the world.

(Disaster prevention: Goal 11)

Based on ex-post project evaluations implemented from FY2008 to FY2017, contribution toward protection of about 24.50 million people from disaster through projects pertaining to flood control, etc.

(Airports: Goal 9)

Based on ex-post project evaluations implemented from FY2008 to FY2017, airport improvement projects in developing countries have contributed to the response to yearly passenger demand of about 106.98 million people per year.

(Railroads: Goal 9)

Based on ex-post project evaluations implemented from FY2008 to FY2017, railroad improvement project in developing countries have contributed to the transport of about 2.49 billion passengers per year.

(Roads: Goal 9)

Based on ex-post project evaluations implemented from FY2008 to FY2017, road improvement projects in developing countries have led to the construction of approximately 6,557 km of new road and improvement of approximately 24,692 km of existing road, and realized traffic volume of about 2.67 million vehicles per day.

(Ports and harbors: Goal 9)

Based on ex-post project evaluations implemented from FY2008 to FY2017, port and harbor improvement projects in developing countries have contributed to realize cargo handling volume of about 427.68 million tons per year.

(Power generation: Goal 7)

Based on ex-post project evaluations implemented from FY2008 to FY2017, construction of power generation facilities improvement projects in developing countries have supported power generation of about 86,243 GWh per year (according to the world average, this is equivalent to the amount consumed by about 31.54 million people in 2015).

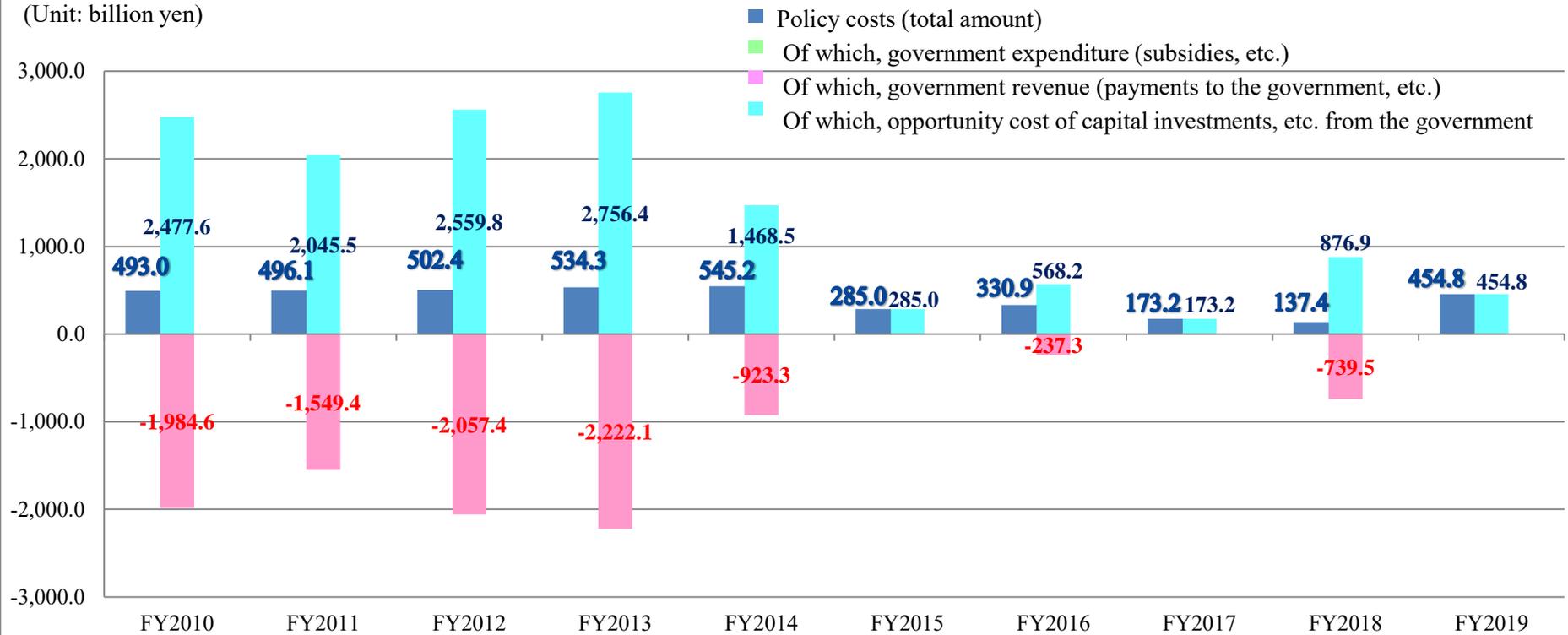
(Environment: Goal 15)

Based on ex-post project evaluations implemented from FY2008 to FY2017, construction of power generation facilities improvement projects in developing countries have supported afforestation of about 2,240,000 ha (equivalent to 10.20 times as large as the area of Metropolis of Tokyo (219,000 ha)) in developing countries.

# (Reference) Changes in Policy Costs by Component

## <Japan International Cooperation Agency (Incorporated Administrative Agency) (Finance and Investment Account)>

(Unit: billion yen)



Note: Policy costs for each fiscal year differ in assumptions including interest rates applied to estimates.

### (Point)

• Large fluctuations in policy costs (total amounts) in some fiscal years are mainly caused by the effect of the assumed interest rates. The balance of government investment of Japan International Cooperation Agency (Finance and Investment Account) is approximately 8 trillion yen, therefore, changes in the assumed interest rates have a large impact on policy costs (total amounts). (Balance of capital investment as of the end of FY2019 (estimated) 8.1 trillion yen)

## (Reference) Financial Statements

## Balance Sheet (Finance and Investment Account)

(Unit: million yen)

Item	End of FY2017 (Result)	End of FY2018 (Estimated)	End of FY2019 (Planned)	Item	End of FY2017 (Result)	End of FY2018 (Estimated)	End of FY2019 (Planned)
(Assets)				(Liabilities and equity)			
Current assets	12,171,739	12,733,639	13,191,577	Current liabilities	213,256	247,064	148,932
Cash and bank deposits	255,639	270,004	79,229	Bonds to be redeemed within one year	20,000	67,305	-
Securities	5,000	-	-	Borrowings from fiscal loans to be repaid within one year	150,179	138,032	110,773
Loans	12,005,004	12,561,441	13,230,784	Accrued payments	9,698	9,698	9,698
Allowance for possible loan losses	-171,804	-171,829	-191,068	Accrued expenses	5,788	8,537	7,795
Accrued income	29,981	27,656	26,265	Derivatives	14,786	10,978	8,171
Guarantee deposits	23,686	23,686	23,686	Lease liabilities	147	151	147
Other current assets	24,234	22,681	22,681	Deposit received	1,475	1,475	1,475
Fixed assets	107,204	129,212	155,779	Advance revenues	30	30	30
Tangible fixed assets	8,904	9,347	9,321	Reserves	10,898	10,858	10,842
Buildings	1,547	2,004	2,050	Allowance for bonuses	299	278	280
Land	6,612	6,612	6,612	Contingency reserves	10,598	10,580	10,562
Construction in progress	30	-	-	Suspense receipt	254	-	-
Other tangible fixed assets	714	730	659	Fixed liabilities	2,451,974	2,890,879	3,410,850
Intangible fixed assets	5,236	5,166	5,673	Bonds	683,132	761,827	905,827
Trademark rights	0	0	0	Discount on bond	-512	-414	-336
Software	4,360	4,542	4,407	Funds for fiscal loans	1,761,334	2,119,702	2,494,129
Software in progress	875	624	1,266	Long-term lease liabilities	264	195	51
Investment and other assets	93,064	114,699	140,785	Long-term deposits	3,482	5,174	6,865
Investment securities	4,701	8,749	13,238	Reserve for retirement pensions	4,203	4,325	4,243
Affiliated companies stock	43,546	44,276	44,276	Asset retirement obligation	70	70	70
Money in trust	32,551	53,284	74,877	(Total liabilities)	2,665,229	3,137,943	3,559,783
Claims in bankruptcy, rehabilitation, reorganization or other equivalent claims	87,063	87,063	87,063	Capital			
Allowance for possible loan losses	-75,454	-79,324	-79,324	Government investment	8,037,408	8,083,418	8,130,228
Long-term prepaid expenses	19	19	19	Retained earnings	1,626,110	1,688,959	1,699,601
Guarantee deposits	638	632	636	Reserve	1,546,921	1,626,110	1,688,959
				Unappropriated income for the current year	79,188	62,849	10,642
				(Of this, gross profit)	(79,188)	(62,849)	(10,642)
				Valuation and translation adjustments	-49,805	-47,469	-42,256
				Valuation difference on securities	826	955	955
				Deferral hedge profit/loss	-50,631	-48,424	-43,211
				(Total equity)	9,613,713	9,724,908	9,787,573
Total assets	12,278,942	12,862,851	13,347,356	Total liabilities and equity	12,278,942	12,862,851	13,347,356

Note: Components may not add up to the total because of rounding.

## Income Statement (Finance and Investment Account)

(Unit: million yen)

Item	FY2017 (Result)	FY2018 (Estimated)	FY2019 (Planned)
Ordinary expenses	94,049	95,783	138,257
Expenses related to operations of cooperation through finance and investment	94,049	95,783	138,257
(Interest on bonds)	(7,327)	(11,784)	(14,776)
(Interest on borrowings)	(17,130)	(17,145)	(22,375)
(Interest on interest-rate swap)	(7,395)	(4,142)	(10,357)
(Other interest expenses)	(1)	-	-
(Outsourcing expenses)	(32,484)	(36,878)	(46,308)
(Bond issuance expenses)	(557)	(887)	(765)
(Foreign exchange losses)	-	-	-
(Personnel expenses)	(3,896)	(4,499)	(4,352)
(Provision of allowance for bonuses)	(299)	(278)	(280)
(Retirement benefit expenses)	(137)	(321)	(322)
(Property expenses)	(14,212)	(14,402)	(17,676)
(Depreciation cost)	(461)	(1,311)	(1,566)
(Taxes)	(80)	(101)	(101)
(Loss on valuation of investment securities)	(174)	-	-
(Loss on valuation of affiliated companies stock)	(144)	-	-
(Money trust investment loss)	(1,497)	-	-
(Provision of allowance for possible loan losses)	(8,244)	(3,895)	(19,239)
(Provision of contingency reserves)	(10)	-	-
(Other ordinary expenses)	(0)	-	-
(Contingency)	-	(141)	(141)
Ordinary income	171,701	158,382	148,923
Revenues from operations of cooperation through finance and investment	171,701	158,382	148,737
(Interest on loans)	(145,294)	(138,256)	(135,264)
(Interest on government bonds, etc)	(0)	(0)	(0)
(Dividends on investments)	(19,319)	(17,334)	(10,965)
(Commissions)	(3,308)	(2,791)	(2,508)
(Gain on foreign exchange)	(1,248)	(1)	-
(Reversal of contingency reserves)	(2,532)	-	-
Financial revenues	266	191	153
Miscellaneous profits	1,342	75	33
Profits on loans written off	20	10	-
Ordinary profit	79,279	62,874	10,666
Extraordinary losses	97	26	24
Loss on retirement of fixed assets	20	16	15
Loss on sale of fixed assets	0	9	9
Loss on return of public portion of employee pension funds to the Government	77	-	-
Extraordinary profits	6	1	-
Gain on sales of fixed assets	6	1	-
Net profit	79,188	62,849	10,642
Gross profit	79,188	62,849	10,642

Note: Components may not add up to the total because of rounding.