For the six months ended 30 September 2016

Japan Finance Organization for Municipalities

Semiannual Financial Statements

Japan Finance Organization for Municipalities

Contents

■Semiannual Balance Sheets (As of 30 September 2015 and 2016)

(Millions of yen)

Item	As of 30 September 2015	As of 30 September 2016	Item	As of 30 September 2015	As of 30 September 2016
	Amount			Amount	
Assets			Liabilities		
Loans (Note 3)	¥23,464,589	¥23,603,349	Bonds (Note 7)	¥19,589,489	¥20,019,395
Securities (Note 11)	649,000	99,000	Borrowed money	110,500	145,500
Cash and bank deposits	538,003	1,111,260	Cash collateral received for financial instruments	171,031	39,799
Cash collateral paid for financial instruments	507	46,217	Other liabilities	9,729	7,861
			Reserve for bonuses	54	56
			Reserve for bonuses for directors and corporate auditors	8	8
Other assets	12,230	10,436			
Tangible fixed assets (Note 6)	2,775	2,654	Reserve for retirement benefits	38	46
Intangible fixed assets (Note 6)	1,591	1,501	Reserve for retirement benefits for directors and corporate auditors	25	15
			Fund for lending rate reduction	920,287	920,287
			Basic fund for lending rate reduction	920,287	920,287
			Reserves under special laws	3,679,152	3,513,382
			Reserve for interest rate volatility	1,760,000	1,980,000
			Management account reserve for interest rate volatility	1,866,817	1,488,812
			Reserve for interest rate reduction	52,334	44,570
			Total liabilities	24,480,318	24,646,353
			Net Assets		
			Capital	16,602	16,602
			Retained earnings	121,362	150,135
			General account appropriated surplus reserve	107,703	137,900
			General account semiannual unappropriated retained earnings	13,659	12,234
			Valuation, translation adjustments and others	(3,253)	7,662
			Management account surplus reserve	53,666	53,666
			Total net assets	188,378	228,065
Total assets	¥24,668,696	¥24,874,418	Total liabilities and net assets	¥24,668,696	¥24,874,418

See notes to semiannual financial statements.

■Semiannual Statements of Income (For the six-month period ended 30 September 2015 and 2016)

(Millions of yen)

Item	Six months ended 30 September 2015	Six months ended 30 September 2016
	Amount	
Income	¥205,019	¥189,305
Interest income	204,935	189,213
Fees and commissions	78	73
Other operating income	0	12
Other income	6	6
Expenses	120,275	110,491
Interest expenses	116,049	106,547
Fees and commissions	165	161
Other operating expenses	2,503	2,166
General and administrative expenses	1,557	1,616
Ordinary income	84,744	78,813
Special gains	224,217	223,770
Reversal of management account reserve for interest rate volatility	220,000	220,000
Reversal of reserve for interest rate reduction	4,217	3,770
Special losses	295,302	290,349
Provision for reserve for interest rate volatility	220,000	220,000
Provision for management account reserve for interest rate volatility	75,302	70,349
Semiannual net income	¥13,659	¥12,234

See notes to semiannual financial statements.

■Semiannual Statements of Changes in Net Assets
(For the six-month period ended 30 September 2015)

(Millions of yen)

	Stockholders' equity				Valuation, translation adjustments and others	Management account surplus reserve	Total net assets
	Capital	Retained earnings		Total stockholders' equity	Unrealized gain/(loss) from hedging instruments		
		General account appropriated surplus reserve	General account semiannual unappropriated retained earnings				
Balance as of 1 April 2015	¥16,602	¥107,703	-	¥124,305	¥(4,482)	¥53,666	¥173,489
Changes during semiannual accounting period							
Semiannual net income	-	-	¥13,659	13,659	-	-	13,659
Net changes during semiannual accounting period in items other than stockholders' equity	-	-	-	-	1,229	-	1,229
Net changes during semiannual accounting period	-	-	13,659	13,659	1,229	-	14,888
Balance as of 30 September 2015	¥16,602	¥107,703	¥13,659	¥137,964	¥(3,253)	¥53,666	¥188,378

(For the six-month period ended 30 September 2016)

(Millions of yen)

	Stockholders' equity				Valuation, translation adjustments and others		
		Retained earnings					
	Capital	General account appropriated surplus reserve	General account semiannual unappropriated retained earnings	Total stockholders' equity	Unrealized gain/(loss) from hedging instruments	Management account surplus reserve	Total net assets
Balance as of 1 April 2016	¥16,602	¥137,900	-	¥154,502	¥8,018	¥53,666	¥216,187
Changes during semiannual accounting period							
Semiannual net income	-	-	¥12,234	12,234	-	-	12,234
Net changes during semiannual accounting period in items other than stockholders' equity	-	-	-	-	(356)	-	(356)
Net changes during semiannual accounting period	-	-	12,234	12,234	(356)	-	11,878
Balance as of 30 September 2016	¥16,602	¥137,900	¥12,234	¥166,737	¥7,662	¥53,666	¥228,065

See notes to semiannual financial statements.

■Semiannual Statements of Cash Flows (For the six-month period ended 30 September 2015 and 2016)

(Millions of yen)

Item	Six months ended 30 September 2015	Six months ended 30 September 2016
	Amount	
Ⅰ Cash flows from operating activities		
Semiannual net income	¥13,659	¥12,234
Depreciation and amortization	277	311
Interest income	(204,935)	(189,213)
Interest expenses	116,049	106,547
Increase in reserve for bonuses	3	3
Increase in reserve for bonuses for directors and corporate auditors	0	0
Increase/(decrease) in reserve for retirement benefits	(3)	12
Increase in reserve for retirement benefits for directors and corporate auditors	2	5
Increase in reserve for interest rate volatility	220,000	220,000
Decrease in management account reserve for interest rate volatility	(144,697)	(149,650)
Decrease in reserve for interest rate reduction	(4,217)	(3,770)
Net (increase)/decrease in loans	(26,959)	61,163
Net increase/(decrease) in bonds	45,238	218,532
Net increase/(decrease) in borrowed money	25,000	25,000
Interest received	206,212	190,656
Interest paid	(116,623)	(107,903)
Others	(11,110)	(120,167)
Net cash provided by/(used in) operating activities	117,898	263,763
Ⅱ Cash flows from investing activities		
Proceeds from redemption of securities	1,305,000	348,500
Purchases of securities	(1,284,000)	(212,500)
Purchases of tangible fixed assets	(0)	(1)
Purchases of intangible fixed assets	(104)	(113)
Net cash provided by/(used in) investing activities	20,894	135,885
Ⅲ Cash flows from financing activities	-	-
Ⅳ Effect of exchange rate changes on cash and cash equivalents	-	-
Ⅴ Net increase/(decrease) in cash and cash equivalents	138,792	399,648
Ⅵ Cash and cash equivalents at beginning of period	399,211	711,611
Ⅶ Cash and cash equivalents at end of period	¥538,003	¥1,111,260

See notes to semiannual financial statements.

■Notes to Semiannual Financial Statements

1. Basis of Presentation

Japan Finance Organization for Municipalities (hereinafter, "JFM") has prepared semiannual financial statements in accordance with the Japan Finance Organization for Municipalities Law (Law No. 64, 2007; hereinafter the "Law"), the ordinances based on the Law and other regulations applicable to JFM and accounting principles and practices applicable to semiannual financial statements generally accepted in Japan, which are different in certain respects as to the application and disclosure requirements of International Financial Reporting Standards.

Since JFM does not have any subsidiaries or affiliates, it does not prepare consolidated semiannual financial statements.

Amounts less than 1 million yen have been omitted. As a result, the totals in Japanese yen shown in the semiannual financial statements do not necessarily agree with the sum of the individual amounts.

2. Summary of Significant Accounting Policies

(1) Securities

Held-to-maturity securities are carried at amortized cost (straight-line method).

(2) Derivative transactions

Derivative transactions are carried at fair value with changes in unrealized gain or loss charged or credited to income, except for those which meet the criteria for hedge accounting.

(3) Depreciation and amortization

(a) Tangible fixed assets

Depreciation of tangible fixed assets is calculated by the straight-line method based on the estimated useful lives and the residual value determined by management. The estimated useful lives of major items are as follows:

Buildings: 23 to 47 years

Others: 2 to 19 years

(b) Intangible fixed assets

Amortization of intangible fixed assets is calculated by the straight-line method based on the estimated useful lives and the residual value determined by management. Software for internal use owned by JFM is amortized over 5 years.

(4) Deferred assets

Bond issuance costs are expensed in full when incurred.

(5) Translation of assets and liabilities denominated in foreign currencies into Japanese yen

Monetary assets and liabilities denominated in foreign currencies, for which foreign currency swaps or foreign exchange forward contracts are used to hedge the risk of foreign currency fluctuation, are translated at the contracted rate as these swap contracts or the forward contracts qualify for deferral hedge accounting.

(6) Reserves

(a) Reserve for possible loan losses

JFM has never experienced any loan losses. Accordingly, no reserve for possible loan losses has been maintained.

(b) Reserve for bonuses

The reserve for bonuses is provided for payment of bonuses to employees, in the amount of estimated bonuses, which are attributable to the semiannual period.

(c) Reserve for bonuses for directors and corporate auditors

The reserve for bonuses for directors and corporate auditors is provided for payment of bonuses to directors and corporate auditors, in the amount of estimated bonuses, which are attributable to the semiannual period.

(d) Reserve for retirement benefits

The reserve for retirement benefits is provided for payment of retirement benefits to employees, in the amount deemed accrued at the end of the semiannual period, based on the projected retirement benefit obligation and fair value of plan assets at the end of the semiannual period. The reserve for retirement benefits and pension expenses are calculated using the simplified method, which assumes JFM's retirement benefit obligation to be equal to the benefits payable if all eligible employees voluntarily terminated their employment at the end of the semiannual period.

(e) Reserve for retirement benefits for directors and corporate auditors

The reserve for retirement benefits for directors and corporate auditors is provided for payment of retirement benefits to directors and corporate auditors, in the amount deemed accrued at the end of the semiannual period based on the internal policies.

(7) Hedge accounting

(a) Hedge accounting method

Interest rate swaps used to hedge the risk of interest rate fluctuations that qualify for hedge accounting and meet specific matching criteria are not measured at fair value, but the differential paid or received under the swap agreements is recognized and included in interest expense or income. If swap contracts or forward contracts used to hedge the risk of foreign currency fluctuation qualify for deferral hedge accounting, the foreign currency-denominated assets and liabilities are translated at the contracted rate.

(b) Hedging instruments and hedged items

(i) Hedging instruments・・・Interest rate swaps

Hedged items・・・・・・・・・Bonds and long-term borrowed money

(ii) Hedging instruments・・・Currency swaps

Hedged items・・・・・・・・・Foreign currency-denominated bonds

(iii) Hedging instruments・・・Foreign exchange forward contracts

Hedged items・・・・・・・・・Foreign currency-denominated bank deposits

(c) Hedging policy

JFM uses hedging instruments as a means of hedging exposure to interest rate risk and foreign exchange risk. Hedged items are identified by each individual contract.

As a means of hedging foreign exchange fluctuation risks associated with the receipt of interest and principal of foreign currency-denominated bank deposits, a foreign exchange forward contract is entered into at the time of each deposit by JFM.

(d) Assessment of hedge effectiveness

JFM ensures hedging instruments and hedged items have the same major terms when entering into hedge transactions to offset market fluctuation risks associated with bonds and long-term borrowed money. Accordingly, JFM deems these to be highly effective and thus does not assess effectiveness. Moreover, a periodic assessment of hedge effectiveness for interest rate swaps and currency swaps and forward contracts that qualify for deferral hedge accounting is omitted when the exceptional accrual method is applied.

(8) Cash and cash equivalents

Cash and cash equivalents in the semiannual statement of cash flows consist of “Cash and bank deposits” on the semiannual balance sheets.

(9) Fund for lending rate reduction

In accordance with the provisions of Article 46, Section 1 of the Law, JFM has established the fund for lending rate reduction to reserve contributions as stipulated in Article 32-2 of the Local Government Finance Law (Law No. 109, 1948). Also, pursuant to the provisions of Article 46, Section 5 of the Law, income arising from the investment of the fund (hereinafter, “investment income”) is used to reduce interest rates of the loans to municipalities, and if there is any surplus in the investment income after this interest rate reduction process, the surplus amount is added to the fund. Further, pursuant to the provisions of Article 46, Section 6 of the Law, if there is any shortfall after the interest rate reduction process, the shortfall is covered by withdrawal of the fund within the limits of the total of the additional portion to the fund made up to the previous fiscal year and the contributions made in the most current fiscal year.

(10) Reserve for interest rate volatility and management account reserve for interest rate volatility

The reserve for interest rate volatility is set aside to prepare for interest rate risk associated with refinancing of JFM bonds (excluding the bonds issued by the former Japan Finance Corporation for Municipal Enterprises; hereinafter, the “Predecessor”) pursuant to the provisions of Article 38, Sections 1 and 3 of the Law, and Article 9, Sections 8 and 10 of the Supplementary Provisions of the Law, and is calculated and accounted for based on the provisions of Article 34 of the Ministerial Ordinance on Finance and Accounting of Japan Finance Organization for Municipalities (Ordinance No. 87 of the Ministry of Internal Affairs and Communications, 2008; hereinafter, “Ordinance on Finance and Accounting”) and Articles 22 and 23 of the Government Ordinance on preparation of relevant government ordinances and provisional measures for the abolishment of the Japan Finance Corporation for Municipal Enterprises Law (Government Ordinance No. 226, 2008; hereinafter, “Preparation Ordinance”).

The management account reserve for interest rate volatility is set aside to manage interest rate risk associated with refinancing of bonds issued by the Predecessor pursuant to the provisions of Article 9, Sections 9 and 10, and Article 13, Sections 5 and 7 of the Supplementary Provisions of the Law, and is calculated and accounted for based on the provisions of Articles 1 through 3 of the Ministerial Ordinance on the operations of the Management Account at Japan Finance Organization for Municipal Enterprises (Ordinance No. 2 of the Ministry of Internal Affairs and Communications, and the Ministry of Finance, 2008; hereinafter, “Management Account Operations Ordinance”) and Articles 3 and 5 of the Supplementary Provisions of the above ordinance.

(11) Reserve for interest rate reduction

Reserve for interest rate reduction is set aside to reduce interest rates on the loans made by the Predecessor to local governments pursuant to the provisions of Article 9, Section 13, and Article 13, Section 8 of the Supplementary Provisions of the Law, and Article 26, Sections 1, 3 and 4 of the Preparation Ordinance, and is calculated and accounted for based on the provisions of Article 5 of the Management Account Operations Ordinance.

(12) Consumption taxes

National and local consumption taxes are accounted for using the tax exclusion method.

3. Loans

There are no bankrupt loans, non-accrual loans, past due loans (three months or more), or restructured loans. Since JFM has never experienced loan losses in the past, it does not record a reserve for possible loan losses.

Bankrupt loans represent loans to borrowers as defined in Article 96, Section 1, Clause 3 (a) through (e) and Clause 4 of the Enforcement Ordinance of the Corporate Income Tax Law (Government Ordinance No. 97, 1965), and on which accrued interest is not accounted in revenue as there is no expectation of collection of either principal or interest because they are past due for a considerable period of time or for other reasons (excluding loans on which bad debts are written off; hereinafter, “Non-accrual loans”).

Non-accrual loans represent loans on which accrued interest is not accounted in revenue, excluding loans to bankrupt borrowers and loans with grace periods for interest payments to assist in corporate reorganization or to support business.

Past due loans (three months or more) represent loans on which payment of principal or interest is in arrears for more than three months, calculated from the day following the contractual due date, excluding bankrupt loans and non-accrual loans.

Restructured loans represent loans, given certain favorable terms and conditions, such as reduction or exemption of interest, grace periods for interest or principal payments, and debt waivers, to assist borrowers in corporate rehabilitation or to support business, excluding bankrupt loans, non-accrual loans and past due loans (three months or more).

4. Subsequent Events

For the three years from fiscal 2015 (1 April 2015 to 31 March 2016) through fiscal 2017, a portion of JFM's management account reserve for interest rate volatility is to be attributed to the Japanese national government, with the aim of transferring up to 600,000 million yen over this period. In fiscal 2016, 200,000 million yen has been transferred to the national treasury by JFM, pursuant to Article 14 of the Supplementary Provisions of the Law for fiscal 2016 (Ordinance No. 1 of the Ministry of Internal Affairs and Communications, and the Ministry of Finance, 2016).

5. Financial Instruments

(1) Status of financial instruments

(a) Policy for financial instruments

In order to maintain a sound and good financial standing, as well as the solid confidence of capital markets, JFM needs to appropriately manage various risks including interest rate risk.

JFM adopts an integrated risk management approach to appropriately respond to various risks while endeavoring to further advance its risk analysis and management.

Accordingly, JFM has developed a system for appropriate risk management, including the establishment of the Integrated Risk Management Committee, which supervises JFM's overall risk management, and the Risk Management Office, which monitors the risks in each department. The content of risk management can then be appropriately reflected in management decisions.

(b) Details and risks of financial instruments

JFM makes loans to local governments. The maximum term to maturity is 40 years, but the majority of the funds for these loans are raised mainly through issuance of 10-year bonds. Therefore, a large duration gap is created between lending and funding, and JFM is exposed to the interest rate risk associated with bond and long-term borrowed money refinancing.

JFM has set aside reserves for interest rate fluctuations (the reserve for interest rate volatility), and has set up the ALM Committee separately from the Integrated Risk Management Committee to comprehensively analyze and manage JFM's assets and liabilities in a timely and appropriate manner. At the meeting, medium- and long-term management analysis as well as risk analysis and evaluation are conducted through scenario analysis, VaR analysis, and duration analysis, among other methods. In addition, JFM reflects the findings in its bond issuance plans and other aspects of management and endeavors to reduce interest rate risk.

(c) Risk Management for Financial Instruments

(i) Credit risk

Credit risk is the risk of loss arising from a credit event, such as deterioration in the financial condition of a borrower, which causes an asset to lose value or become worthless. In addition to credit risk associated with loans, market transactions also involve credit risk.

A. Credit risk on loans

JFM extends loans exclusively to local governments. Local governments have a zero Bank of International Settlements (BIS) risk weighting and JFM does not expect any default on loans made to local governments for the reasons outlined below. JFM and the Predecessor have never experienced any loan losses.

- The Japanese national government includes principal and interest payments of local government bonds and loans in the expenditure of the Local Government Finance Program, and secures the total amount of local allocation tax which balances local governments' total expenditures including principal and interest payments, and total revenue. Thus, the national government effectively secures revenue sources for principal and interest payments by local governments. The national government also secures revenue sources for principal and interest payments by individual local governments by including a portion of such principal and interest in the Standard Financial Needs when calculating local allocation tax.
- Under the consultation system for local government bonds and loans, credit reviews must include checks on the repayment status of local governments, and tax revenue and necessary revenue sources to be secured. Additionally, under the Early Warning System, the local governments whose principal and interest payments or financial deficits exceed a certain level must apply for approval to issue bonds or obtain loans, so that the credit standing of local government bonds and loans is maintained.
- Under the Law Relating to the Financial Soundness of Local Governments, which was promulgated in June 2007 (No. 94), local governments whose fiscal indicators exceed the early warning limits must make their own efforts toward achieving fiscal soundness, and local governments whose fiscal indicators exceed the reconstruction limits must take necessary actions to restore their finances under the supervision of the national government or the respective prefectural governments with regard to redemption of local government bonds and loans, and other operations.
- JFM is not subject to the "Banking Law" (1981, No. 59) or the "Financial Reconstruction Law" (1998, No. 132) but performs self-assessment of loans in accordance with the "Financial Inspection Manual" of the Financial Services Agency (FSA).

B. Credit risk on transactions

JFM is exposed to the risk of loss arising from credit events, such as deterioration in the financial condition of a counterparty, which causes an asset to lose value or become worthless. However, JFM appropriately manages credit risk of this type by constantly monitoring counterparties' financial standing, taking measures including suspension of new deals and cancellation of transactions in case of a deterioration of their credit standings.

Moreover, JFM limits counterparties to financial institutions that achieve a certain credit rating and other criteria, and conducts transactions within the credit lines for each counterparty in order to diversify risks. In addition, JFM enters into ISDA (International Swaps and Derivatives Association) Master Agreements and CSA (Credit Support Annex) with all derivatives counterparties to reduce credit risk.

(ii) Market risk

Market risk is the risk of loss resulting from changes in the value of assets and liabilities due to fluctuations in risk factors such as interest rates, securities prices and foreign exchange rates, or the risk of loss resulting from changes in earnings generated from assets and liabilities. Market risk includes interest rate risk, foreign exchange risk, inflation risk and price change risk.

A. Interest rate risk

Interest rate risk is the risk of losses incurred or a decrease in profits due to fluctuations in interest rates when there is an interest rate or duration gap between assets and liabilities. The interest rate risk at JFM includes the interest rate risk associated with bond and borrowed money refinancing and pipeline risk.

- Interest rate risk associated with bond and borrowed money refinancing

JFM makes loans to local governments. The maximum term to maturity is 40 years, but the majority of the funds for these loans are raised mainly through issuance of 10-year bonds, which creates interest rate risk associated with bond refinancing. JFM takes the following measures to address the interest rate risk resulting from a duration gap between lending and funding.

• JFM maintains necessary reserves to cope with the interest rate risk resulting from a duration gap between lending and funding.
• As assets and liabilities in JFM's general account will expand as a result of lending to local governments and funding, JFM carries out an ALM analysis of this account in a timely and appropriate manner to further enhance the effectiveness of its management of interest rate risk. In order to reduce exposure to interest rate risk, JFM has established a medium-term management target for five years from fiscal 2013, in which the duration gap is to be maintained below approximately two years.
• To achieve its objective, JFM has taken measures to manage the duration gap on liabilities issuing longer than 10-year bonds under ultra-low interest rate circumstances and other flexible funding operations while pursuing the best bond conditions with flexible funding operations.
• JFM's lending for temporary financial countermeasures funding accounts for approximately 40% of the overall outstanding loans in the general account. However, the interest rates for temporary financial countermeasures funding are revised every 5 or 10 years. In addition, JFM will revise its lending rate by the 30th year at the latest for its loans with maturities longer than 30 years, which also contributes to moderate the duration on assets (lending).
• The management account, which manages assets related to loans extended by the Predecessor, is currently exposed to greater interest rate risk than the general account. To address such risk, JFM contributes to the required reserves for interest rate volatility as described above. In accordance with Article 14 of the Supplementary Provisions of the Law, a portion of JFM's management account reserve for interest rate volatility is to be transferred to the Japanese national government. The transfer is scheduled to occur over a period of three years from fiscal 2015 through fiscal 2017, with the aim of transferring up to 600,000 million yen. The amount of transfer is to be within the amount which the Japanese national government deems as an amount exceeding the requisite amount of reserve necessary for the smooth operation of JFM's management account at the time of transfer and in the future, in light of JFM's financial condition.

- Pipeline risk

JFM is also exposed to pipeline risk, whereby losses would be incurred or profits decreased as a result of interest rate fluctuations during the time from when JFM raises money until the point at which the money is loaned to local governments. JFM, in principle, uses swap transactions to hedge against pipeline risk.

B. Foreign exchange and other risks

Various risks associated with bond principal and interest payments are hedged by swap transactions. These risks include foreign exchange risk related to foreign currency-denominated bonds and interest rate risk related to floating rate bonds.

JFM's investments of surplus funds are exposed to the risk of losses on the sale of securities resulting from price declines and the risk of realized losses on foreign currency-denominated deposits resulting from fluctuations in foreign exchange rates. Accordingly, in principle, JFM minimizes the risk of price fluctuation by holding investments until maturity, and hedges foreign exchange risk by using foreign exchange contracts.

C. Quantitative information on market risk

Loans, bonds and long-term borrowed money are primarily affected by interest rate risk, which is a major risk variable among the market risks.

With respect to loans, bonds and long-term borrowed money in the general account, JFM establishes a management target for the duration gap in order to manage interest rate risk appropriately. With regard to the quantitative analysis of interest rate risk, while JFM does not have a management target for the quantitative figures, it reports the results of calculating the quantitative information, such as the "outlier ratio," to the ALM Committee and tracks the status of the interest rate risk.

The "outlier ratio" is calculated by dividing JFM's "decline in economic value" as a result of hypothetical interest rate shocks by JFM's net assets, including the reserve for interest rate volatility in the general account and the fund for lending rate reduction. The "decline in economic value" is the largest possible loss in net present market value of its loans and bonds and long-term borrowed money that JFM would suffer following a

hypothetical 200 basis point increase or decrease in market interest rates.
The outlier ratio is calculated based on the following conditions.

• Future Cash Flows

With respect to loans, future cash flows regarding such loans are calculated based on the type of interest rate of the loans. In addition, the advanced redemption in the future is not expected by JFM.

With respect to fixed-rate bonds and long-term borrowed money, future cash flows regarding such fixed-rate bonds and long-term borrowed money are calculated based on the redemption schedule. With respect to floating rate bonds hedged by interest rate swaps, that qualify for hedge accounting and meet specific matching criteria, future cash flows corresponding to such floating rate bonds are calculated in a manner similar to fixed-rate bonds.

• Indicative Interest Rate

For the assessment of loans, bonds and long-term borrowed money, the corresponding interest rate of Japanese government bonds as of 30 September 2016 is used.

• Calculation of Outlier Ratio

Based on an assumption that risk variables, except for interest rate risk, are fixed as of 30 September 2016, the outlier ratio is calculated by dividing the change in fair value in the case where the indicative interest rate (government bonds) rises across-the-board by 200 basis points (2.00%) or the change in fair value in the case such rate falls across-the-board by 200 basis points (2.00%), whichever is greater, by net assets including the reserve for interest rate volatility and the fund for lending rate reduction.

JFM calculates the outlier ratio reflecting a rise of 200 basis points of the indicative interest rate as JFM understands that the change in fair value in the case of rising interest rates would be greater than that in the case of falling interest rates.

JFM monitors the movement of the outlier ratio on a regular basis, and the calculation as of 30 September 2016 is as follows:

(Millions of yen)

	Outlier ratio (a)= -(b)/(e)	Change in fair value in the case of 200 basis points rise in interest rates			Net assets including reserve for interest rate volatility and the fund for lending rate reduction (e)
		Total (b)=(c)+(d)	Loans (c)	Bonds and long-term borrowed money (d)	
General account	22.3% [+1.9%]	¥(684,163) [(111,192)]	¥(2,207,449) [(281,181)]	¥1,523,286 [+169,989]	¥3,074,687 [+259,687]

Note: Amounts posted in square brackets indicate the change from 30 September 2015.

With respect to loans and bonds in the management account, JFM raises funds by the issuance of bonds as necessary in order to manage existing loans until their redemption. For this reason, while JFM reports the calculation results of the quantitative information regarding the interest rate risk to the ALM Committee and confirms the status of interest rate risk as is the case in the general account, JFM does not establish a management target or use the quantitative analysis for the management account.

With respect to these financial instruments in the management account, based on an assumption that the risk variables, except for interest rate risk, hold steady, for an indicative interest rate as of 30 September 2016 that is 10 basis points higher than the actual rate, it is assumed that the fair value of the net amount (assets side), after offsetting such financial instruments with the financial liabilities, would decline by 26,550 million yen. On the contrary, for an indicative interest rate as of 30 September 2016 that is 10 basis points lower than the actual rate, it is assumed that the fair value of the net amount (assets side), after offsetting such financial instruments with the financial liabilities, would increase by 26,899 million yen.

(iii) Liquidity risk

Liquidity risk is the risk that JFM would incur losses due to difficulties in securing the necessary funds or the necessity of obtaining funds at far higher interest rates than under normal conditions as a result of a mismatch between the maturities of assets and liabilities or an unexpected outflow of funds (funding liquidity risk). It also includes the risk that JFM would incur losses because it is unable to conduct market transactions or is forced to conduct transactions at far more unfavorable prices than under normal conditions due to market disruption or other difficult situations (market liquidity risk).

JFM’s exposure to liquidity risk is extremely low because loans are made to local governments according to a pre-set schedule, and the daily cash and liquidity management is carried out based on a quarterly plan for fund management. Moreover, JFM has entered into overdraft agreements with several financial institutions to prepare for the unexpected events, and invests surplus funds only in short-term financial products.

In addition, as new Basel III liquidity standards are being applied to Japanese financial institutions, although JFM is not required to comply with the liquidity coverage ratio requirements of Basel III, as a voluntary measure, JFM has implemented a plan to secure liquidity support assets in advance in order to prepare for potential market disruption which may prevent JFM from securing the necessary funds for scheduled bond principal and interest payments.

(ⅳ) Supplemental remarks on fair value of financial instruments

In addition to the amount based on the market price, the fair value of illiquid financial instruments includes a value that has been rationally calculated. Since certain assumptions were made when calculating the fair value, the value may differ in the event that the assumptions change.

(2) Items related to fair value of financial instruments

The book value, fair value and difference between them as of 30 September 2015 are as follows:

(Millions of yen)

	Book value	Fair value	Difference
(1) Loans	¥23,464,589	¥25,345,598	¥1,881,009
(2) Securities			
Held-to-maturity securities	649,000	649,000	-
(3) Cash and bank deposits	538,003	538,003	-
(4) Cash collateral paid for financial instruments	507	507	-
Total assets	24,652,099	26,533,109	1,881,009
(1) Bonds	19,589,489	20,456,421	866,931
(2) Borrowed money	110,500	112,558	2,058
(3) Cash collateral received for financial instruments	171,031	171,031	-
Total liabilities	19,871,021	20,740,011	868,989
Derivative transactions(*1) Hedge accounting applied	1,150	1,150	-
Total of derivative transactions	1,150	1,150	-

The book value, fair value and difference between them as of 30 September 2016 are as follows:

(Millions of yen)

	Book value	Fair value	Difference
(1) Loans	¥23,603,349	¥26,243,652	¥2,640,303
(2) Securities			
Held-to-maturity securities	99,000	99,000	-
(3) Cash and bank deposits	1,111,260	1,111,260	-
(4) Cash collateral paid for financial instruments	46,217	46,217	-
Total assets	24,859,826	27,500,129	2,640,303
(1) Bonds	20,019,395	21,180,386	1,160,991
(2) Borrowed money	145,500	149,301	3,801
(3) Cash collateral received for financial instruments	39,799	39,799	-
Total liabilities	20,204,694	21,369,487	1,164,792
Derivative transactions(*1) Hedge accounting applied	253	253	-
Total of derivative transactions	253	253	-

(*1) Assets and liabilities resulting from derivative transactions are presented on a net basis with liabilities in parentheses.

Note 1. Method for calculating fair value of financial instruments and items related to marketable securities and derivative transactions

Assets

(1) Loans

The fair value of loans is calculated by discounting future cash flows assuming prepayment at the discount rate calculated using the Japanese government bond rates as of 30 September 2015 and 2016.

(2) Securities

All bonds are held until maturity, and the fair value of treasury discount bills is the market price.

Since all negotiable certificates of deposit are short-term, the fair value approximates the book value. As a result, the book value is deemed to be the fair value.

As of 30 September 2015

(Millions of yen)

	Type	Book value	Fair value	Difference
Securities with fair values exceeding the semiannual balance sheet amount	-	¥-	¥-	¥-
	Sub total	-	-	-
Securities with fair values that do not exceed the semiannual balance sheet amount	Negotiable certificates of deposit	649,000	649,000	-
	Sub total	649,000	649,000	-
Total		¥649,000	¥649,000	¥-

As of 30 September 2016

(Millions of yen)

	Type	Book value	Fair value	Difference
Securities with fair values exceeding the semiannual balance sheet amount	-	¥-	¥-	¥-
	Sub total	-	-	-
Securities with fair values that do not exceed the semiannual balance sheet amount	Negotiable certificates of deposit	99,000	99,000	-
	Sub total	99,000	99,000	-
Total		¥99,000	¥99,000	¥-

(3) Cash and bank deposits

The book value is used as the fair value for deposits without maturities. Since all deposits with maturities are short-term, the fair value approximates the book value. As a result, the book value is deemed to be the fair value.

(4) Cash collateral paid for financial instruments

Cash collateral is associated with derivative transactions. The book value is used as the fair value of cash collateral paid for financial instruments since both values are approximately equal as a result of each deposit period being short term.

Liabilities

(1)Bonds

The fair value of bonds issued by JFM that have a market price is based on the market price. The fair value of bonds without a market price is calculated by discounting the future cash flows using the interest rate that would be applied when issuing similar bonds with the same total principal and interest and payment term.

Deferral hedge accounting is used for currency swaps, and the fair value of foreign currency-denominated bonds is thus calculated using the total of the fair value of that bond and the fair value of the swap transaction.

Hedge accounting is used for interest rate swaps, and the fair value of floating rate bonds is thus calculated by determining the present value using the total of the corresponding interest rate swap accounted for together with the principal and interest and discounting the future cash flows using the interest rate that would be applied when issuing a similar bond.

(2)Borrowed money

The fair value of long-term borrowed money is calculated by discounting the future cash flows using the interest rate that would presumably be applied when issuing bonds with the same total principal and interest and payment term.

(3)Cash collateral received for financial instruments

Cash collateral is associated with derivative transactions. The book value is used as the fair value of cash collateral received for financial instruments since both values are approximately equal as a result of each deposit period being short-term.

Derivative transactions

Transactions for which hedge accounting is applied

For derivative transactions for which hedge accounting is applied, the contractual amount or the amount equivalent to the principal in the contract under each hedge accounting method as of 30 September 2015 is as follows:

(Millions of yen)

Hedge accounting method	Type of derivative transactions	Primary hedged items	Contract amount		Fair value	Method for calculating fair value
				Of which more than 1 year		
Principal accounting method	Interest rate swap transactions Receive/fixed and pay/floating	Bonds Long-term borrowed money	¥71,500	¥71,500	¥1,150	Based on prices provided by the counterparty financial institution
Hedge accounting for interest rate swaps	Interest rate swap transactions Receive/floating and pay/fixed	Bonds	75,000	75,000	(*1)	
Deferral hedge accounting for currency swaps	Currency swap transactions	Foreign currency-denominated bonds	1,233,354	1,233,354	(*2)	
Deferral hedge accounting for foreign exchange forward contracts	Foreign exchange contracts	Foreign currency-denominated deposits	130,000	-	(*2)	
Total			¥1,509,854	¥1,379,854	¥1,150	

For derivative transactions for which hedge accounting is applied, the contractual amount or the amount equivalent to the principal in the contract under each hedge accounting method as of 30 September 2016 is as follows:

(Millions of yen)

Hedge accounting method	Type of derivative transactions	Primary hedged items	Contract amount	Of which more than 1 year	Fair value	Method for calculating fair value
Principal accounting method	Interest rate swap transactions Receive/fixed and pay/floating	Bonds Long-term borrowed money	¥68,000	¥68,000	¥253	Based on prices provided by the counterparty financial institution
Hedge accounting for interest rate swaps	Interest rate swap transactions Receive/floating and pay/fixed	Bonds	55,000	55,000	(*1)	
Deferral hedge accounting for currency swaps	Currency swap transactions	Foreign currency-denominated bonds	1,467,529	1,467,529	(*2)	
Deferral hedge accounting for foreign exchange forward contracts	Foreign exchange contracts	Foreign currency-denominated deposits	91,000	-	(*2)	
Total			¥1,681,529	¥1,590,529	¥253	

(*1) Since interest rate swaps for which hedge accounting is applied are accounted for together with the bond being hedged, the fair value is presented together with the fair value of the relevant bond.

(*2) Since currency swaps and foreign exchange forward contracts for which deferral hedge accounting is applied are accounted for together with the foreign currency-denominated bond or foreign currency-denominated deposit being hedged, the fair value is presented together with the fair value of the relevant hedged item.

Note 2. The repayment schedule for monetary claims and securities with maturities is as follows:

As of 30 September 2015

(Millions of yen)

	Within 1 year	After 1 year through 2 years	After 2 years through 3 years	After 3 years through 4 years	After 4 years through 5 years	After 5 years through 10 years	After 10 years through 20 years	After 20 years through 30 years
Loans	¥1,645,874	¥1,665,060	¥1,659,271	¥1,643,632	¥1,606,250	¥6,754,095	¥6,951,433	¥1,538,971
Securities								
Held-to-maturity securities	649,000	-	-	-	-	-	-	-
Deposits	538,003	-	-	-	-	-	-	-

As of 30 September 2016

(Millions of yen)

	Within 1 year	After 1 year through 2 years	After 2 years through 3 years	After 3 years through 4 years	After 4 years through 5 years	After 5 years through 10 years	After 10 years through 20 years	After 20 years through 30 years	After 30 years through 40 years
Loans	¥1,672,472	¥1,689,230	¥1,705,339	¥1,685,506	¥1,635,862	¥6,732,610	¥6,898,830	¥1,575,004	¥8,493
Securities									
Held-to-maturity securities	99,000	-	-	-	-	-	-	-	-
Deposits	1,111,259	-	-	-	-	-	-	-	-

Note 3. The repayment schedule for bonds and borrowed money is as follows:

As of 30 September 2015

(Millions of yen)

	Within 1 year	After 1 year through 2 years	After 2 years through 3 years	After 3 years through 4 years	After 4 years through 5 years	After 5 years through 10 years	After 10 years through 20 years	After 20 years through 30 years
Bonds	¥1,658,250	¥1,900,536	¥1,734,890	¥1,854,643	¥1,985,343	¥8,039,191	¥2,241,525	¥177,000
Borrowed money	-	25,000	-	30,000	10,000	45,500	-	-

As of 30 September 2016

(Millions of yen)

	Within 1 Year	After 1 year through 2 years	After 2 years through 3 years	After 3 years through 4 years	After 4 years through 5 years	After 5 years through 10 years	After 10 years through 20 years	After 20 years through 30 years	After 30 years through 40 years
Bonds	¥1,900,536	¥1,759,890	¥1,857,643	¥2,030,343	¥2,217,271	¥7,615,765	¥2,487,355	¥139,500	¥20,000
Borrowed money	25,000	25,000	30,000	10,000	-	55,500	-	-	-

6. Accumulated Depreciation

Accumulated depreciation of tangible fixed assets amounted to 450 million yen and 582 million yen as of 30 September 2015 and 2016, respectively.

7. Assets Pledged as Collateral

Pursuant to the provisions of Article 40, Section 2 of the Law, JFM's total assets are pledged as general collateral for JFM bonds in the amount of 19,589,489 million yen and 20,019,395 million yen as of 30 September 2015 and 2016, respectively.

8. Semiannual Net Income by Account

(For the six-month period ended 30 September 2015)

Semiannual net income of general account was 13,659 million yen, while there was no semiannual net income of management account.

(For the six-month period ended 30 September 2016)

Semiannual net income of general account was 12,234 million yen, while there was no semiannual net income of management account.

9. Information by Account (Semiannual Balance Sheets)

Semiannual balance sheets of general account and management account as of 30 September 2015 were as follows:

(Millions of yen)

Item	General account	Management Account	Offset	Total
(Assets)				
Loans	¥11,531,840	¥11,932,748	-	¥23,464,589
Securities	649,000	-	-	649,000
Cash and bank deposits	538,003	-	-	538,003
Cash collateral paid for financial instruments	507	-	-	507
Other assets	4,991	7,238	-	12,230
Tangible fixed assets	2,775	-	-	2,775
Intangible fixed assets	1,591	-	-	1,591
Due from general account	-	707,979	¥(707,979)	-
Due to management account for fund for lending rate reduction	92,831	-	(92,831)	-
Total assets	12,821,540	12,647,966	(800,810)	24,668,696
(Liabilities)				
Bonds	9,014,778	10,574,711	-	19,589,489
Borrowed money	110,500	-	-	110,500
Cash collateral received for financial instruments	171,031	-	-	171,031
Other liabilities	2,124	7,605	-	9,729
Reserve for bonuses	54	-	-	54
Reserve for bonuses for directors and corporate auditors	8	-	-	8
Reserve for retirement benefits	38	-	-	38
Reserve for retirement benefits for directors and corporate auditors	25	-	-	25
Fund for lending rate reduction	920,287	-	-	920,287
Basic fund for lending rate reduction	920,287	-	-	920,287
Due to management account	707,979	-	(707,979)	-
Due from general account for fund for lending rate reduction	-	92,831	(92,831)	-
Reserves under special laws	1,760,000	1,919,152	-	3,679,152
Reserve for interest rate volatility	1,760,000	-	-	1,760,000
Management account reserve for interest rate volatility	-	1,866,817	-	1,866,817
Reserve for interest rate reduction	-	52,334	-	52,334
Total liabilities	12,686,828	12,594,300	(800,810)	24,480,318
(Net Assets)				
Capital	16,602	-	-	16,602
Retained earnings	121,362	-	-	121,362
General account appropriated surplus reserve	107,703	-	-	107,703
General account semiannual unappropriated retained earnings	13,659	-	-	13,659
Valuation, translation adjustments and others	(3,253)	-	-	(3,253)
Management account surplus reserve	-	53,666	-	53,666
Total net assets	134,711	53,666	-	188,378
Total liabilities and net assets	¥12,821,540	¥12,647,966	¥(800,810)	¥24,668,696

Semiannual balance sheets of general account and management account as of 30 September 2016 were as follows:

(Millions of yen)

Item	General account	Management account	Offset	Total
(Assets)				
Loans	¥12,915,117	¥10,688,232	-	¥23,603,349
Securities	99,000	-	-	99,000
Cash and bank deposits	1,111,260	-	-	1,111,260
Cash collateral paid for financial instruments	46,217	-	-	46,217
Other assets	4,064	6,372	-	10,436
Tangible fixed assets	2,654	-	-	2,654
Intangible fixed assets	1,501	-	-	1,501
Due from general account	-	724,616	¥(724,616)	-
Total assets	14,179,814	11,419,221	(724,616)	24,874,418
(Liabilities)				
Bonds	10,193,094	9,826,300	-	20,019,395
Borrowed money	145,500	-	-	145,500
Cash collateral received for financial instruments	39,799	-	-	39,799
Other liabilities	1,989	5,871	-	7,861
Reserve for bonuses	56	-	-	56
Reserve for bonuses for directors and corporate auditors	8	-	-	8
Reserve for retirement benefits	46	-	-	46
Reserve for retirement benefits for directors and corporate auditors	15	-	-	15
Fund for lending rate reduction	920,287	-	-	920,287
Basic fund for lending rate reduction	920,287	-	-	920,287
Due to management account	724,616	-	(724,616)	-
Reserves under special laws	1,980,000	1,533,382	-	3,513,382
Reserve for interest rate volatility	1,980,000	-	-	1,980,000
Management account reserve for interest rate volatility	-	1,488,812	-	1,488,812
Reserve for interest rate reduction	-	44,570	-	44,570
Total liabilities	14,005,414	11,365,555	(724,616)	24,646,353
(Net Assets)				
Capital	16,602	-	-	16,602
Retained earnings	150,135	-	-	150,135
General account appropriated surplus reserve	137,900	-	-	137,900
General account semiannual unappropriated retained earnings	12,234	-	-	12,234
Valuation, translation adjustments and others	7,662	-	-	7,662
Management account surplus reserve	-	53,666	-	53,666
Total net assets	174,399	53,666	-	228,065
Total liabilities and net assets	¥14,179,814	¥11,419,221	¥(724,616)	¥24,874,418

Notes: 1. General account and management account

In accordance with the provisions of Article 13, Section 1 of the Supplementary Provisions of the Law, management account is used to conduct administration, collection and other related operations of the assets that JFM inherited from the Predecessor (management of the assets of the Predecessor).

Management account is separated from the other account (general account) pursuant to the provisions of Article 13, Section 3 of the Supplementary Provisions of the Law.

2. General account semiannual unappropriated retained earnings

"Semiannual net income" of general account is posted as "General account semiannual unappropriated retained earnings. "

3. Due from general account and due to management account

These amounts represent funds lent between the general account and management account pursuant to the provisions of Article 13, Section 4 of the Supplementary Provisions of the Law.

4. Due from general account for fund for lending rate reduction and due to management account for fund for lending rate reduction

These amounts represent cash received for “Fund for lending rate reduction,” which was lent to management account from the general account pursuant to the provisions of Article 9, Section 12 of the Supplementary Provisions of the Law.

10. Information by Account (Semiannual Statements of Income)

Semiannual statements of income of general account and management account for the six-month period ended 30 September 2015 were as follows:

(Millions of yen)

Item	General account	Management Account	Offset	Total
Income	¥67,458	¥144,150	¥(6,590)	¥205,019
Interest income	65,876	139,059	-	204,935
Fees and commissions	78	-	-	78
Other operating income	0	-	-	0
Other income	6	-	-	6
Administrative fee for management account	389	-	(389)	-
Interest on fund for lending rate reduction	1,108	-	(1,108)	-
Interest on due from general account	-	9	(9)	-
Transfer from general account for fund for lending rate reduction	-	5,082	(5,082)	-
Expenses	53,799	73,065	(6,590)	120,275
Interest expenses	45,724	70,325	-	116,049
Fees and commissions	73	91	-	165
Other operating expenses	1,444	1,058	-	2,503
General and administrative expenses	1,465	92	-	1,557
Interest on due to management account	9	-	(9)	-
Transfer to management account for fund for lending rate reduction	5,082	-	(5,082)	-
Administrative fee for management account	-	389	(389)	-
Interest on fund for lending rate reduction	-	1,108	(1,108)	-
Ordinary income	13,659	71,085	-	84,744
Special gains	220,000	224,217	(220,000)	224,217
Transfer from management account	220,000	-	(220,000)	-
Reversal of management account reserve for interest rate volatility	-	220,000	-	220,000
Reversal of reserve for interest rate reduction	-	4,217	-	4,217
Special losses	220,000	295,302	(220,000)	295,302
Provision for reserve for interest rate volatility	220,000	-		220,000
Provision for management account reserve for interest rate volatility	-	75,302	-	75,302
Transfer to general account	-	220,000	(220,000)	-
Semiannual net income	¥13,659	¥-	¥-	¥13,659

Semiannual statements of income of general account and management account for the six-month period ended 30 September 2016 were as follows:

(Millions of yen)

Item	General account	Management Account	Offset	Total
Income	¥67,019	¥127,293	¥(5,008)	¥189,305
Interest income	66,567	122,645	-	189,213
Fees and commissions	73	-	-	73
Other operating income	12	-	-	12
Other income	6	-	-	6
Administrative fee for management account	360	-	(360)	-
Interest on due from general account	-	12	(12)	-
Transfer from general account for fund for lending rate reduction	-	4,635	(4,635)	-
Expenses	54,785	60,714	(5,008)	110,491
Interest expenses	47,292	59,254	-	106,547
Fees and commissions	73	88	-	161
Other operating expenses	1,236	929	-	2,166
General and administrative expenses	1,534	81	-	1,616
Interest on due to management account	12	-	(12)	-
Transfer to management account for fund for lending rate reduction	4,635	-	(4,635)	-
Administrative fee for management account	-	360	(360)	-
Ordinary income	12,234	66,579	-	78,813
Special gains	220,000	223,770	(220,000)	223,770
Transfer from management account	220,000	-	(220,000)	-
Reversal of management account reserve for interest rate volatility	-	220,000	-	220,000
Reversal of reserve for interest rate reduction	-	3,770	-	3,770
Special losses	220,000	290,349	(220,000)	290,349
Provision for reserve for interest rate volatility	220,000	-	-	220,000
Provision for management account reserve for interest rate volatility	-	70,349	-	70,349
Transfer to general account	-	220,000	(220,000)	-
Semiannual net income	¥12,234	¥-	¥-	¥12,234

11. Fair Value of Marketable Securities

Marketable held-to-maturity securities as of 30 September 2015 consisted of the following:

(Millions of yen)

	Book value	Fair value	Difference	Unrealized gains	Unrealized losses
Negotiable certificates of deposit	¥649,000	¥649,000	-	-	-

Marketable held-to-maturity securities as of 30 September 2016 consisted of the following:

(Millions of yen)

	Book value	Fair value	Difference	Unrealized gains	Unrealized losses
Negotiable certificates of deposit	¥99,000	¥99,000	-	-	-

Notes:

1. The balance sheet amount for negotiable certificates of deposit is the fair value.
2. Difference is the net amount of “unrealized gains” and “unrealized losses.”

12. Information on Derivative Transactions

(1) Types of derivative transactions

Derivative transactions entered into by JFM are interest rate swaps for interest rate related transactions, and currency swaps and foreign exchange forward contracts for currency related transactions.

(2) Policies and purposes of derivative transactions

JFM uses interest rate swaps, currency swaps and foreign exchange forward contracts as a means of hedging exposure to interest rate and foreign exchange fluctuation risks, and does not enter into derivatives for speculative purposes.

Interest rate swaps are used to hedge exposure to interest rate risk on funding activities. Currency swaps and foreign exchange forward contracts are used to hedge exposure to foreign exchange risk associated with issuance of foreign currency-denominated bonds and foreign currency-denominated deposits.

Hedge accounting is applied to interest rate swaps, currency swaps and foreign exchange contracts.

(a) Hedge accounting method

Interest rate swaps used to hedge the risk of interest rate fluctuations that qualify for hedge accounting and meet specific matching criteria are not measured at fair value, but the differential paid or received under the swap agreements is recognized and included in interest expense or income. If swap contracts or forward contracts used to hedge the risk of foreign currency fluctuation qualify for deferral hedge accounting, the foreign currency-denominated assets and liabilities are translated at the contracted rate.

(b) Hedging instruments and hedged items

(i) Hedging instruments: Interest rate swaps
Hedged items: Bonds and long-term borrowed money

(ii) Hedging instruments: Currency swaps
Hedged items: Foreign currency-denominated bonds

(iii) Hedging instruments: Foreign exchange forward contracts
Hedged items: Foreign currency-denominated bank deposits

(c) Hedging policy

JFM uses hedging instruments as a means of hedging exposure to interest rate risk and foreign exchange risk. Hedged items are identified by each individual contract.

As a means of hedging foreign exchange fluctuation risks associated with the receipt of interest and principal of foreign currency-denominated bank deposits, a foreign exchange forward contract is entered into at the time of each deposit to hedge the risks.

(d) Assessment of hedge effectiveness

JFM ensures hedging instruments and hedged items have the same major terms when entering into hedge transactions to offset market fluctuation risks associated with bonds and long-term borrowed money.

Accordingly, JFM deems these to be highly effective and thus does not assess effectiveness. Moreover, a periodic assessment of hedge effectiveness for interest rate swaps and currency swaps and forward contracts that qualify for deferral hedge accounting is omitted when the exceptional accrual method is applied.

(3) Risks on derivative transactions

Major risks on derivative transactions are market risk and credit risk. Market risk is the risk of future revenue fluctuations due to market value changes. Credit risk is the risk of losses incurred when counterparties are unable to fulfill their contracts due to bankruptcy or other reasons.

As for derivative transactions used for hedging purposes, market risk is offset by the corresponding change in the underlying hedged items.

JFM enters into ISDA Master Agreements and CSA with financial institutions, which are its derivative transactions counterparties, to reduce credit risk. Moreover, JFM constantly monitors restructuring costs of the transactions and the counterparties' credit profiles, and deals with multiple counterparties.

(4) Risk management system for derivative transactions

Execution and management of derivative transactions are conducted by the Finance Department of JFM with the approval of persons in charge in accordance with the operational guidelines which specify transaction authority and limits on the transaction amount.

Additionally, the total amount of derivative transactions, the status of risks, the assessed fair value, and the credit risk on counterparties are regularly reported to the Integrated Risk Management Committee.