

For the six months ended 30 September 2018

Japan Finance Organization for Municipalities
Semiannual Financial Statements

Japan Finance Organization for Municipalities

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■ Semiannual Balance Sheets (As of 30 September 2017 and 2018)

(Millions of yen)					
Item	As of 30 September 2017	As of 30 September 2018	Item	As of 30 September 2017	As of 30 September 2018
	Amount			Amount	
Assets			Liabilities		
Loans (Note 3)	¥23,597,128	¥23,408,265	Bonds (Note 7)	¥20,243,899	¥20,347,665
Securities (Note 11)	116,000	142,000	Borrowed money	145,500	154,500
Cash and bank deposits	1,363,677	914,685	Cash collateral received for financial instruments	99,639	35,580
Cash collateral paid for financial instruments	21,357	28,447	Other liabilities	6,716	6,181
Other assets	9,922	8,604	Reserve for bonuses	58	60
Tangible fixed assets (Note 6)	2,555	2,494	Reserve for bonuses for directors and corporate auditors	8	10
Intangible fixed assets (Note 6)	1,328	982	Reserve for retirement benefits	46	51
			Reserve for retirement benefits for directors and corporate auditors	20	20
			Fund for lending rate reduction	920,287	920,287
			Basic fund for lending rate reduction	920,287	920,287
			Reserves under special laws	3,443,137	2,763,504
			Reserve for interest rate volatility	2,200,000	2,200,000
			Management account reserve for interest rate volatility	1,205,451	538,140
			Reserve for interest rate reduction	37,685	25,363
			Total liabilities	24,859,314	24,227,861
			Net Assets		
			Capital	16,602	16,602
			Retained earnings	177,126	199,035
			General account appropriated surplus reserve	165,779	189,436
			General account semiannual unappropriated retained earnings	11,346	9,598
			Valuation, translation adjustments and others	5,260	4,172
			Management account surplus reserve	53,666	57,808
			Total net assets	252,654	277,618
Total assets	¥25,111,969	¥24,505,479	Total liabilities and net assets	¥25,111,969	¥24,505,479

See notes to semiannual financial statements.

■ Semiannual Statements of Income (For the six-month period ended 30 September 2017 and 2018)

Item	(Millions of yen)	
	Six months ended 30 September 2017	Six months ended 30 September 2018
	Amount	
Income	¥174,582	¥160,614
Interest income	174,436	160,530
Fees and commissions	69	65
Other operating income	29	12
Other income	47	6
Contributions from fund for lending rate reduction	38	-
Others	8	6
Expenses	99,236	90,826
Interest expenses	95,104	87,395
Fees and commissions	151	150
Other operating expenses	2,352	1,686
General and administrative expenses	1,627	1,593
Ordinary income	75,345	69,788
Special gains	223,331	403,191
Reversal of management account reserve for interest rate volatility	220,000	400,000
Reversal of reserve for interest rate reduction	3,331	3,191
Special losses	287,330	463,381
Provision for reserve for interest rate volatility	220,000	-
Provision for management account reserve for interest rate volatility	67,330	63,381
Payment to national treasury	-	400,000
Semiannual net income	¥11,346	¥9,598

See notes to semiannual financial statements.

■ Semiannual Statements of Changes in Net Assets
(For the six-month period ended 30 September 2017)

(Millions of yen)

(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 appropriat ed surplus reserve	General account semiannual unappropriated retained earnings				
Balance as of 1 April 2017	¥16,602	¥165,779	-	¥182,381	¥5,035	¥53,666	¥241,082
Changes during semiannual accounting period							
Semiannual net income	-	-	¥11,346	11,346	-	-	11,346
Net changes during semiannual accounting period in items other than stockholders' equity	-	-	-	-	225	-	225
Net changes during semiannual accounting period	-	-	11,346	11,346	225	-	11,572
Balance as of 30 September 2017	¥16,602	¥165,779	¥11,346	¥193,728	¥5,260	¥53,666	¥252,654

(For the six-month period ended 30 September 2018) - As restated

(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 2018	¥ 16,602	¥ 191,890	-	¥ 208,492	¥ 5,268	¥ 53,666	¥ 267,427
Cumulative effects of error correction (Note 13)	-	(2,453)	-	(2,453)	-	4,142	1,688
Balance at the beginning of current period after retrospective adjustment for error correction	16,602	189,436	-	206,038	5,268	57,808	269,116
Changes during semiannual accounting period							
Semiannual net income	-	-	¥ 9,598	9,598	-	-	9,598
Net changes during semiannual accounting period in items other than stockholders' equity	-	-	-	-	(1,096)	-	(1,096)
Net changes during semiannual accounting period	-	-	9,598	9,598	(1,096)	-	8,501
Balance as of 30 September 2018	¥ 16,602	¥ 189,436	¥ 9,598	¥ 215,637	¥ 4,172	¥ 57,808	¥ 277,618

See notes to semiannual financial statements.

■ Semiannual Statements of Cash Flows (For the six-month period ended 30 September 2017 and 2018)

Item	(Millions of yen)	
	Six months ended 30 September 2017	Six months ended 30 September 2018
	Amount	
I Cash flows from operating activities		
Semiannual net income	¥11,346	¥9,598
Depreciation and amortization	323	350
Interest income	(174,436)	(160,530)
Interest expenses	95,104	87,395
Increase in reserve for bonuses	3	2
Increase in reserve for bonuses for directors and corporate auditors	0	2
Increase in reserve for retirement benefits	0	3
Increase/(decrease) in reserve for retirement benefits for directors and corporate auditors	2	(3)
Decrease in fund for lending rate reduction	(38)	-
Increase in reserve for interest rate volatility	220,000	-
Decrease/(increase) in management account reserve for interest rate volatility	(152,669)	63,381
Decrease in reserve for interest rate reduction	(3,331)	(3,191)
Net (increase)/decrease in loans	122,892	359,975
Net increase/(decrease) in bonds	287,219	62,222
Net increase/(decrease) in borrowed money	(25,000)	(5,000)
Interest received	175,566	161,782
Interest paid	(95,922)	(88,152)
Others	(8,409)	51,164
Net cash provided by operating activities	452,652	539,000
II Cash flows from investing activities		
Proceeds from redemption of securities	249,000	300,000
Purchases of securities	(199,000)	(272,000)
Purchases of tangible fixed assets	(4)	(0)
Purchases of intangible fixed assets	(236)	(82)
Net cash provided by investing activities	49,758	27,916
III Cash flows from financing activities		
Payment to the national treasury	-	(400,000)
Revenue from contributions made from municipally operated racing	38	-
Net cash provided by/(used in) investing activities	38	(400,000)
IV Effect of exchange rate changes on cash and cash equivalents	-	-
V Net increase/(decrease) in cash and cash equivalents	502,450	166,917
VI Cash and cash equivalents at beginning of period	861,226	747,767
VII Cash and cash equivalents at end of period	¥1,363,677	¥914,685

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.

Additional information

The amendment to the Act on Promotion of Private Finance Initiative (Law No. 60, 2018) was enforced on 20 June 2018 and it was determined that an amount of up to 1.5 billion yen of a Portion of JFM’s Management Account Reserve for Interest Rate Volatility would be transferred to the national treasury over a six-year period ending 31 March 2024 for securing funds for exemptions of early redemption charges in relation to concessions of water supply and sewerage business. For the six-month period ended 30 September 2018, no payment occurred in relation to this decision.

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. Payment to the National Treasury of a Portion of JFM's Management Account Reserve for Interest Rate Volatility

In the six-month period ended September 30, 2018, 400 billion yen was reversed from the Management Account Reserve for Interest Rate Volatility and the same amount was transferred to the national treasury by JFM, pursuant to Article 14 of the Supplementary Provision of the Law for fiscal 2018 (Ordinance No. 1 of the Ministry of Internal Affairs and Communications, and the Ministry of Finance, 2018).

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 2018, in which the duration gap is to be maintained below approximately two years.
- To achieve its objective, from the viewpoint of moderating the duration on assets (lending), the interest rates for temporary financial countermeasures funding which accounts for approximately 1/3 of the overall outstanding loans in the general account, 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. And, in terms of funding side, JFM has taken measures to manage the duration on liabilities (bonds and loans) through issuing longer than 10-year bonds continuously under the ultra-low interest rate circumstances and carefully choosing maturities of bonds to be issued by utilizing its FLIP and Open Issuance scheme.
- The management account, which manages assets related to loans extended by the Predecessor, is exposed to interest rate risk. 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 2017 through fiscal 2019, with the aim of transferring up to 900 billion yen of which the transfer of 100 billion yen is pursuant to the January 2015 determination, and over a period of six years from fiscal 2018 through fiscal 2023, with the aim of transferring up to 1.5 billion yen for securing funds for exemptions of early redemption charges in relation to concessions of water supply and sewerage business. 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 the cancellation of 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 to the ALM Committee and tracks the status of the interest rate risk.

With respect to these financial instruments in the general 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 2018 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 37,093 million yen. On the contrary, for an indicative interest rate as of 30 September 2018 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 37,723 million yen. These basis point values are used in the financial statements from fiscal 2017 instead of the outlier ratio (A maximum loss of market value expressed as a percentage of net asset in the event of a parallel rate hike or drop of 200 basis points) in accordance with the amendment of Comprehensive Guidelines for Supervision of Major Banks, etc. issued by the FSA in Japan.

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 2018 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 12,009 million yen. On the contrary, for an indicative interest rate as of 30 September 2018 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 12,162 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, 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 2017 are as follows:

	Book value	Fair value	Difference
(1) Loans	¥23,597,128	¥25,485,294	¥1,888,166
(2) Securities			
Held-to-maturity securities	116,000	116,000	-
(3) Cash and bank deposits	1,363,677	1,363,677	-
(4) Cash collateral paid for financial instruments	21,357	21,357	-
Total assets	25,098,163	26,986,329	1,888,166
(1) Bonds	20,243,899	21,085,160	841,260
(2) Borrowed money	145,500	147,688	2,188
(3) Cash collateral received for financial instruments	99,639	99,639	-
Total liabilities	20,489,039	21,332,488	843,449
Derivative transactions ^(*)			
Hedge accounting applied	349	349	-
Total of derivative transactions	349	349	-

(Millions of yen)

The book value, fair value and difference between them as of 30 September 2018 are as follows:

(Millions of yen)

	Book value	Fair value	Difference
(1) Loans	¥23,408,265	¥24,925,759	¥1,517,494
(2) Securities			
Held-to-maturity securities	142,000	142,000	-
(3) Cash and bank deposits	914,685	914,685	-
(4) Cash collateral paid for financial instruments	28,447	28,447	-
Total assets	24,493,397	26,010,892	1,517,494
(1) Bonds	20,347,665	21,025,328	677,663
(2) Borrowed money	154,500	156,412	1,912
(3) Cash collateral received for financial instruments	35,580	35,580	-
Total liabilities	20,537,745	21,217,321	679,575
Derivative transactions ^(*)			
Hedge accounting applied	(864)	(864)	-
Total of derivative transactions	(864)	(864)	-

(*) 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 2017 and 2018.

(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 2017

(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	116,000	116,000	-
	Sub total	116,000	116,000	-
Total		¥116,000	¥116,000	¥-

As of 30 September 2018

(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	142,000	142,000	-
	Sub total	142,000	142,000	-
Total		¥142,000	¥142,000	¥-

(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 2017 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	¥238,500	¥238,500	¥349	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	35,000	35,000	(*)	
Deferral hedge accounting for currency swaps	Currency swap transactions	Foreign currency-denominated bonds	1,517,517	1,517,517	(*)	
Deferral hedge accounting for foreign exchange forward contracts	Foreign exchange contracts	Foreign currency-denominated deposits	89,000	-	(*)	
Total			¥1,880,017	¥1,791,017	¥349	

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 2018 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	¥47,000	¥47,000	¥(864)	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	35,000	35,000	(*)	
Deferral hedge accounting for currency swaps	Currency swap transactions	Foreign currency-denominated bonds	1,466,751	1,314,277	(*)	
Deferral hedge accounting for foreign exchange forward contracts	Foreign exchange contracts	Foreign currency-denominated deposits	41,000	-	(*)	
Total			¥1,589,751	¥1,396,277	¥(864)	

(*) 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.

(*) 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 2017

(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	¥1,700,911	¥1,736,766	¥1,745,746	¥1,711,953	¥1,644,093	¥6,654,304	¥6,789,261	¥1,596,072	¥18,018
Securities									
Held-to-maturity securities	116,000	-	-	-	-	-	-	-	-
Deposits	1,363,677	-	-	-	-	-	-	-	-

As of 30 September 2018

(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	¥1,733,638	¥1,761,763	¥1,757,272	¥1,704,999	¥1,615,683	¥6,535,715	¥6,649,145	¥1,623,189	¥26,857
Securities	142,000	-	-	-	-	-	-	-	-
Held-to-maturity securities	914,685	-	-	-	-	-	-	-	-
Deposits									

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

As of 30 September 2017

(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	¥1,759,890	¥1,857,643	¥2,140,883	¥2,330,271	¥2,134,051	¥7,154,948	¥2,669,185	¥178,500	¥26,000
Borrowed money	25,000	55,000	10,000	-	-	55,500	-	-	-

As of 30 September 2018

(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	¥1,857,643	¥2,163,883	¥2,334,843	¥2,193,948	¥2,057,950	¥6,687,882	¥2,847,015	¥184,500	¥26,000
Borrowed money	55,000	10,000	1,000	-	51,500	37,000	-	-	-

6. Accumulated Depreciation

Accumulated depreciation of tangible fixed assets amounted to 686 million yen and 790 million yen as of 30 September 2017 and 2018, 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 20,243,899 million yen and 20,347,665 million yen as of 30 September 2017 and 2018, respectively.

8. Semiannual Net Income by Account

(For the six-month period ended 30 September 2017)

Semiannual net income of general account was 11,346 million yen, while there was no semiannual net income of management account.

(For the six-month period ended 30 September 2018)

Semiannual net income of general account was 9,598 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 2017 were as follows:

(Millions of yen)

Item	General account	Management account	Offset	Total
(Assets)				
Loans	¥14,074,246	¥9,522,881	-	¥23,597,128
Securities	116,000	-	-	116,000
Cash and bank deposits	1,363,677	-	-	1,363,677
Cash collateral paid for financial instruments	21,357	-	-	21,357
Other assets	4,325	5,596	-	9,922
Tangible fixed assets	2,555	-	-	2,555
Intangible fixed assets	1,328	-	-	1,328
Due from general account	-	678,692	¥(678,692)	-
Total assets	15,583,490	10,207,171	(678,692)	25,111,969
(Liabilities)				
Bonds	11,337,965	8,905,934	-	20,243,899
Borrowed money	145,500	-	-	145,500
Cash collateral received for financial instruments	99,639	-	-	99,639
Other liabilities	2,282	4,433	-	6,716
Reserve for bonuses	58	-	-	58
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	20	-	-	20
Fund for lending rate reduction	920,287	-	-	920,287
Basic fund for lending rate reduction	920,287	-	-	920,287
Due to management account	678,692	-	(678,692)	-
Reserves under special laws	2,200,000	1,243,137	-	3,443,137
Reserve for interest rate volatility	2,200,000	-	-	2,200,000
Management account reserve for interest rate volatility	-	1,205,451	-	1,205,451
Reserve for interest rate reduction	-	37,685	-	37,685
Total liabilities	15,384,502	10,153,505	(678,692)	24,859,314
(Net Assets)				
Capital	16,602	-	-	16,602
Retained earnings	177,126	-	-	177,126
General account appropriated surplus reserve	165,779	-	-	165,779
General account semiannual unappropriated retained earnings	11,346	-	-	11,346
Valuation, translation adjustments and others	5,260	-	-	5,260
Management account surplus reserve	-	53,666	-	53,666
Total net assets	198,988	53,666	-	252,654
Total liabilities and net assets	¥15,583,490	¥10,207,171	¥(678,692)	¥25,111,969

Semiannual balance sheets of general account and management account as of 30 September 2018 were as follows:

(Millions of yen)

Item	General account	Management account	Offset	Total
(Assets)				
Loans	¥15,119,876	¥8,288,388	-	¥23,408,265
Securities	142,000	-	-	142,000
Cash and bank deposits	914,685	-	-	914,685
Cash collateral paid for financial instruments	28,447	-	-	28,447
Other assets	3,801	4,803	-	8,604
Tangible fixed assets	2,494	-	-	2,494
Intangible fixed assets	982	-	-	982
Due from general account	-	490,455	¥(490,455)	-
Total assets	16,212,287	8,783,648	(490,455)	24,505,479
(Liabilities)				
Bonds	12,188,491	8,159,173	-	20,347,665
Borrowed money	154,500	-	-	154,500
Cash collateral received for financial instruments	35,580	-	-	35,580
Other liabilities	3,019	3,161	-	6,181
Reserve for bonuses	60	-	-	60
Reserve for bonuses for directors and corporate auditors	10	-	-	10
Reserve for retirement benefits	51	-	-	51
Reserve for retirement benefits for directors and corporate auditors	20	-	-	20
Fund for lending rate reduction	920,287	-	-	920,287
Basic fund for lending rate reduction	920,287	-	-	920,287
Due to management account	490,455	-	(490,455)	-
Reserves under special laws	2,200,000	563,504	-	2,763,504
Reserve for interest rate volatility	2,200,000	-	-	2,200,000
Management account reserve for interest rate volatility	-	538,140	-	538,140
Reserve for interest rate reduction	-	25,363	-	25,363
Total liabilities	15,992,477	8,725,839	(490,455)	24,227,861
(Net Assets)				
Capital	16,602	-	-	16,602
Retained earnings	199,035	-	-	199,035
General account appropriated surplus reserve	189,436	-	-	189,436
General account semiannual unappropriated retained earnings	9,598	-	-	9,598
Valuation, translation adjustments and others	4,172	-	-	4,172
Management account surplus reserve	-	57,808	-	57,808
Total net assets	219,809	57,808	-	277,618
Total liabilities and net assets	¥16,212,287	¥8,783,648	¥(490,455)	¥24,505,479

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.

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 2017 were as follows:

(Millions of yen)				
Item	General account	Management Account	Offset	Total
Income	¥67,073	¥112,057	¥(4,548)	¥174,582
Interest income	66,572	107,863	-	174,436
Fees and commissions	69	-	-	69
Other operating income	29	-	-	29
Other income	45	1	-	47
Contributions from fund for lending rate reduction	38	-	-	38
Others	6	1	-	8
Administrative fee for management account	356	-	(356)	-
Interest on due from general account	-	11	(11)	-
Transfer from general account for fund for lending rate reduction	-	4,181	(4,181)	-
Expenses	55,726	48,058	(4,548)	99,236
Interest expenses	48,644	46,459	-	95,104
Fees and commissions	78	73	-	151
Other operating expenses	1,275	1,077	-	2,352
General and administrative expenses	1,535	92	-	1,627
Interest on due to management account	11	-	(11)	-
Transfer to management account for fund for lending rate reduction	4,181	-	(4,181)	-
Administrative fee for management account	-	356	(356)	-
Ordinary income	11,346	63,998	-	75,345
Special gains	220,000	223,331	(220,000)	223,331
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	-	3,331	-	3,331
Special losses	220,000	287,330	(220,000)	287,330
Provision for reserve for interest rate volatility	220,000	-	-	220,000
Provision for management account reserve for interest rate volatility	-	67,330	-	67,330
Transfer to general account	-	220,000	(220,000)	-
Semiannual net income	¥11,346	¥-	¥-	¥11,346

Semiannual statements of income of general account and management account for the six-month period ended 30 September 2018 were as follows:

(Millions of yen)				
Item	General account	Management Account	Offset	Total
Income	¥66,327	¥98,427	¥(4,139)	¥160,614
Interest income	65,951	94,579	-	160,530
Fees and commissions	65	-	-	65
Other operating income	12	-	-	12
Other income	6	-	-	6
Administrative fee for management account	291	-	(291)	-
Interest on due from general account	-	16	(16)	-
Transfer from general account for fund for lending rate reduction	-	3,831	(3,831)	-
Expenses	56,728	38,237	(4,139)	90,826
Interest expenses	49,943	37,452	-	87,395
Fees and commissions	82	68	-	150
Other operating expenses	1,298	388	-	1,686
General and administrative expenses	1,557	36	-	1,593
Interest on due to management account	16	-	(16)	-
Transfer to management account for fund for lending rate reduction	3,831	-	(3,831)	-
Administrative fee for management account	-	291	(291)	-
Ordinary income	9,598	60,189	-	69,788
Special gains	-	403,191	-	403,191
Reversal of management account reserve for interest rate volatility	-	400,000	-	400,000
Reversal of reserve for interest rate reduction	-	3,191	-	3,191
Special losses	-	463,381	-	463,381
Provision for management account reserve for interest rate volatility	-	63,381	-	63,381
Transfer to the national treasury	-	400,000	-	400,000
Semiannual net income	¥9,598	¥-	¥-	¥9,598

11. Fair Value of Marketable Securities

Marketable held-to-maturity securities as of 30 September 2017 consisted of the following:

(Millions of yen)					
	Book value	Fair value	Difference	Unrealized gains	Unrealized losses
Negotiable certificates of deposit	¥116,000	¥116,000	-	-	-

Marketable held-to-maturity securities as of 30 September 2018 consisted of the following:

(Millions of yen)					
	Book value	Fair value	Difference	Unrealized gains	Unrealized losses
Negotiable certificates of deposit	¥142,000	¥142,000	-	-	-

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.

13. Notes on error correction

(1) Contents of errors

During fiscal 2018, JFM discovered that the provisioned amount from the general account and the reversal amount of reserve for interest rate reduction in the management account for the loans extended by the Predecessor in fiscal 2007 was posted incorrectly. In order to correct for this error, the management account reserve for interest rate volatility and the management account surplus reserve increased by 4,142 million yen and the reserve for interest rate reduction and the general account surplus reserve decreased by 2,453 million yen as of the beginning of the six month period ended 30 September 2018.

(2) Effects on the net assets as of the beginning balance of the six month period ended 30 September 2018

The effect of correcting this error on net assets of 1,688 million yen is shown as "Cumulative effects of error correction" on the "Semiannual Statements of Changes in Net Assets."