Japan Exchange Group, Inc. and its subsidiaries
Consolidated Financial Statements under IFRS
and Independent Auditor's Report

For the year ended March 31, 2021

Japan Exchange Group, Inc.

Contents

Deloitte.

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INDEPENDENT AUDITOR'S REPORT

To the Board of Directors of Japan Exchange Group, Inc.:

Opinion

We have audited the consolidated financial statements of Japan Exchange Group, Inc. and its subsidiaries (the "Group"), which comprise the consolidated statement of financial position as of March 31, 2021, and the consolidated statement of income, consolidated statement of comprehensive income, consolidated statement of changes in equity and consolidated statement of cash flows for the year then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Group as of March 31, 2021, and its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with International Financial Reporting Standards ("IFRSs").

Basis for Opinion

We conducted our audit in accordance with auditing standards generally accepted in Japan. Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Consolidated Financial Statements section of our report. We are independent of the Group in accordance with the provisions of the Code of Professional Ethics in Japan, and we have fulfilled our other ethical responsibilities as auditors. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Key Audit Matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements of the current period. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

1 Evaluation of IT controls for revenue recognition	
Key Audit Matter Description	How the Key Audit Matter Was Addressed in the Audit
As stated in Note "20. Operating Revenue," trading service revenue and clearing service revenue for this fiscal year were 53,171 million yen and 27,939 million yen, respectively, or 60.8% of operating revenue in the consolidated statements of income. These operating revenues mentioned above are accounted for based on trading and transaction amounts, transaction volume or notional amounts. Such amounts are then multiplied by certain commission rates derived from daily cash equity transactions, which are high in volume, future transactions and other transactions processed through the IT systems. Consequently, the recognition of such revenues is highly dependent on IT systems. The Group's IT systems have been periodically upgraded to appropriately and flexibly respond to diversification and sophistication of trading methods due to technological development and listing of new services, and to meet the needs of market users. In the current fiscal year, upgrade of the infrastructure related to a portion of systems critical to financial reporting, including the master data management system and the transaction data storage system, has been implemented. We consider stable operation of the IT systems essential to our direct verification of whether operating revenues are appropriately recorded and presented in the consolidated financial statements. Therefore, we consider it important to evaluate the effectiveness of the automated controls performed by a series of IT systems for trading, clearing and others. Furthermore, we considered that the upgrade of the infrastructure related to a portion of systems critical to financial reporting in this fiscal year would have the most significant impact on the stable operation of the IT systems. Consequently, we determined that careful consideration is necessary for evaluation of the effectiveness of general IT controls relevant to system development management and data migration in the changing areas. In addition, appropriate expertise and experiences in the exchange business and IT systems are required and essential in order to evaluate the effectiveness of these controls for the operating revenue transactions. Based on above, we determined that the evaluation of IT controls for revenue recognition is a key audit matter.	With the assistance of our IT specialists, we understood the series of data flow, data processing process and automated controls in IT systems from the beginning to the end of the operating revenue transactions and tested effectiveness of the controls designed for the stable operation of the IT systems. In addition, we performed substantive testing mainly on the operating revenue to obtain support evidence. Our audit procedures performed included the following, among others: • We tested the effectiveness of general IT controls by inspecting the evidence of approval of the authorized persons for program changes of the IT systems, authorization and upgrade of access rights to the key data files and periodical inspection of the access rights. • In order to test the effectiveness of application controls for data interface processing between IT systems, we evaluated whether trading and transaction amounts and transaction volume between the IT systems agree with each other. • In order to test the effectiveness of application controls in major IT systems for trading and clearing transaction, we evaluated the accuracy of the IT system algorithm by recalculating the transaction fees, access fees and clearing fees. • On October 1, 2020, an error occurred in the stock trading system "arrowhead." We inspected the Group's investigation results regarding the cause of the error, and evaluated the error's impact on the effectiveness of the general IT controls and application controls. In addition, for the infrastructure related a portion of systems important to financial reporting, which were upgraded or replaced in this fiscal year, we tested the effectiveness of internal controls, especially focusing on the controls in change management areas. The audit procedures performed included the following, among others: • In order to test the effectiveness of general IT controls for the system development management and data migration in the portion of systems important to financial reporting, we made inquiries of system administrators, and inspected materials related to the following items:

	—User division participation in and approval for system requirement definitions —Quality assessment of vendor-developed programs by acceptance testing —Final quality test via pre-release operation evaluation

2 Evaluation of software and software in progress	
Key Audit Matter Description	How the Key Audit Matter Was Addressed in the Audit
As stated in Note "13. Goodwill and Intangible Assets," software and software in progress were 27,116 million yen and 8,010 million yen, respectively as of March 31, 2021. As also mentioned in the above "1 Evaluation of IT controls for revenue recognition," the dependency on IT systems was extremely high in the exchange business, and the Group performed periodical upgrades of those systems in order to appropriately and flexibly respond to diversification and sophistication of trading methods due to technological development and listing of new services, and to meet the needs of market users. Given this situation, the Group made large amount of capital investments in IT systems upgraded in this fiscal year including the infrastructure of a portion of systems important to financial reporting, as well as the planned replacement and development of the derivatives trading system "J-GATE" and a system for clearing of government bonds in the next fiscal year. We recognized that careful evaluation was necessary for indications of impairment for new systems currently under development in cases where the Group is considering a policy change for the utilization of such systems. It was possible that the new systems would not be in service and be disposed or the part of related investments were not recoverable. In addition, as the estimated useful lives of the current systems could be changed due to the development of the new systems, we also deemed that careful consideration was necessary for the changes in accounting estimates of useful lives of the current systems in connection with the Group was reviewing the estimated useful lives of the current system for the operation of new systems, as described in Note "5. Significant Accounting Estimates and Judgments Involving Estimations." Due to the above, we determined that the evaluation of the recoverability of software and software in progress is a key audit matter.	With the assistance of our IT specialists, we evaluated the effectiveness of internal controls designed for evaluation of software and software in progress and performed audit procedures described below in order to examine whether the impairment indications exist for new systems under development, including the infrastructure of a portion of systems upgraded in this fiscal year important to financial reporting, the planned replacement and development of "J-GATE" and a system for clearing of government bonds in the next fiscal year. • For new systems under development, we made inquiries of system administrators whether there have been significant changes in utilization and development policies since planning, and reviewed evidence such as minutes of the system information division meetings. Additionally, in order to examine whether the Group reviewed useful lives of the current systems properly, we performed the following procedures, among others: • In order to examine whether the Group completely identified the current systems whose estimated useful lives would be subject to change and made the changes in the useful lives appropriately, we reviewed approval documents and related support documents obtained from information systems divisions. • In order to examine whether depreciation is accurately calculated for the current systems whose estimated useful lives were changed, we conducted a recalculation.

Responsibilities of Management and the Audit Committee for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with IFRSs, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern in accordance with IFRSs and using the going concern basis of accounting unless management either intends to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

The Audit Committee is responsible for overseeing the Officers and Directors' execution of duties relating to the design and operating effectiveness of the controls over the Group's financial reporting process.

Auditor's Responsibilities for the Audit of the Consolidated Financial Statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with auditing standards generally accepted in Japan will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As part of an audit in accordance with auditing standards generally accepted in Japan, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks. The procedures selected depend on the auditor's judgment. In addition, we obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

- Obtain, when performing risk assessment procedures, an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.

- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.

- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.

- Evaluate whether the overall presentation and disclosures of the consolidated financial statements are in accordance with IFRSs, as well as the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with the Audit Committee regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide the Audit Committee with a statement that we have complied with relevant ethical requirements regarding independence, and communicate with it all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with the Audit Committee, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

Interest Required to Be Disclosed by the Certified Public Accountants Act of Japan

Our firm and its designated engagement partners do not have any interest in the Group which is required to be disclosed pursuant to the provisions of the Certified Public Accountants Act of Japan.

Deloitte Touche Tohmatsu LLC

June 9, 2021

Consolidated Financial Statements

Consolidated Statement of Financial Position

	Notes	As of March 31, 2020	As of March 31, 2021
		Millions of yen	Millions of yen
Assets			
Current assets			
Cash and cash equivalents	8,25	71,883	108,209
Trade and other receivables	9,25	16,686	14,936
Clearing business financial assets	25	60,329,672	53,649,780
Specified assets for deposits from clearing participants	10,25	6,549,099	5,996,143
Specified assets for legal guarantee funds	10,25	762	673
Income tax receivable		5,922	5,286
Other financial assets	11,25	117,400	116,800
Other current assets		1,837	2,033
Total current assets		67,093,263	59,893,862
Non-current assets			
Property and equipment	12,29	14,798	10,697
Goodwill	13	67,374	67,374
Intangible assets	13	35,045	35,977
Retirement benefit assets	14	5,642	8,204
Investments accounted for using the equity method	15	14,703	16,736
Specified assets for default compensation reserve funds	10,25	27,948	27,948
Other financial assets	11,25	18,156	5,309
Other non-current assets		6,049	6,181
Deferred tax assets	16	3,321	3,385
Total non-current assets		193,039	181,815
Total assets		67,286,302	60,075,678

	Notes	As of March 31, 2020 Millions of yen	As of March 31, 2021 Millions of yen
Liabilities and equity			
Liabilities			
Current liabilities			
Trade and other payables	17,25, 26	6,643	4,132
Bonds and loans payable	18,25, 26	32,500	32,500
Clearing business financial liabilities	25,26	60,329,672	53,649,780
Deposits from clearing participants	10,25, 26	6,549,099	5,996,143
Legal guarantee funds	10,25, 26	762	673
Trading participant security money	10,25, 26	8,248	8,161
Income taxes payable		10,289	15,038
Other current liabilities	29	10,062	8,746
Total current liabilities		66,947,278	59,715,175
Non-current liabilities			
Bonds and loans payable	18,25, 26	19,953	19,960
Retirement benefit liabilities	14	8,866	9,018
Other non-current liabilities	29	2,162	2,336
Deferred tax liabilities	16	2,665	418
Total non-current liabilities		33,648	31,732
Total liabilities		66,980,926	59,746,908
Equity			
Share capital	19	11,500	11,500
Capital surplus	19	39,716	39,716
Treasury shares	19	(1,548)	(1,825)
Other components of equity	19	5,602	992
Retained earnings	10,19	242,958	271,006
Total equity attributable to owners of the parent company	26	298,228	321,391
Non-controlling interests		7,146	7,378
Total equity		305,375	328,769
Total liabilities and equity		67,286,302	60,075,678

Consolidated Statement of Income

	Notes	Fiscal year ended March 31, 2020	Fiscal year ended March 31, 2021
		Millions of yen	Millions of yen
Revenue			
Operating revenue	20	123,688	133,343
Other revenue		975	359
Total revenue		124,663	133,702
Expenses			
Operating expenses	13,14,21,29	58,532	61,394
Other expenses		54	5
Total expenses		58,587	61,399
Share of income of investments accounted for using the equity method	15	2,457	2,263
Operating income		68,533	74,565
Financial income	22	665	266
Financial expenses	22	103	99
Income before income taxes		69,095	74,732
Income tax expenses	16	20,781	22,714
Net income		48,314	52,017
Net income attributable to			
Owners of the parent company		47,609	51,389
Non-controlling interests		705	628
Net income		48,314	52,017
Earnings per share			
Basic (Yen)	23	88.91	96.00
Diluted (Yen)	23	—	—

Consolidated Statement of Comprehensive Income

	Notes	Fiscal year ended March 31, 2020	Fiscal year ended March 31, 2021
		Millions of yen	Millions of yen
Net income		48,314	52,017
Other comprehensive income			
Items that will not be reclassified to profit or loss			
Net gain on revaluation of financial assets measured at fair value through other comprehensive income	25	1,930	271
Remeasurements of defined benefit plan	14	(49)	1,813
Share of other comprehensive income of investments accounted for using the equity method	15	0	0
Other comprehensive income, net of tax	27	1,881	2,084
Comprehensive income		50,195	54,102
Comprehensive income attributable to:			
Owners of the parent company		49,490	53,474
Non-controlling interests		705	628
Comprehensive income		50,195	54,102

Consolidated Statement of Changes in Equity

		Equity attributable to owners of the parent company				
					Other components of equity	
	Notes	Share capital	Capital surplus	Treasury shares	Net gain (loss) on revaluation of financial assets measured at fair value through other com-prehensive income	Remeasure-ments of defined benefit plan
		Millions of yen	Millions of yen	Millions of yen	Millions of yen	Millions of yen
Balance as of April 1, 2019		11,500	39,716	(1,213)	7,688	—
Net income		—	—	—	—	—
Other comprehensive income, net of tax		—	—	—	1,930	(49)
Total comprehensive income		—	—	—	1,930	(49)
Acquisitions of treasury shares	19	—	—	(350)	—	—
Dividends paid	28	—	—	—	—	—
Transfer from other components of equity to retained earnings		—	—	—	(4,016)	49
Other		—	—	15	—	—
Total transactions with the owners		—	—	(334)	(4,016)	49
Balance as of March 31, 2020		11,500	39,716	(1,548)	5,602	—
Net income		—	—	—	—	—
Other comprehensive income, net of tax		—	—	—	271	1,813
Total comprehensive income		—	—	—	271	1,813
Acquisitions of treasury shares	19	—	—	(366)	—	—
Dividends paid	28	—	—	—	—	—
Changes in interests in subsidiaries without losing control		—	—	—	—	—
Transfer from other components of equity to retained earnings		—	—	—	(4,881)	(1,813)
Other		—	—	90	—	—
Total transactions with the owners		—	—	(276)	(4,881)	(1,813)
Balance as of March 31, 2021		11,500	39,716	(1,825)	992	—

	Notes	Equity attributable to owners of the parent company			Non-controlling interests	Total equity
		Other components of equity	Retained earnings	Total		
		Total				
		Millions of yen	Millions of yen	Millions of yen	Millions of yen	Millions of yen
Balance as of April 1, 2019		7,688	227,317	285,009	6,441	291,450
Net income		—	47,609	47,609	705	48,314
Other comprehensive income, net of tax		1,881	—	1,881	—	1,881
Total comprehensive income		1,881	47,609	49,490	705	50,195
Acquisitions of treasury shares	19	—	—	(350)	—	(350)
Dividends paid	28	—	(35,935)	(35,935)	—	(35,935)
Transfer from other components of equity to retained earnings		(3,966)	3,966	—	—	—
Other		—	—	15	—	15
Total transactions with the owners		(3,966)	(31,968)	(36,270)	—	(36,270)
Balance as of March 31, 2020		5,602	242,958	298,228	7,146	305,375
Net income		—	51,389	51,389	628	52,017
Other comprehensive income, net of tax		2,084	—	2,084	—	2,084
Total comprehensive income		2,084	51,389	53,474	628	54,102
Acquisitions of treasury shares	19	—	—	(366)	—	(366)
Dividends paid	28	—	(30,035)	(30,035)	—	(30,035)
Changes in interests in subsidiaries without losing control		—	—	—	(396)	(396)
Transfer from other components of equity to retained earnings		(6,694)	6,694	—	—	—
Other		—	—	90	—	90
Total transactions with the owners		(6,694)	(23,341)	(30,311)	(396)	(30,708)
Balance as of March 31, 2021		992	271,006	321,391	7,378	328,769

Consolidated Statement of Cash Flows

	Notes	Fiscal year ended March 31, 2020	Fiscal year ended March 31, 2021
		Millions of yen	Millions of yen
Cash flows from operating activities			
Income before income taxes		69,095	74,732
Depreciation and amortization		16,499	16,783
Financial income		(665)	(266)
Financial expenses		96	93
Share of income of investments accounted for using the equity method		(2,457)	(2,263)
(Increase) decrease in trade and other receivables		(5,246)	1,750
Increase (decrease) in trade and other payables		420	(288)
(Increase) decrease in retirement benefit assets		230	(2,562)
Increase in retirement benefit liabilities		12	151
Other		(424)	4,010
Subtotal		77,560	92,140
Interest and dividends received		899	498
Interest paid		(96)	(93)
Income taxes paid		(21,482)	(20,794)
Cash flows generated from operating activities		56,881	71,750
Cash flows from investing activities			
Payments into time deposits		(117,400)	(116,300)
Proceeds from withdrawal of time deposits		113,100	117,400
Purchase of property and equipment		(1,199)	(2,880)
Purchase of intangible assets		(12,379)	(12,558)
Proceeds from sales of investment securities		11,585	12,719
Payments for acquisition of subsidiaries	7	(3,165)	—
Other		23	106
Cash flows used in investing activities		(9,434)	(1,513)
Cash flows from financing activities			
Proceeds from loans payable		9,000	—
Repayments of loans payable		(9,000)	—
Repayments of lease liabilities		(3,125)	(3,133)
Dividends paid		(35,935)	(30,035)
Purchase of treasury shares		(350)	(366)
Other		—	(397)
Cash flows used in financing activities		(39,411)	(33,932)
Net increase (decrease) in cash and cash equivalents		8,035	36,305
Cash and cash equivalents at the beginning of the year		63,891	71,883
Effect of changes in exchange rate on cash and cash equivalents		(43)	19
Cash and cash equivalents at the end of the year	8	71,883	108,209

Notes to Consolidated Financial Statements

1. Reporting Entity

Japan Exchange Group, Inc. (hereinafter the "Company") is a stock company based in Japan, and the address of the registered head office is 2-1 Nihombashi Kabutocho, Chuo-ku, Tokyo. The Company’s consolidated financial statements, the reporting date of which is March 31, 2021, are composed of financial statements of the Company and its subsidiaries (hereinafter the "Group") and the Group's interests in associates. The Group operates its businesses under regulations of the Financial Instruments and Exchange Act, the Commodity Derivatives Act and related laws and regulations, and its major line of business is establishing and operating financial instruments exchange markets and assuming financial instruments obligations.

2. Basis of Preparation

(1)Compliance with IFRS

As the Company satisfies all the requirements prescribed in Article 1-2 of the Ordinance on Terminology, Forms, and Preparation Methods of Consolidated Financial Statements (Ordinance of the Ministry of Finance No. 28 of 1976; hereinafter the "Ordinance on CFS"), the Group's consolidated financial statements are prepared in accordance with International Financial Reporting Standards (hereinafter "IFRS") pursuant to the provision of Article 93 of the Ordinance on CFS.

(2)Approval of Consolidated Financial Statements

The Group's consolidated financial statements were approved by Kiyota Akira, Director and Representative Executive Officer, Group CEO, and Tabata Atsushi, Executive Officer & CFO, on June 9, 2021.

(3)Basis of Measurement

As stated in Note "3. Significant Accounting Policies," the Group's consolidated financial statements are prepared on the historical cost basis, except for certain financial instruments, etc. measured at fair value.

(4)Functional Currency and Presentation Currency

The Group's consolidated financial statements are presented in Japanese yen, which is the functional currency of the Company, and amounts less than ¥1 million are rounded down.

3. Significant Accounting Policies

(1) Basis of Consolidation

1) Subsidiaries

A subsidiary is an entity that is controlled by the Group. In determining whether an entity is a subsidiary, various elements related to assessment of control such as holding of voting rights, composition of members of a governing body including the board of directors and influence over decision making on financial and operating policies are taken into account comprehensively.

All subsidiaries are consolidated from the date on which the Group obtains control until the date on which the Group loses the control.

The balances of receivables from, payables to, and transactions with subsidiaries, and unrealized gains that arise from intragroup transactions are eliminated in the preparation of the consolidated financial statements.

2) Associates

An associate is an entity which is not controlled by the Group but for which the Group has significant influence over the financial and operating policies. If the Group holds 20% or more and 50% or less of an entity's voting power, it is presumed that the Group has significant influence over the entity.

Investments in associates, which are accounted for using the equity method, are measured at cost at the time of acquisition, and the amount of the investments is subsequently changed according to changes in the Group's share of net assets of the associates. In this case, the amount equivalent to the Group's share of net profit or loss of associates is recorded in the consolidated statement of income. The amount equivalent to the Group's share of other comprehensive income of associates is recorded as other comprehensive income in the consolidated statement of comprehensive income.

Profits on significant internal transactions are eliminated in proportion to the share in the associate.

(2) Business Combinations

Business combinations are accounted for using the acquisition method.

Consideration transferred in a business combination is measured as the sum of the acquisition-date fair values of the assets transferred, the liabilities assumed and the equity instruments issued by the Company in exchange for control over an acquiree. On the acquisition date, identifiable assets and liabilities are recognized at fair value as of the acquisition date, except for assets and liabilities to be measured at an amount other than fair value under IFRS 3 "Business Combinations," such as deferred tax assets, deferred tax liabilities and assets and liabilities on employee benefits, which are recognized at the value specified in IFRS 3 "Business Combinations."

For each business combination, the Group chooses whether non-controlling interests are measured at fair value or the proportionate share of identifiable net assets of the acquiree on the acquisition date.

When the total of the consideration transferred and the amount of non-controlling interests in an acquiree exceeds the fair value of identifiable assets and liabilities on the acquisition date, the excess is recognized as goodwill in the consolidated statement of financial position. In contrast , when th e total is lower than the fair value of identifiable assets and liabilities, the difference is immediately recognized as profit in the consolidated statement of income. Acquisition-related costs incurred are accounted for as expenses. In the case of a business combination in which control is achieved in stages, the equity interests in the acquiree previously held by the Group are revalued at fair value as of the acquisition date and any resulting gain or loss is recognized in profit or loss.

(3) Foreign Currency Translation

Foreign Currency Transactions

Foreign currency transactions are translated into the functional currency at the rates of exchange prevailing at the dates of transactions.

Monetary assets and liabilities denominated in foreign currencies at the end of each fiscal year are translated into the functional currency at the rates of exchange prevailing at the end of the fiscal year. Differences arising from the translation are recognized in profit or loss. However, exchange differences arising from the translation of financial assets measured at fair value through other comprehensive income are recognized as other comprehensive income.

(4) Cash and Cash Equivalents

Cash and cash equivalents consist of cash on hand, demand deposits and short-term investments that are readily convertible to cash and subject to insignificant risk of changes in value and due within three months from the date of acquisition.

(5) Financial Instruments

1) Financial Assets

(ⅰ) Initial Recognition and Measurement

The Group recognizes a financial asset when the Group becomes a party to the contractual provisions of the financial instrument.

The Group classifies financial assets as those measured at amortized cost if both of the following conditions are met on the basis of facts and circumstances that existed at initial recognition of the assets. Otherwise, financial assets are classified as those measured at fair value through profit or loss.

・ The asset is held within a business model whose objective is to hold the asset in order to collect contractual cash flows.
・ The contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

At initial recognition, the Group may make an irrevocable designation of recognizing subsequent changes in fair value of investments in equity instruments as other comprehensive income.

All financial assets are initially measured at fair value plus transaction costs that are directly attributable to the financial assets, except for when they are classified as financial assets measured at fair value through profit or loss.

(ⅱ) Subsequent Measurement

After initial recognition, financial assets are measured based on the following classifications:

(a) Financial Assets Measured at Amortized Cost

Financial assets measured at amortized cost are measured using the effective interest method.

(b) Financial Assets Measured at Fair Value through Profit or Loss

Financial assets measured at fair value through profit or loss are measured at fair value, and changes in the fair value are recognized in profit or loss.

(c) Financial Assets Measured at Fair Value through Other Comprehensive Income

Financial assets measured at fair value through other comprehensive income are measured at fair value, and changes in the fair value are recognized as other comprehensive income. When such a financial asset is derecognized or the decline in its fair value compared to its acquisition cost is significant, the amount recognized in other comprehensive income is transferred directly to retained earnings, not being recognized in profit or loss.

However, dividend income from the financial assets is recognized in profit or loss.

(ⅲ) Derecognition

Financial assets are derecognized when contractual rights to cash flows from the financial assets expire, or when contractual rights to receive cash flows generated from the financial assets are transferred in a transaction where substantially all the risks and rewards of the ownership of those financial assets are transferred.

2) Impairment of Financial Assets Measured at Amortized Cost

For financial assets measured at amortized cost, allowance for doubtful accounts is recognized for expected credit losses. Expected credit losses are calculated based on historical loss experience, future recoverable amount and others.

For trade receivables, allowance for doubtful accounts is always recognized at an amount equal to lifetime expected credit losses. For financial assets other than trade receivables, in principle, allowance for doubtful accounts is measured at an amount equal to 12-month expected credit losses. However, if credit risk has increased significantly since initial recognition, allowance for doubtful accounts is measured at an amount equal to lifetime expected credit losses.

The assessment of whether credit risk has increased significantly is based on changes in the risk of default occurring, and past-due information; financial difficulty of the borrower and others are taken into account in the assessment.

If it is considered extremely difficult to recover all or part of a financial asset, the asset is deemed to be in default and treated as a credit-impaired financial asset. In addition, when it is reasonably determined that all or part of a financial asset cannot be recovered, the carrying amount of the financial asset is directly written off.

For trade receivables that are not credit impaired, because these receivables consist of many homogeneous business partners, expected credit losses are measured collectively with the receivables grouped together.

Provision of allowance for doubtful accounts for financial assets is recognized in profit or loss. If any event that reduces the allowance for doubtful accounts arises, reversal of allowance for doubtful accounts is recognized in profit or loss.

3) Financial Liabilities

(ⅰ) Initial Recognition and Measurement

The Group recognizes a financial liability when the Group becomes a party to the contractual provisions of the financial instrument.

As a general rule, financial liabilities are classified as financial liabilities measured at amortized cost. However, derivative liabilities and financial liabilities held for trading are classified as financial liabilities measured at fair value through profit or loss. The classification is determined at initial recognition of financial liabilities.

All financial liabilities are measured at fair value at initial recognition. However, financial liabilities measured at amortized cost are measured at fair value less transaction costs that are directly attributable to the financial liabilities.

(ⅱ) Subsequent Measurement

After initial recognition, financial liabilities are measured based on the following classifications:

(a) Financial Liabilities Measured at Amortized Cost

Financial liabilities measured at amortized cost are measured using the effective interest method.

(b) Financial Liabilities Measured at Fair Value through Profit or Loss

Financial liabilities measured at fair value through profit or loss are measured at fair value, and changes in the fair value are recognized in profit or loss.

(ⅲ) Derecognition

Financial liabilities are derecognized when the contractual obligation is discharged, canceled or expired.

4) Clearing Business Financial Assets and Clearing Business Financial Liabilities

Japan Securities Clearing Corporation, a subsidiary of the Company, as a financial instruments clearing organization and commodity clearing organization, presents receivables and payables related to transactions to be cleared as clearing business financial assets and clearing business financial liabilities (hereinafter "clearing business financial assets and liabilities") and provides a settlement guarantee by assuming obligations for the transactions conducted by market participants and acting as a party to the transactions.

For cash equity transactions at financial instruments exchanges, and sales and purchase transactions of Japanese government bonds at over-the-counter markets, clearing business financial assets and liabilities are initially recognized and simultaneously derecognized on the settlement date basis.

Futures transactions are initially recognized as clearing business financial assets and liabilities on the transaction date. Subsequently, those transactions are measured at fair value and their valuation differences are recognized in profit or loss. Since this company receives and pays such profit or loss as net settlements from and to clearing participants on a daily basis, the clearing business financial assets and liabilities are derecognized upon receipt or payment.

Option transactions are initially recognized on the transaction date, while interest rate swap transactions and credit default swap transactions at over-the-counter markets (hereinafter "OTC derivative transactions") are initially recognized on the date when the obligation is assumed. Subsequently, these transactions are measured at fair value and their valuation differences are recognized in profit or loss.

Over-the-counter transactions of Japanese government bonds that are transactions with repurchase or resale agreements and cash-secured bond lending or borrowing transactions (hereinafter "repo transactions") are initially recognized on the commencement date of transactions and subsequently measured at fair value.

Clearing business financial assets and liabilities recognized are offset and presented as a net amount in the consolidated statement of financial position when the company currently holds a legally enforceable right to set off the amounts and intends either to settle on a net basis or to realize the asset and settle the liability simultaneously.

Because clearing business financial assets and liabilities are recognized at the same amount, profit or loss arising from changes in their fair value is also the same amount. Hence, the profit or loss is eliminated and is not presented in the consolidated statement of income.

(6) Property and Equipment

Property and equipment are measured by using the cost model. After initial recognition, they are stated at cost less accumulated depreciation and accumulated impairment losses.

The acquisition cost includes any costs directly attributable to the acquisition of the asset.

Depreciation of property and equipment is recorded using the straight-line method over their estimated useful lives. The estimated useful lives of major asset items are as follows:

・ Buildings: 2 to 50 years

・ Information system equipment: 5 years

The estimated useful lives, residual values and depreciation method are reviewed at least at each fiscal year end and when any changes are made, such changes are applied prospectively as changes in accounting estimates.

Property and equipment are derecognized when they are disposed of, or when future economic benefits are no longer expected from their continued use or disposal. A gain or loss arising from derecognition of an item of property and equipment is recognized in profit or loss when the respective asset item is derecognized.

(7) Goodwill and Intangible Assets

1) Goodwill

Measurement of goodwill at initial recognition is described in Note "3. Significant Accounting Policies (2)Business Combinations." After initial recognition, goodwill is measured at cost less accumulated impairment losses. Goodwill is not amortized. It is tested for impairment at the end of each fiscal year or whenever there is any indication of impairment, and impairment losses are recognized, if any. No reversal of impairment losses is made.

2) Intangible Assets

Intangible assets are measured by using the cost model. After initial recognition, intangible assets are measured at cost less accumulated amortization and accumulated impairment losses.

Expenditures in the development phase are recognized as intangible assets when all of the following have been demonstrated: 1) the Group has the ability to measure those expenditures reliably, 2) the technical feasibility of completing the intangible asset, 3) the intent and ability to use or sell the intangible asset, 4) the availability of adequate resources to use or sell the intangible asset, and 5) a high probability that the intangible asset will generate future economic benefits.

Amortization of intangible assets is recorded using the straight-line method over their estimated useful lives. The estimated useful life of software, a major asset item, is five years.

The estimated useful lives, residual values and amortization method are reviewed at each fiscal year end and when any changes are made, such changes are applied prospectively as changes in accounting estimates. Changes in development plans for software under development may have a significant impact on the consolidated financial statements.

(8) Right-of-Use Assets

For lease transactions as a lessee, right-of-use assets are measured at acquisition cost and lease liabilities are measured at the present value of the total lease payments payable at the lease commencement date.

Right-of-use assets are depreciated using the straight-line method over the shorter of their estimated useful lives or lease terms.

Lease payments are recognized by allocating them to finance costs and repayments of lease liabilities.

For short-term leases (with a lease term of 12 months or less) and leases of low-valued assets, the total lease payments are recognized by the straight-line method over a lease term.

(9) Impairment of Non-financial Assets

The Group assesses at the end of each fiscal year whether there is any indication that an asset may be impaired. If any such indication exists or in cases where an impairment test is required to be performed each fiscal year, the recoverable amount of the asset is estimated. In cases where the recoverable amount cannot be estimated for an individual asset, it is estimated for the cash-generating unit to which the asset belongs. The recoverable amount is determined at the higher of an asset's or cash-generating unit's fair value less costs to sell it or its value in use. If the carrying amount of an asset or cash-generating unit exceeds its recoverable amount, an impairment loss is recognized, and the carrying amount is reduced to its recoverable amount. In determining value in use, estimated future cash flows are discounted to the present value, using pretax discount rates that reflect current market assessments of the time value of money and the risks specific to the asset. In determining fair value less costs to sell of an asset or cash-generating unit, the Group uses an appropriate valuation model supported by available fair value indicators.

The Group assesses at the end of each fiscal year whether there is any indication that an impairment loss recognized in prior years for an asset other than goodwill may have decreased or may no longer exist. If any such indication exists, the recoverable amount of the asset or cash-generating unit is re-estimated. In cases where the recoverable amount exceeds the carrying amount of the asset or cash-generating unit, the impairment loss is reversed up to the lower of the recoverable amount determined or the carrying amount (net of depreciation) that would have been determined if no impairment loss had been recognized in prior years.

Information on goodwill is described in Note "13. Goodwill and Intangible Assets (4) Impairment Test for Goodwill."

(10) Employee Retirement Benefits

The Company and some of its subsidiaries have introduced contract-type defined benefit corporate pension plans and lump-sum retirement benefit plans as defined benefit plans, and defined contribution plans.

1) Defined Benefit Plans

For each plan, the Group calculates the present value of defined benefit obligations, and related current service cost and past service cost using the projected unit credit method. A discount rate is determined by reference to the market yields as of the end of the fiscal year, depending on the expected date of benefit payment in each plan, on high-quality corporate bonds.

Net defined benefit liability (asset) is calculated by deducting the fair value of the plan assets (including adjustments for the asset ceiling for defined benefit plan and minimum funding requirements, if necessary) from the present value of the defined benefit obligation. The net amount of interest on the net defined benefit liability (asset) is recognized as operating expenses.

Remeasurements of defined benefit plans are recognized in full as other comprehensive income in the period when they are incurred and transferred to retained earnings immediately. Past service costs are recognized in profit or loss in the period when they are incurred.

Except when the Group has a legally enforceable right to use surplus in defined benefit plans to settle obligations under the other plans, assets and liabilities are not set off between the plans.

2) Defined Contribution Plans

Cost for retirement benefits is recognized as expenses at the time of contribution.

(11) Revenue

1) Revenue from Contracts with Customers

The Group recognizes revenue from contracts with customers based on the five-step approach detailed below.

Step 1: Identify the contract(s) with a customer
Step 2: Identify the performance obligations in the contract
Step 3: Determine the transaction price
Step 4: Allocate the transaction price to the performance obligations in the contract
Step 5: Recognize revenue when the entity satisfies a performance obligation

The Group is primarily engaged in the financial instruments exchange business and its revenue consists mainly of revenue related to the rendering of services, such as trading services revenue and clearing services revenue. The Group considers that its performance obligations are satisfied at the points in time when the services are provided to customers, and accordingly, revenues are recognized at said points.

2) Dividend

Dividends are recognized when the rights of shareholders receiving payments are confirmed.

(12) Income Taxes

Income taxes consist of current taxes and deferred taxes and are recognized in profit or loss, except for items arising from business combinations and items that are recognized in other comprehensive income or directly in equity.

Current taxes are the amount expected to be paid or recovered on taxable profit for the current fiscal year, which is calculated using the tax rates that have been enacted or substantively enacted by the end of the fiscal year, with any tax adjustments for prior years.

Deferred taxes are recognized for temporary differences between the carrying amount of assets or liabilities for accounting purposes and the amount of assets or liabilities for tax purposes in accordance with the asset and liability approach. Deferred taxes are not recognized for the following temporary differences arising from:

- the initial recognition of goodwill
- deductible temporary differences arising from investments in subsidiaries and associates to the extent that it is probable that the temporary differences will not reverse in the foreseeable future
- taxable temporary differences arising from investments in subsidiaries and associates to the extent that the timing of the reversal of the temporary differences are controlled and that it is probable that the temporary differences will not reverse in the foreseeable future

Deferred taxes are measured using the tax rates for the fiscal year when the temporary difference is expected to reverse in accordance with the laws that have been enacted or substantively enacted by the end of the fiscal year.

Deferred tax assets and liabilities are offset when the Group has a legally enforceable right to set off current tax assets against current tax liabilities and income taxes are levied by the same taxation authority on the same taxable entity.

Deferred tax assets are recorded for tax loss carryforwards for tax purposes, refunds by carrying back tax losses and deductible temporary differences to the extent that it is probable that sufficient taxable profits will be available against which they can be utilized. Deferred tax assets are reduced to the extent that it is no longer probable that the related tax benefits will be realized.

The Company and some of its subsidiaries applied for approval of the consolidated taxation system in the current fiscal year and the said taxation system will be applied from the next fiscal year. Accordingly, from the current fiscal year, for tax effect accounting, accounting processes are conducted on the presumption that the consolidated taxation system will be applied.

(13) Treasury Shares

Treasury shares are measured at cost and deducted from equity. No gain or loss is recognized on the purchase, sale or cancellation of treasury shares. Any difference between the carrying amount and the consideration paid is recognized in equity.

(14) Contingent Liabilities

The Group discloses contingent liabilities in the notes to the consolidated financial statements if it has possible obligations at the end of the fiscal year but cannot confirm whether they are obligations as of that date, or if the obligations do not meet the recognition criteria of a provision (a present obligation (legal or constructive obligation) is held as a result of past events, it is probable that the settlement of the obligation is required, and the amount of that obligation can be reliably estimated).

4. Significant Accounting Estimates and Judgments Involving Estimations

In preparing consolidated financial statements in accordance with IFRS, management is required to make judgments, estimates and assumptions that affect the application of accounting policies and the amounts of assets, liabilities, income and expenses. Given their nature, actual results may differ from these estimates.

Estimates and their underlying assumptions are continuously reviewed. The effects of a change in any accounting estimate are recognized in the fiscal period of the change and future periods.

Judgments and estimates made by management is required that may have a significant effect on the amounts recognized in the consolidated financial statements are as follows:

- Estimated useful lives of property and equipment and intangible assets (Note 3. Significant Accounting Policies (6) and (7))
- Impairment of non-financial assets (Notes 12. Property and Equipment and 13. Goodwill and Intangible Assets)
- Lease terms of right-of-use assets (Note 29. Leases)
- Recoverability of deferred tax assets (Note 16. Income Taxes)
- Measurement of defined benefit obligations (Note 14. Employee Benefits)
- Fair value measurement of financial instruments (Note 25. Financial Instruments)

5. New Accounting Standards Not Yet Applied by the Group

There are no such accounting standards that have a significant impact on the Group's consolidated financial statements.

6. Operating Segments

(1) General Information

This information is omitted since the Group has a single segment consisting of the financial instruments exchange business.

(2) Information about Products and Services

This information is omitted since similar information is disclosed in Note "20. Operating Revenue."

(3) Information about Geographical Areas

1) Operating Revenue

This information is omitted since operating revenue from external customers in Japan makes up most of operating revenue recorded in the consolidated statement of income.

2) Non-current Assets

This information is omitted since the amount of non-current assets located in Japan makes up most of the amount of non-current assets recorded in the consolidated statement of financial position.

(4) Information by Major Customer

This information is omitted since there is no single customer that makes up 10% or more of the operating revenue recorded in the consolidated statement of income.

7. Business Combinations

Fiscal year ended March 31, 2020

(1) Outline of Business Combination

1) Name of the Acquiree and Description of its Business

Name of the acquiree	Tokyo Commodity Exchange, Inc.
Description of business	Establishment and operation of markets necessary for futures trading of commodities and commodity indices and other accompanying business, under Commodity Derivatives Act

2) Reasons for the Business Combination

To improve the creditworthiness of Tokyo Commodity Exchange, Inc. and invigorate Japan's derivatives market through the creation of a comprehensive exchange

3) Date of the Business Combination

October 1, 2019

4) Legal Form of the Business Combination

Acquisition of shares

5) Ratio of Acquired Voting Rights

100.00%

(2) Contribution for Acquisition

	(Millions of yen)
Cash	5,704
Total consideration for acquisition	5,704

The acquisition-related costs associated with this business combination of ¥312 million were recorded as "Operating expenses."

(3) Fair Value of Assets Acquired and Liabilities Assumed at the Date of the Business Combination

	(Millions of yen)
Cash and cash equivalents	2,538
Current assets (excluding cash and cash equivalents)	81,033
Non-current assets	22,704
Total assets	106,276
Current liabilities	98,262
Non-current liabilities	1,634
Total liabilities	99,896
Fair value of assets acquired and liabilities assumed (net value)	6,380

(4) Amount of and Reason for Negative Goodwill Arising from the Business Combination

1) Amount of Negative Goodwill

¥675 million

2) Reason for Negative Goodwill

The assets acquired and liabilities assumed were measured at fair value at the time of the business combination, and then compared with the contribution for acquisition. The negative goodwill arising from said difference was recorded as "Other revenue."

(5) Breakdown of Cash Flows from the Acquisition

	(Millions of yen)
Cash and cash equivalents paid for the acquisition	5,704
Cash and cash equivalents held by the acquiree at the time of the acquisition	2,538
Payments for acquisition of subsidiaries	3,165

(6) Effects on Financial Results

Neither the profit and loss information from the acquisition date of the business combination to March 31, 2020 nor the profit and loss information calculated by assuming that the business combination is completed at the beginning of the current fiscal year is disclosed, as their effects on the consolidated financial statements are not significant.

Fiscal year ended March 31, 2021

Transaction Under Common Control, etc.

Outline of Transaction

1) Names and Businesses of the Combiner and Combinee

Name of the combiner	Japan Securities Clearing Corporation
Description of business	- Financial instruments obligation assumption services, etc - Businesses incidental or related to the above services

Name of the combinee	Japan Commodity Clearing House Co., Ltd.
Description of business	- Business of assuming commodity transaction debts - Businesses incidental or related to the above business

2) Date of Business Combination

July 27, 2020

3) Legal Form of Business Combination

Absorption-type merger with Japan Securities Clearing Corporation as the surviving company and Japan Commodity Clearing House Co., Ltd. as the non-surviving company

4) Name of Combined Enterprise

Japan Securities Clearing Corporation

5) Other Matters regarding the Transaction

The transaction aims to contribute to strengthening international competitiveness of the Japan's financial capital market through enhancing convenience, efficiency, and stability of the market via further strengthening of clearing functions including facilitating the efficiency in both operations and systems.

8. Cash and Cash Equivalents

The breakdown of "Cash and cash equivalents" is as follows:

	As of March 31, 2020	As of March 31, 2021
	Millions of yen	Millions of yen
Cash and cash equivalents		
Cash and deposits	71,883	108,209
Total	71,883	108,209

9. Trade and Other Receivables

The breakdown of "Trade and other receivables" is as follows:

	As of March 31, 2020	As of March 31, 2021
	Millions of yen	Millions of yen
Operating accounts receivable	16,655	14,924
Other	39	18
Allowance for doubtful accounts	(8)	(7)
Total	16,686	14,936

(Note) Trade and other receivables are presented in the amount after deduction of allowance for doubtful accounts in the consolidated statement of financial position.

10. Assets and Liabilities Based on Various Rules for Ensuring Safety of Financial Instruments Trading

Deposits from clearing participants are collaterals that Japan Securities Clearing Corporation requires clearing participants to deposit (clearing deposit for clearing fund, etc., clearing margin, initial margin and variation margin) in order to provide for possible losses incurred by this company in the event of settlement default of clearing participants.

Legal guarantee funds are collaterals that Tokyo Stock Exchange, Inc., Osaka Exchange, Inc., and Tokyo Commodity Exchange, Inc. require trading participants to deposit to provide for possible losses incurred by these companies, etc. in the event of default by trading participants.

Trading participant security money is collateral that Tokyo Stock Exchange, Inc., Osaka Exchange, Inc., and Tokyo Commodity Exchange, Inc. require trading participants to deposit to provide for possible losses incurred by these companies in the event of default by trading participants.

Each type of collateral is deposited in the form of cash or substitute securities (only those permitted by each company's rules). For collateral that is deposited in the form of cash, an asset and a corresponding liability are recorded in the consolidated statement of financial position.

In contrast, collateral deposited in the form of substitute securities is not recorded in the consolidated statement of financial position. Fair values of substitute securities for the collateral are as follows:

	As of March 31, 2020	As of March 31, 2021
	Millions of yen	Millions of yen
Substitute securities for deposits from clearing participants	3,101,716	3,557,824
Substitute securities for legal guarantee funds	605	732
Substitute securities for trading participant security money	1,709	2,616

Default compensation reserve funds are reserve funds to cover losses incurred by Japan Securities Clearing Corporation in association with clearing operations.

11. Other Financial Assets

(1) The breakdown of "Other financial assets" is as follows:

	As of March 31, 2020	As of March 31, 2021
	Millions of yen	Millions of yen
Current assets		
Time deposits	117,400	116,300
Debt securities	—	500
Total	117,400	116,800
Non-current assets		
Equity securities	15,303	2,979
Debt securities	2,501	2,000
Other	470	452
Allowance for doubtful accounts	(119)	(121)
Total	18,156	5,309

(Note 1) Other financial assets are presented in the amount after deduction of allowance for doubtful accounts in the consolidated statement of financial position.

(Note 2) Equity securities are classified as financial assets measured at fair value through other comprehensive income, and time deposits and debt securities are classified as financial assets measured at amortized cost.

(2) Investee name of significant financial assets measured by fair value through other comprehensive income and their fair values are as follows:

	As of March 31, 2020	As of March 31, 2021
	Millions of yen	Millions of yen
Shares in Singapore Exchange Limited	13,434	1,208

The above shares were held mainly for business relationship purposes. Therefore, they are designated as financial assets measured at fair value through other comprehensive income.

Note, however, that the Company decided on March 30, 2018 that it would sell these shares sequentially for approximately three years and sold some of them in the current fiscal year. The Company completed the sale of all these shares by April 30, 2021.

Fair value at the time of such sale and accumulated profit/loss pertaining to other comprehensive income recognized in equity are as indicated below.

As of March 31, 2020		As of March 31, 2021	
Fair value	Accumulated profit/loss pertaining to other comprehensive income recognized in equity	Fair value	Accumulated profit/loss pertaining to other comprehensive income recognized in equity
Millions of yen	Millions of yen	Millions of yen	Millions of yen
11,478	4,099	12,719	4,959

(Note) Accumulated profit/loss pertaining to other comprehensive income recognized in equity is transferred to retained earnings in cases where said shares are sold or their fair value decreases significantly.

12. Property and Equipment

(1)Schedule of Property and Equipment

The schedules of changes in carrying amount, acquisition cost as well as accumulated depreciation and accumulated impairment losses of "Property and equipment" are as follows:

1) Carrying Amount

	Buildings	Information system equipment	Land	Right-of-use assets	Other	Total
	Millions of yen	Millions of yen	Millions of yen	Millions of yen	Millions of yen	Millions of yen
As of April 1, 2019	759	5,073	—	—	1,460	7,293
Cumulative effects of change in accounting policy (Note)	—	—	—	6,082	—	6,082
As of April 1, 2019, with change in accounting policy reflected	759	5,073	—	6,082	1,460	13,375
Individual acquisition	234	2,737	—	318	117	3,407
Acquisition through business combination	1,251	38	1,910	—	5	3,206
Depreciation	(170)	(1,687)	—	(3,129)	(190)	(5,177)
Sale or disposal	—	—	—	—	(13)	(13)
As of March 31, 2020	2,074	6,161	1,910	3,270	1,381	14,798
Individual acquisition	150	1,113	—	—	53	1,317
Depreciation	(194)	(1,911)	—	(3,129)	(181)	(5,417)
Sale or disposal	—	0	—	—	(0)	(0)
As of March 31, 2021	2,029	5,361	1,910	141	1,253	10,697

(Note) Effects arising from the application of IFRS 16 "Leases".

2) Acquisition Cost

	Buildings	Information system equipment	Land	Right-of-use assets	Other	Total
	Millions of yen	Millions of yen	Millions of yen	Millions of yen	Millions of yen	Millions of yen
As of April 1, 2019	3,514	12,810	—	—	4,277	20,601
As of March 31, 2020	7,472	13,734	1,910	6,400	4,594	34,112
As of March 31, 2021	7,575	13,201	1,910	6,400	4,568	33,657

3) Accumulated Depreciation and Accumulated Impairment Losses

	Buildings	Information system equipment	Land	Right-of-use assets	Other	Total
	Millions of yen	Millions of yen	Millions of yen	Millions of yen	Millions of yen	Millions of yen
As of April 1, 2019	2,754	7,736	—	—	2,816	13,308
As of March 31, 2020	5,398	7,573	—	3,129	3,213	19,314
As of March 31, 2021	5,545	7,839	—	6,259	3,315	22,959

(2) Impairment Losses

The grouping of property and equipment is based on the smallest identifiable group of assets that generates cash inflows that are largely independent.

No impairment loss was recognized in the fiscal years ended March 31, 2020 and 2021.

13. Goodwill and Intangible Assets

(1) Schedule of Goodwill and Intangible Assets

The schedules of changes in carrying amount, acquisition cost as well as accumulated amortization and accumulated impairment losses of "Goodwill" and "Intangible assets" are as follows:

1) Carrying Amount

	Goodwill	Intangible assets		
		Software	Other	Total
	Millions of yen	Millions of yen	Millions of yen	Millions of yen
As of April 1, 2019	67,374	25,096	8,338	33,435
Individual acquisition	—	15,254	(2,822)	12,432
Acquisition through business combination	—	409	89	498
Amortization	—	(11,186)	(134)	(11,321)
As of March 31, 2020	67,374	29,574	5,471	35,045
Individual acquisition	—	8,754	3,589	12,343
Amortization	—	(11,211)	(154)	(11,365)
Sale or disposal	—	(0)	(45)	(45)
As of March 31, 2021	67,374	27,116	8,860	35,977

(Note 1) The amount of "Individual acquisition" of "Intangible assets-Other" includes the acquisition cost of "Software in progress" and the amount transferred to "Software." The amount of "As of March 31, 2021" includes "Software in progress" of ¥8,010 million.

(Note 2) Amortization of intangible assets is included in "Operating expenses" in the consolidated statement of income.

2) Acquisition Cost

	Goodwill	Intangible assets		
		Software	Other	Total
	Millions of yen	Millions of yen	Millions of yen	Millions of yen
As of April 1, 2019	67,374	92,141	8,925	101,066
As of March 31, 2020	67,374	107,246	6,230	113,476
As of March 31, 2021	67,374	114,177	9,753	123,930

3) Accumulated Amortization and Accumulated Impairment Losses

	Goodwill	Intangible assets		
		Software	Other	Total
	Millions of yen	Millions of yen	Millions of yen	Millions of yen
As of April 1, 2019	—	67,044	586	67,631
As of March 31, 2020	—	77,672	759	78,431
As of March 31, 2021	—	87,060	892	87,953

(2) Material Goodwill

Goodwill recorded in the consolidated statement of financial position arose in the business combination between Tokyo Stock Exchange Group, Inc. and Osaka Securities Exchange Co., Ltd.

(3) Impairment Losses

The grouping of intangible assets is based on the smallest identifiable group of assets that generates cash inflows that are largely independent.

No impairment loss was recognized in the fiscal year ended March 31, 2020 and 2021.

(4) Impairment Test for Goodwill

The Group performs an impairment test for goodwill at the end of each fiscal year or whenever there is any indication of impairment. The recoverable amount in an impairment test is calculated based on the value in use.

The value in use is calculated by discounting estimated future cash flows based on the management plan, etc. at the discount rate on the basis of the weighted-average cost of capital of the relevant cash-generating unit. Cash flows in the period beyond the final fiscal year of the management plan are assumed to remain at the same level as the final fiscal year, taking into account future uncertainty.

For goodwill arising in business combinations, the entire Group is identified as a cash-generating unit and is tested for impairment.

14. Employee Benefits

(1) Employee Post-employment Benefits

The Company and some of its subsidiaries have introduced contract-type defined benefit corporate pension plans and lump-sum retirement benefit plans as defined benefit plans, and defined contribution plans.

1) Reconciliation of Defined Benefit Obligations

The reconciliation of the defined benefit obligations is as follows:

	Fiscal year ended March 31, 2020	Fiscal year ended March 31, 2021
	Millions of yen	Millions of yen
Balance at the beginning of the year	23,560	23,215
Current service cost	1,124	1,152
Interest expense	103	109
Increase (decrease) due to remeasurements		
Actuarial gains and losses - effect of changes in assumptions based on population statistics	(17)	18
Actuarial gains and losses - effect of changes in financial assumptions	(292)	(399)
Actuarial gains and losses - experience adjustments	29	71
Benefits paid	(1,296)	(1,233)
Balance at the end of the year	23,212	22,934

2) Reconciliation of Plan Assets

The reconciliation of the plan assets is as follows:

	Fiscal year ended March 31, 2020	Fiscal year ended March 31, 2021
	Millions of yen	Millions of yen
Balance at the beginning of the year	20,580	19,988
Interest income	102	99
Increase (decrease) due to remeasurements		
Return on plan assets (excluding amounts included in interest income)	(350)	2,303
Contributions by the employer	536	542
Benefits paid	(879)	(814)
Balance at the end of the year	19,988	22,120

3) Reconciliation of Defined Benefit Obligations and Plan Assets

The reconciliation between the defined benefit obligations and plan assets and the retirement benefit liabilities and assets recognized in the consolidated statement of financial position is as follows:

	As of March 31, 2020	As of March 31, 2021
	Millions of yen	Millions of yen
Funded defined benefit obligations	14,346	13,915
Plan assets	(19,988)	(22,120)
Subtotal	(5,642)	(8,204)
Unfunded defined benefit obligations	8,866	9,018
Net amount of liabilities and assets recognized in consolidated statement of financial position	3,223	813
Retirement benefit liabilities	8,866	9,018
Retirement benefit assets	(5,642)	(8,204)
Net amount of liabilities and assets recognized in consolidated statement of financial position	3,223	813

4) Breakdown of Defined Benefit Cost

The breakdown of defined benefit cost is as follows:

	Fiscal year ended March 31, 2020	Fiscal year ended March 31, 2021
	Millions of yen	Millions of yen
Current service cost	1,124	1,152
Interest expense	103	109
Interest income	(102)	(99)
Total	1,124	1,161

(Note) Defined benefit cost is included in "Operating expenses."

5) Major Breakdown of Plan Assets

The Group's investment policy is to manage plan assets for ensuring sufficient return on investment in the long term within the Group's risk tolerance in order to secure the future benefit payments, including pension benefits and lump-sum payments. Specifically, setting a target rate of return which exceeds the assumed rate of return in pension funds in order to maintain sound management of pension plans in the future, the Group adopts an asset composition in light of the risk tolerance taking into account predictions of the expected rate of return, the employer's financial capacity and other factors.

The Group also pays adequate attention to risk management in line with the asset composition introduced to achieve the target for investment and maximize returns under the assumed risk.

The breakdown of plan assets by major category is as follows:

	As of March 31, 2020	As of March 31, 2021
	Millions of yen	Millions of yen
Assets with quoted market prices in active markets		
Equity instruments	4,699	6,248
Domestic stocks	2,394	3,063
Foreign stocks	2,305	3,184
Debt instruments	6,581	7,465
Domestic bonds	2,082	2,324
Foreign bonds	4,499	5,140
Other	2,841	2,504
Subtotal	14,122	16,218
Assets without quoted market prices in active markets		
Corporate pension insurance contracts	5,866	5,902
Subtotal	5,866	5,902
Total plan assets	19,988	22,120

In the fiscal year ending March 31, 2022, the Group will contribute approximately ¥584 million to the plan assets as contributions.

The weighted-average duration of the defined benefit obligations as of March 31, 2021 was 14 years.

6) Matters Related to Actuarial Assumptions

The major actuarial assumptions are as follows:

	As of March 31, 2020	As of March 31, 2021
	%	%
Discount rate	0.5	0.5 to 0.6

(Note) The valuation of defined benefit obligations reflects judgments regarding uncertain future events. The sensitivities of defined benefit obligations as of March 31, 2021 that are affected by changes in discount rates are as follows. These sensitivities assume that other variables remain fixed; however, in fact, they do not always change independently. Negative figures represent decreases in defined benefit obligations, while positive figures represent increases.

	As of March 31, 2020	As of March 31, 2021
	Millions of yen	Millions of yen
Rise of 0.5%	(1,276)	(1,258)
Drop of 0.5%	1,410	1,390

7) Defined Contribution Plans

The amounts recognized as expenses for defined contribution plans were ¥163 million and ¥170 million for the fiscal years ended March 31, 2020 and 2021, respectively.

(2) Short-term Employee Benefits

The amounts of short-term employee benefits included in the consolidated statements of income for the fiscal years ended March 31, 2020 and 2021 were ¥17,066 million and ¥18,807 million, respectively.

15. Investments Accounted for Using the Equity Method

Associates

Information on aggregation of the Group's interests in associates is as follows:

	Fiscal year ended March 31, 2020	Fiscal year ended March 31, 2021
	Millions of yen	Millions of yen
Share of income of investments accounted for using the equity method	2,457	2,263
Share of other comprehensive income of investments accounted for using the equity method	0	0
Total share of comprehensive income	2,457	2,263
Total carrying amount of the Group's interests in associates	14,703	16,736

16. Income Taxes

(1) Deferred Tax Assets and Deferred Tax Liabilities

The breakdown and movements of "Deferred tax assets" and "Deferred tax liabilities" by major cause of their occurrence are as follows:

Fiscal year ended March 31, 2020

	As of April 1, 2019	Effects of change in accounting policy (Note)	As of beginning of year, with change in accounting policy reflected	Recognized in profit or loss	Recognized in other comprehensive income	Business combinations	As of March 31,2020
	Millions of yen	Millions of yen	Millions of yen	Millions of yen	Millions of yen	Millions of yen	Millions of yen
Deferred tax assets							
Post-employment benefits	664	―	664	80	21	240	1,007
Lease liabilities	―	1,959	1,959	(958)	―	―	1,001
Fixed assets	146	―	146	(64)	―	1	83
Enterprise taxes payable	642	―	642	2	―	2	647
Accrued expenses	854	―	854	14	―	39	908
Tax loss carryforwards	―	―	―	―	―	1,842	1,842
Other	2,522	―	2,522	(337)	―	37	2,222
Subtotal	4,830	1,959	6,790	(1,262)	21	2,164	7,713
Unrecognized deductible temporary differences	(216)	―	(216)	―	―	(321)	(538)
Tax loss carryforwards	―	―	―	―	―	(1,842)	(1,842)
Total	4,613	1,959	6,573	(1,262)	21	―	5,332
Deferred tax liabilities							
Right-of-use assets	―	(1,959)	(1,959)	957	―	―	(1,002)
Fair value of financial assets measured at fair value through other comprehensive income	(3,393)	―	(3,393)	―	913	―	(2,479)
Other	(615)	―	(615)	(5)	―	(573)	(1,194)
Total	(4,008)	(1,959)	(5,968)	951	913	(573)	(4,677)

(Note) Effects arising from the application of IFRS 16 "Leases".

Fiscal year ended March 31, 2021

	As of April 1, 2020	Recognized in profit or loss	Recognized in other comprehensive income	As of March 31,2021
	Millions of yen	Millions of yen	Millions of yen	Millions of yen
Deferred tax assets				
Post-employment benefits	766	306	(800)	272
Lease liabilities	1,001	(958)	—	43
Fixed assets	81	161	—	242
Enterprise taxes payable	645	329	—	975
Accrued expenses	869	88	—	958
Other	1,968	234	—	2,202
Total	5,332	161	(800)	4,694
Deferred tax liabilities				
Right-of-use assets	(1,002)	959	—	(43)
Fair value of financial assets measured at fair value through other comprehensive income	(2,479)	—	2,034	(445)
Other	(1,194)	(43)	—	(1,238)
Total	(4,677)	916	2,034	(1,727)

In recognizing deferred tax assets, the Group takes into account whether deductible temporary differences can be utilized from future taxable profits.

The amount for which deferred tax assets have not been recognized was ¥1,757 million as of March 31, 2020 and ¥707 million as of March 31, 2021. Tax loss carryforwards for tax purposes were ¥6,018 million as of March 31, 2020 and ¥7,145 million as of March 31, 2021. There were no significant temporary differences arising from investments in subsidiaries and investments accounted for using the equity method for which deferred tax liabilities have not been recognized.

(2) Income Tax Expenses

The breakdown of "Income tax expenses" is as follows:

	Fiscal year ended March 31, 2020	Fiscal year ended March 31, 2021
	Millions of yen	Millions of yen
Current tax expenses	20,469	23,792
Deferred tax expenses	311	(1,077)
Total	20,781	22,714

(3) Reconciliation of Effective Tax Rate

The Group is subject to corporate tax, inhabitant tax, and enterprise tax. The effective statutory tax rates calculated based on these taxes are primarily 30.6% for the fiscal year ended March 31, 2020 and 30.6% for the fiscal year ended March 31, 2021.

The difference between the effective statutory tax rate and the actual tax rate in the consolidated statement of income is as follows:

	Fiscal year ended March 31, 2020	Fiscal year ended March 31, 2021
	%	%
Effective statutory tax rate	30.6	30.6
Other	(0.5)	(0.2)
Actual tax rate	30.1	30.4

17. Trade and Other Payables

The breakdown of "Trade and other payables" is as follows:

	As of March 31, 2020	As of March 31, 2021
	Millions of yen	Millions of yen
Operating accounts payable	3,268	2,974
Other payable	3,374	1,158
Total	6,643	4,132

18. Bonds and Loans Payable

The breakdown of "Bonds and loans payable" is as follows:

	As of March 31, 2020	As of March 31, 2021	Average interest rate (Note)
	Millions of yen	Millions of yen	%
Short-term loans payable	32,500	32,500	0.036
Bonds	19,953	19,960	0.355
Total	52,453	52,460	
Current liabilities	32,500	32,500	
Non-current liabilities	19,953	19,960	
Total	52,453	52,460	

(Note 1) The interest rate and outstanding balance used to calculate the average interest rate are as of March 31, 2021.

(Note 2) There are no financial covenants associated with loans payable that have material impacts on the Group's financing activities.

(Note 3) The terms and conditions for corporate bonds are as follows:

Issuer	Bond name	Issuance date	As of March 31, 2021	Interest rate	Maturity date
			Millions of yen	%	
Japan Exchange Group, Inc.	First series of unsecured bonds	March 16, 2017	20,000	0.355	March 16, 2027

19. Equity and Other Equity Items

(1) Share Capital and Treasury Shares

	Fiscal year ended March 31, 2020	Fiscal year ended March 31, 2021
	No. of shares	No. of shares
Authorized shares	2,180,000,000	2,180,000,000
Issued shares	536,351,448	536,351,448
Treasury shares	904,476	1,034,400

(Note 1) The shares issued by the Company are non-par value ordinary shares that have no restriction on any rights.

(Note 2) Treasury shares are mainly the Company's shares held in the trust account related to the stock-granting ESOP and the trust account related to the stock remuneration plan for executive officers.

(2) Surplus

1) Capital Surplus

The Companies Act of Japan stipulates that 50% or more of the amount paid for share issue shall be incorporated into share capital and the remaining amount shall be incorporated into capital reserves included in capital surplus. Capital reserves may be incorporated into share capital by resolution of the general shareholders meeting.

2) Retained Earnings

The Companies Act of Japan provides that until the sum of capital reserves included in capital surplus and retained earnings reserves included in retained earnings reaches 25% of share capital, 10% of the surplus distributed as dividends needs to be set aside either as capital reserves or retained earnings reserves. Accumulated retained earnings reserves may be used to cover a deficit. Retained earnings reserves may be reduced by resolution of the general shareholders meeting.

If any investment in equity securities designated as the category in which changes in fair value are recognized through other comprehensive income is derecognized or the fair value decreases significantly, any gain or loss on sale or valuation loss is transferred from "Other comprehensive income" to "Retained earnings."

20. Operating Revenue

(1) Disaggregation of Revenue

The breakdown of "Operating revenue" is as follows:

	Fiscal year ended March 31, 2020	Fiscal year ended March 31, 2021
	Millions of yen	Millions of yen
Trading services revenue	48,589	53,171
Clearing services revenue	26,427	27,939
Listing services revenue	14,322	16,660
Information services revenue	21,977	24,128
Other	12,371	11,443
Total	123,688	133,343

Trading services revenue comprises "Transaction Fees" based mainly on the value of securities traded or volumes of financial derivatives and commodity derivatives traded, "Basic Fees" based on the trading participant's trading qualification, "Access Fees" based on the number of orders, and "Trading System Facilities Usage Fees" based on the types of trading system facilities used, and other similar fees.

Clearing services revenue comprises clearing fees related to the assumption of obligations of financial instrument transactions carried out by Japan Securities Clearing Corporation, and other similar fees.

Listing services revenue comprises "Initial/Additional Listing Fees" that are received based on the issue amount when a company initially lists or when a listed company issues additional shares and "Annual Listing Fees" received from listed companies based on their market capitalization, and other similar fees.

Information services revenue comprises revenue related to the provision of market information to information vendors, etc., which represents market information fees, revenue related to the index business, and revenue related to the provision of corporate action information and other information.

Of the above revenues, trading services revenue and clearing services revenue are recognized as revenues at the specific points in time when performance obligations are fulfilled, mainly on the contract dates, etc. Listing services revenue is recognized as revenue within the period of time for which fees are charged. Information services revenue is recognized as revenue at the specific point in time when performance obligations are fulfilled by distribution of market information, etc. In addition, consideration in contracts with customers does not include significant financial factors.

(2) Accounts Arising from Contracts

Outstanding balance of contractual debt is as indicated below.

	As of April 1, 2019	As of March 31, 2020	As of March 31, 2021
	Millions of yen	Millions of yen	Millions of yen
Unearned revenue	2,776	540	311

(3) Transaction Prices Allocated to the Remaining Performance Obligations

At the Group, material transactions whose expected initial contractual periods exceed one year are not recognized. As such, convenient practical methods are applied and, thus, information on the remaining performance obligations is not disclosed.

In addition, considerations derived from contracts with customers do not include any significant amount that is not included in transaction prices.

21. Operating Expenses

The breakdown of "Operating expenses" is as follows:

	Fiscal year ended March 31, 2020	Fiscal year ended March 31, 2021
	Millions of yen	Millions of yen
Personnel expenses	17,512	19,255
System maintenance and operation expenses	12,071	13,524
Depreciation and amortization	16,484	16,761
Other	12,464	11,852
Total	58,532	61,394

22. Financial Income and Financial Expenses

The breakdown of "Financial income" and "Financial expenses" is as follows:

	Fiscal year ended March 31, 2020	Fiscal year ended March 31, 2021
	Millions of yen	Millions of yen
Dividend income	624	243
Interest income	41	23
Total financial income	665	266
Interest expenses		
Financial assets measured at amortized cost	8	13
Lease liabilities	16	8
Interest on bonds	71	71
Other	6	6
Total financial expenses	103	99

23. Earnings per Share

Basic earnings per share for the fiscal year ended March 31, 2021 was calculated based on the net income attributable to owners of the parent company of ¥51,389 million (fiscal year ended March 31, 2020: ¥47,609 million) and the weighted-average number of ordinary shares outstanding of 535,304 thousand shares (fiscal year ended March 31, 2020: 535,464 thousand shares). Diluted earnings per share are not presented because there were no potential shares.

The Company's shares held in the trust account related to the stock-granting ESOP and the trust account related to the stock remuneration plan for executive officers are treated as treasury shares.

24. Changes in Liabilities Arising from Financing Activities

The major changes in liabilities arising from financing activities are those arising from financing cash flows, and there are no significant non-cash changes.

25. Financial Instruments

(1) Classification of Financial Assets and Liabilities

Carrying amounts and accounting classification of financial assets and liabilities are as follows:

As of March 31, 2020

1) Financial Assets

	Financial assets measured at fair value through profit or loss	Financial assets measured at fair value through other comprehensive income	Financial assets measured at amortized cost
	Millions of yen	Millions of yen	Millions of yen
Cash and cash equivalents	–	–	71,883
Trade and other receivables	–	–	16,686
Clearing business financial assets	60,329,672	–	–
Specified assets for deposits from clearing participants	–	–	6,549,099
Specified assets for legal guarantee funds	–	–	762
Specified assets for default compensation reserve funds	–	–	27,948
Other financial assets	–	15,573	119,983
Total	60,329,672	15,573	6,786,363

2) Financial Liabilities

	Financial liabilities measured at fair value through profit or loss	Financial liabilities measured at amortized cost
	Millions of yen	Millions of yen
Trade and other payables	–	6,643
Bonds and loans payable (current)	–	32,500
Clearing business financial liabilities	60,329,672	–
Deposits from clearing participants	–	6,549,099
Legal guarantee funds	–	762
Trading participant security money	–	8,248
Bonds and loans payable (non-current)	–	19,953
Total	60,329,672	6,617,207

As of March 31, 2021

1) Financial Assets

	Financial assets measured at fair value through profit or loss	Financial assets measured at fair value through other comprehensive income	Financial assets measured at amortized cost
	Millions of yen	Millions of yen	Millions of yen
Cash and cash equivalents	—	—	108,209
Trade and other receivables	—	—	14,936
Clearing business financial assets	53,649,780	—	—
Specified assets for deposits from clearing participants	—	—	5,996,143
Specified assets for legal guarantee funds	—	—	673
Specified assets for default compensation reserve funds	—	—	27,948
Other financial assets	—	3,242	118,867
Total	53,649,780	3,242	6,266,778

2) Financial Liabilities

	Financial liabilities measured at fair value through profit or loss	Financial liabilities measured at amortized cost
	Millions of yen	Millions of yen
Trade and other payables	—	4,132
Bonds and loans payable (current)	—	32,500
Clearing business financial liabilities	53,649,780	—
Deposits from clearing participants	—	5,996,143
Legal guarantee funds	—	673
Trading participant security money	—	8,161
Bonds and loans payable (non-current)	—	19,960
Total	53,649,780	6,061,571

(2) Fair Value Hierarchy

IFRS 13 "Fair Value Measurement" requires entities to classify fair value measurements using a fair value hierarchy that reflects the significance of inputs used to measure fair value.

The hierarchy of fair value used to measure fair value (fair value hierarchy) is defined as follows:

Level 1: Unadjusted quoted prices in active markets for identical assets or liabilities

Level 2: Fair value that is calculated using inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly

Level 3: Fair value that is calculated using unobservable inputs for the asset or liability

The level of the fair value hierarchy for financial instruments is determined based on the lowest level of significant inputs used in the measurement of fair value.

The fair value hierarchy of financial assets and financial liabilities measured at fair value on a recurring basis in the consolidated statement of financial position according to the above definition is as follows:

As of March 31, 2020

	Level 1	Level 2	Level 3
	Millions of yen	Millions of yen	Millions of yen
Clearing business financial assets	682,796	59,646,875	—
Other financial assets	13,434	—	2,138
Total	696,231	59,646,875	2,138
Clearing business financial liabilities	682,796	59,646,875	—
Total	682,796	59,646,875	—

As of March 31, 2021

	Level 1	Level 2	Level 3
	Millions of yen	Millions of yen	Millions of yen
Clearing business financial assets	488,538	53,161,241	—
Other financial assets	1,208	—	2,034
Total	489,746	53,161,241	2,034
Clearing business financial liabilities	488,538	53,161,241	—
Total	488,538	53,161,241	—

The carrying amounts, fair values and fair value hierarchy of financial assets and financial liabilities that are not measured at fair value in the consolidated statement of financial position are as follows:

As of March 31, 2020

	Carrying amount	Fair value	
		Level 1	Level 2
	Millions of yen	Millions of yen	Millions of yen
Other financial assets	119,983	117,990	1,983
Total	119,983	117,990	1,983
Bonds and loans payable (non-current)	19,953	—	20,077
Total	19,953	—	20,077

As of March 31, 2021

	Carrying amount	Fair value	
		Level 1	Level 2
	Millions of yen	Millions of yen	Millions of yen
Other financial assets	118,867	116,870	1,997
Total	118,867	116,870	1,997
Bonds and loans payable (non-current)	19,960	—	19,971
Total	19,960	—	19,971

For financial assets and financial liabilities that are not measured at fair value in the consolidated statement of financial position, since the following items are all short term and their carrying amounts reasonably approximate the fair values, their fair values are not disclosed.

- Cash and cash equivalents
- Trade and other receivables
- Specified assets for deposits from clearing participants
- Specified assets for legal guarantee funds
- Specified assets for default compensation reserve funds
- Trade and other payables
- Bonds and loans payable (current)
- Deposits from clearing participants
- Legal guarantee funds
- Trading participant security money

(3) Method for Measuring Fair Value

Fair values of financial assets and financial liabilities are as follows:

1) Clearing Business Financial Assets and Liabilities

The fair values of these instruments are estimated by each method in accordance with the following classification:

- For futures transactions, option transactions and OTC derivative transactions, fair value is estimated based on clearing prices at the end of the fiscal year.
- For repo transactions, fair value is estimated by discounting amounts of delivery settlement as of the settlement date of transactions.

2) Other Financial Assets

Fair values of marketable securities are estimated by using market prices, etc.

3) Bonds and loans Payable

For bonds and loans payable with long periods to maturity, fair value is estimated by discounting future cash flows using the discount rate that reflects the Group's credit standing.

(4) Offsetting of Financial Instruments

Financial assets and financial liabilities are offset and presented as a net amount in the consolidated statement of financial position only when the Group holds a legally enforceable right to set off the recognized amounts and intends either to settle on a net basis or to realize the asset and settle the liability simultaneously.

The effects of offsetting on clearing business financial assets and liabilities in the consolidated statement of financial position are as follows:

As of March 31, 2020

1) Financial Assets

	Gross amount of recognized financial assets	Gross amount of financial assets offset in the consolidated statement of financial position	Balance in the consolidated statement of financial position
	Millions of yen	Millions of yen	Millions of yen
Repo transactions	98,944,932	39,324,619	59,620,313
Listed option transactions	3,085,037	2,433,498	651,539
Other	13,845,590	13,787,770	57,819
Total	115,875,560	55,545,888	60,329,672

2) Financial Liabilities

	Gross amount of recognized financial liabilities	Gross amount of financial liabilities offset in the consolidated statement of financial position	Balance in the consolidated statement of financial position
	Millions of yen	Millions of yen	Millions of yen
Repo transactions	98,944,932	39,324,619	59,620,313
Listed option transactions	3,085,037	2,433,498	651,539
Other	13,845,590	13,787,770	57,819
Total	115,875,560	55,545,888	60,329,672

As of March 31, 2021

1) Financial Assets

	Gross amount of recognized financial assets	Gross amount of financial assets offset in the consolidated statement of financial position	Balance in the consolidated statement of financial position
	Millions of yen	Millions of yen	Millions of yen
Repo transactions	92,255,523	39,142,900	53,112,623
Listed option transactions	2,462,203	2,033,260	428,942
Other	9,935,395	9,827,181	108,214
Total	104,653,123	51,003,342	53,649,780

2) Financial Liabilities

	Gross amount of recognized financial liabilities	Gross amount of financial liabilities offset in the consolidated statement of financial position	Balance in the consolidated statement of financial position
	Millions of yen	Millions of yen	Millions of yen
Repo transactions	92,255,523	39,142,900	53,112,623
Listed option transactions	2,462,203	2,033,260	428,942
Other	9,935,395	9,827,181	108,214
Total	104,653,123	51,003,342	53,649,780

Under certain conditions, including the settlement default of any clearing participant, the amounts of clearing business financial assets and liabilities recorded in the consolidated statement of financial position are set off by appropriating securities and money for which delivery to the defaulting clearing participant is suspended and deposits from clearing participants in accordance with the designated methods established by each instrument.

26. Management of Financial Risks

(1) Capital Management

It is the Group's basic policy for capital management to maintain an appropriate capital level and composition of liabilities and equity that are commensurate with the risks of the business for the purpose of achieving sustainable growth and maximization of the corporate value while ensuring stability of the financial base for business operations in order to carry out its mission as a public infrastructure in the Japanese securities market. Equity represents "Equity attributable to owners of the parent company."

A certain amount of surplus has been set aside in accordance with the guidelines for clearing institutions, in order to ensure the continuity of the Group's clearing organization, Japan Securities Clearing Corporation, and the functioning of settlement guarantee schemes.

Under the Financial Instruments and Exchange Act, restrictions are placed on the acquisition of and holding shares of the Company, which is a financial instruments exchange holding company.

(2) Management of Financial Risks Arising from Financial Instruments

The Group is exposed to financial risks arising from financial instruments, such as credit risk, liquidity risk and market risk, in the course of business activities. The Group seeks to avoid or mitigate such risks by identifying and analyzing risks and comprehensively managing them in an appropriate manner.

Major risks recognized by the Group are credit risk and liquidity risk arising from the clearing operations of Japan Securities Clearing Corporation. The following shows risk management for the Group's clearing operations and other risk management by financial risk.

1) Credit Risk Management

Credit risk is the risk that the Group may incur financial losses due to a counterparty's failure to fulfill a contract and other reasons. Japan Securities Clearing Corporation is exposed to credit risks of clearing participants for clearing business financial assets that are receivables acquired by assuming obligations for the transactions conducted by market participants, and has established a system to respond to the risks, including the qualification system and collateral requirement system for clearing participants. Please refer to "[Appendix] Framework for Ensuring Implementation of Settlement" for details of Japan Securities Clearing Corporation's settlement execution system and Note "10. Assets and Liabilities Based on Various Rules for Ensuring Safety of Financial Instruments Trading" for fair values of substitute securities including deposits from clearing participants.

Specified assets for deposits from clearing participants that are deposited as collateral by clearing participants are exposed to credit risks of entities where the assets are kept and funds are managed. As a general rule, such assets are deposited into bank settlement accounts and a Bank of Japan current account, which are free from credit risks. For asset management, the Group also avoids the risks by funding only call loans collateralized by Japanese government bonds to financial institutions or ordinary deposits with trust banks that have a certain degree of credit strength.

2) Liquidity Risk Management

Liquidity risk is the risk that the Group may incur financial losses due to inability to secure necessary funds and other reasons.

Japan Securities Clearing Corporation is exposed to liquidity risks for clearing business financial liabilities because it needs to cover the fund shortage and complete the settlement even in the case of a clearing participant's settlement default. However, it has established a system to ensure sufficient liquidity for such risks by concluding contracts on provision of liquidity with fund settlement banks and other measures.

For specified assets for deposits from clearing participants that have been deposited as collateral by each clearing participant, the Group avoids liquidity risks at the time of return of collateral by keeping and managing the funds as highly liquid, short-term financial assets.

Furthermore, the Group raises funds through loans payable and is exposed to liquidity risk of failing to repay the debts by the due date. The Group avoids such risks by monitoring its financial condition and forecast and flexibly accommodating group companies with funds within the Group.

The financial liability balance by maturity is as follows:

As of March 31, 2020

	Book balance	Contractual cash flow	Due within one year	Due after one year through two years	Due after two years
	Millions of yen	Millions of yen	Millions of yen	Millions of yen	Millions of yen
Trade and other payables	6,643	6,643	6,643	—	—
Bonds and loans payable (current)	32,500	32,500	32,500	—	—
Clearing business financial liabilities	60,329,672	60,329,672	60,329,672	—	—
Deposits from clearing participants	6,549,099	6,549,099	6,549,099	—	—
Legal guarantee funds	762	762	762	—	—
Trading participant security money	8,248	8,248	8,248	—	—
Bonds and loans payable (non-current)	19,953	20,000	—	—	20,000
Total	66,946,879	66,946,926	66,926,926	—	20,000

As of March 31, 2021

	Book balance	Contractual cash flow	Due within one year	Due after one year through two years	Due after two years
	Millions of yen	Millions of yen	Millions of yen	Millions of yen	Millions of yen
Trade and other payables	4,132	4,132	4,132	—	—
Bonds and loans payable (current)	32,500	32,500	32,500	—	—
Clearing business financial liabilities	53,649,780	53,649,780	53,649,780	—	—
Deposits from clearing participants	5,996,143	5,996,143	5,996,143	—	—
Legal guarantee funds	673	673	673	—	—
Trading participant security money	8,161	8,161	8,161	—	—
Bonds and loans payable (non-current)	19,960	20,000	—	—	20,000
Total	59,711,351	59,711,391	59,691,391	—	20,000

3) Market Risk Management

(Market price risk and foreign exchange risk)

The Group holds shares in Singapore Exchange Limited ("SGX"). As fluctuations in market prices of the shares in SGX and exchange rates affect the Group's equity capital and comprehensive income, the Group is exposed to market price risk and foreign exchange risk and continuously monitors fluctuations in the market prices of shares in SGX and other situations by regularly reporting such fluctuations to the Board of Directors and other methods.

The effects of a price fluctuation on equity in the consolidated statement of financial position when the fair value of shares in SGX declines by 10% are as follows. Note that the Company decided on March 30, 2018 to sell said shares sequentially for approximately three years and that the Company sold some of them in the current fiscal year. The Company completed the sale of all these shares by April 30,2021

	As of March 31, 2020	As of March 31, 2021
	Millions of yen	Millions of yen
Effect on equity	(932)	(83)

27. Other Comprehensive Income

The amount arising during the year and tax effects for each component of "Other comprehensive income" are as follows:

Fiscal year ended March 31, 2020

	Amount arising during year	Before tax effects	Tax effects	Net of tax effects
	Millions of yen	Millions of yen	Millions of yen	Millions of yen
Net gain (loss) on revaluation of financial assets measured at fair value through other comprehensive income	2,782	2,782	(851)	1,930
Remeasurements of defined benefit plan	(71)	(71)	21	(49)
Share of other comprehensive income of investments accounted for using the equity method	0	0	(0)	0
Total	2,711	2,711	(830)	1,881

Fiscal year ended March 31, 2021

	Amount arising during year	Before tax effects	Tax effects	Net of tax effects
	Millions of yen	Millions of yen	Millions of yen	Millions of yen
Net gain (loss) on revaluation of financial assets measured at fair value through other comprehensive income	391	391	(119)	271
Remeasurements of defined benefit plan	2,613	2,613	(800)	1,813
Share of other comprehensive income of investments accounted for using the equity method	0	0	(0)	0
Total	3,004	3,004	(919)	2,084

28. Dividends

(1) Dividends Paid

(Resolution)	Class of shares	Total amount of dividends	Amount of dividends per share	Basis date	Effective date
		Millions of yen	Yen		
Board of Directors (May 14, 2019)	Ordinary shares	23,063	(Note) 43.00	March 31, 2019	May 28, 2019
Board of Directors (October 30, 2019)	Ordinary shares	12,872	24.00	September 30, 2019	December 2, 2019
Board of Directors (May 14, 2020)	Ordinary shares	16,090	30.00	March 31, 2020	May 27, 2020
Board of Directors (October 28, 2020)	Ordinary shares	13,945	26.00	September 30, 2020	December 1, 2020

(Note) The amount of dividends per share includes a special dividend of ¥15.00 per share.

(2) Dividend with a Basis Date That Belongs to the Current Fiscal Year and with an Effective Date That Will Belong to the Following Fiscal Year

(Resolution)	Class of shares	Total amount of dividends	Amount of dividends per share	Basis date	Effective date
		Millions of yen	Yen		
Board of Directors (May 13, 2021)	Ordinary shares	22,526	(Note) 42.00	March 31, 2021	May 27, 2021

(Note) The amount of dividends per share includes a special dividend of ¥10.00 per share.

29. Leases

The Group leases assets whose underlying assets are real estates as a lessee. The breakdown of income and expenses for the leases are as follows:

	Fiscal year ended March 31, 2020	Fiscal year ended March 31, 2021
	Millions of yen	Millions of yen
Depreciation of right-of-use assets (Note 1)		
Whose underlying assets are real estates	3,129	3,129
Total	3,129	3,129
Interest expenses on lease liabilities (Note 2)	16	8
Expenses relating to short-term leases (Note 3)	1,044	1,107
Total	1,061	1,116

(Note 1) Depreciation of right-of-use assets is included in "Operating expenses" in the consolidated statement of income.
(Note 2) Interest expenses on lease liabilities are included in "Financial expenses" in the consolidated statement of income.
(Note 3) Expenses relating to short-term leases are included in "Operating expenses" in the consolidated statement of income.

The total cash outflow for leases is ¥3,142 million for the fiscal year ended March 31, 2020 and ¥3,142 million for the fiscal year ended March 31, 2021.

Additions to and breakdown of right-of-use assets are described in Note "12. Property and Equipment".

Lease liabilities of the Group are included in other current liabilities and other non-current liabilities.
Lease liabilities by maturity date are as follows:

	Book balance	Contractual cash flow	Due within one year	Due after one year through two years
	Millions of yen	Millions of yen	Millions of yen	Millions of yen
As of March 31, 2020				
Lease liabilities	3,275	3,284	3,142	142
As of March 31, 2021				
Lease liabilities	141	142	142	—

30. Related Parties

(1) Major Subsidiaries and Associates

Major subsidiaries and associates are as follows:

Name	Address	Ratio of voting rights owned (%)
(Consolidated subsidiaries)		
Tokyo Stock Exchange, Inc.	Chuo-ku, Tokyo	100.0
Osaka Exchange, Inc.	Chuo-ku, Osaka-shi, Osaka	100.0
Tokyo Commodity Exchange, Inc.	Chuo-ku, Tokyo	100.0
Japan Exchange Regulation	Chuo-ku, Tokyo	100.0
Japan Securities Clearing Corporation	Chuo-ku, Tokyo	(Note)
TOSHO SYSTEM SERVICE CO., LTD.	Chuo-ku, Tokyo	100.0 (100.0)
(Associates accounted for under the equity method)		
ICJ, Inc.	Chuo-ku, Tokyo	50.0 (50.0)
Tosho Computer Systems Co., Ltd.	Koto-ku, Tokyo	35.0 (35.0)
Japan Securities Depository Center, Inc.	Chuo-ku, Tokyo	24.6

(Note) Japan Commodity Clearing House Co., Ltd. ceased to exist on July 27, 2020 due to the absorption-type merger with Japan Securities Clearing Corporation as the surviving company. Accordingly, the former company is outside the scope of consolidation.

(2) Compensation for Key Management Personnel

Category	Amount paid
Directors (excluding outside directors)	28 million yen
Executive officers	460 million yen
Outside directors	172 million yen

31. Contingencies

Guarantee Liabilities

The Group provides debt guarantees for loans of employees from financial institutions for their housing acquisition as follows:

Fiscal year ended March 31, 2020	Fiscal year ended March 31, 2021
Millions of yen	Millions of yen
1,192	1,033

32. Subsequent Events

The Company decided, at the board of directors meeting held on April 28, 2021, to acquire treasury shares in accordance with provisions of Article 459, Paragraph 1 of the Companies Act and the Company's Articles of Incorporation.

(1) Reason for acquiring treasury shares

The Company aims to increase shareholder returns through implementing its capital policy in an agile and flexible manner.

(2) Details of the acquisition

1) Type of shares to be acquired

Ordinary shares of the Company

2) Total number of shares to be acquired

20 million shares (maximum)

3) Total amount of acquisition value

¥20 billion (maximum)

4) Duration of acquisition

From April 30, 2021 to October 26, 2021

5) Acquisition method

Purchases on the market of Tokyo Stock Exchange

[Appendix]
* The following items are outside the scope of audit procedures by the certified public accountants or the audit firm.

Framework for Ensuring Implementation of Settlement

There are four financial instruments exchanges[1] for trading securities in Japan including Tokyo Stock Exchange, Inc. ("TSE"). For transactions in securities at these exchanges, all the clearing operations are conducted by Japan Securities Clearing Corporation ("JSCC"). JSCC also covers transactions in securities in PTS[2] in its clearing operations. JSCC also performs the clearing of futures and options trading on the market of Osaka Exchange, Inc. ("OSE"), Tokyo Commodity Exchange, Inc. ("TOCOM") and Osaka Dojima Commodity Exchange ("ODE"), and covers credit default swap transactions and interest rate swap transactions in over-the-counter (OTC) markets (hereinafter "OTC derivative transactions") and OTC traded Japanese government bonds in the clearing operations.

As a clearing organization, JSCC provides a settlement guarantee by assuming obligations for transactions conducted by market participants and acting as the counterparty to each side of the transactions. This enables market participants to conduct transactions without regard to credit risk of their counterparties, while if a clearing participant fails to fulfill the settlement, JSCC is obliged to implement the clearing with other clearing participants. Therefore, in cases where JSCC incurs a loss due to settlement default by a clearing participant, it basically follows the principle of self-responsibility under which the loss is compensated for with collateral pledged by the clearing participant who failed to fulfill the settlement. In the event of any shortage, JSCC uses its own funds and has a compensation system where it also requires other clearing participants to share the burden.

JSCC's efforts for ensuring implementation of clearing and the overview of the loss compensation system are as follows:

Measures for Ensuring Settlement

(1) Clearing participant system and monitoring

In order to reduce credit risks of clearing participants, JSCC has provided for eligibility requirements for clearing by type of eligibility and established criteria for acquisition and maintenance of eligibility in the requirements. A clearing participant must have a certain financial base, management structure and business execution structure. The status of such criteria for clearing participants is monitored periodically. If it is found that there is any problem for a clearing participant, JSCC may stop the assumption of obligations of the clearing participant and revoke the status of the participant for clearing.

JSCC also monitors the status of clearing participants' positions periodically and controls whether or not credit risks are overly concentrated in some clearing participants. If an undue position is taken, JSCC considers measures as needed.

(2) Collateral requirement system

In order to prepare for possible losses incurred due to settlement default by clearing participants, JSCC requires clearing participants to deposit collateral. Collateral includes clearing deposit for clearing fund[3], etc., clearing margin[4], initial margin[5] and variation margin[6]. JSCC confirms the adequacy of collateral periodically, and verifies and reviews the calculation model for the required amount of collateral as appropriate.

In addition, JSCC has set certain qualification requirements for money or substitute securities deposited as collateral, and assesses collateral value daily.

(3) Delivery Versus Payment ("DVP") settlement

The settlement of securities between JSCC and its clearing participants is conducted via the DVP settlement system, in which the delivery of securities and the payment of funds are linked, that is, securities can be delivered on the condition that the corresponding payment is completed, while payment can be received on the condition that the corresponding securities are delivered. Consequently, should settlement defaults occur, the counterparty will not be left with non-receipt of securities or funds.

(4) Ensuring liquidity

In order to secure liquidity required in cases of settlement defaults by clearing participants, JSCC has entered into agreements on liquidity supply with fund settlement banks.

In addition, JSCC confirms the adequacy of liquidity lines for funds periodically.

[Overview of the Loss Compensation System]

In cases where a clearing participant fails to make a settlement, JSCC stops the assumption or sharing of obligations for the clearing participant as a party as well as the delivery of securities and money that JSCC should deliver to the clearing participant, and at the same time, appropriates the securities and money for which the delivery is stopped as compensation for the clearing participant's settlement default.

In cases where losses of JSCC are not eliminated even after the above process, JSCC makes up for the losses by the following methods. As a general rule, this compensation for losses is made individually by JSCC for losses[7] incurred on each clearing of securities trading, futures and option transactions, OTC derivative transactions and OTC traded Japanese government bonds, according to the clearing qualifications of the defaulting clearing participant. (The amounts indicated below are final figures as of the end of March 2021.)

If losses on settlement default are incurred in clearing of securities trading, the losses will be compensated under the following multi-tiered scheme:

1) Compensation from collateral deposited by the defaulting clearing participant (initial margin, clearing funds, etc.)
2) Compensation from loss compensation by financial instruments exchanges, etc.[8]
3) Compensation by JSCC
4) Compensation from clearing funds contributed by non-defaulting clearing participants
5) Mutual guarantee by non-defaulting clearing participants

Hence, in cases where JSCC incurs losses due to settlement default by a clearing participant for a securities transaction and its losses cannot be fully made up for even through the measure in 1), the Group may incur losses due to compensation made by TSE or OSE up to the amount stipulated in the loss compensation contract for the measure in 2), or compensation made by JSCC up to the amount funded as a settlement guarantee reserve for securities trading, etc. (¥20.0 billion) for the measure in 3).

If losses on settlement default are incurred in clearing of futures and options transactions, the losses will be compensated under the following multi-tiered scheme:

1) Compensation from collateral deposited by the defaulting clearing participant (clearing margin, clearing funds, etc.)
2) Compensation from loss compensation by financial instruments exchanges or commodity exchanges[10]
3) Compensation by JSCC
4) Compensation from clearing funds contributed by non-defaulting clearing participants[10]
5) Compensation from special clearing charges collected from non-defaulting clearing participants
6) Compensation by non-defaulting clearing participants who are the recipients of accumulated gains of variation margin equivalent after the default

Hence, in cases where JSCC incurs losses due to settlement default by a clearing participant for a futures and options transaction and JSCC's losses cannot be fully made up for even through the measure in 1), the Group may incur losses due to compensation made by TSE, OSE or TOCOM up to the amount stipulated in the loss compensation contract (financial derivatives transactions: ¥17.4 billion, commodity derivatives transactions: ¥2.1 billion) for the measure in 2), or compensation made by JSCC up to the amount funded as a settlement guarantee reserve for securities trading, etc. (¥20.0 billion) for financial derivatives transactions and up to the amount funded as a settlement guarantee reserve for commodity futures, etc. (¥2.37 billion) for commodity derivatives transactions for the measure in 3).

If losses on settlement default are incurred in clearing of OTC derivative transactions, the losses will be compensated under the following multi-tiered scheme:

1) Compensation by collateral deposited by the defaulting clearing participant (initial margin and clearing funds)
2) Compensation by JSCC (first-tier settlement guarantee reserve)
3) Compensation by clearing funds contributed by non-defaulting clearing participants and by JSCC (second-tier settlement guarantee reserve)
4) Compensation by special clearing charges collected from non-defaulting clearing participants
5) Compensation by non-defaulting clearing participants who are the recipients of variation margin after the default

Hence, in cases where JSCC incurs losses due to settlement default by a clearing participant for an OTC derivative transaction and JSCC's losses cannot be fully made up for even through the measure in 1), the Group may incur losses for each clearing operation due to compensation made by JSCC up to the amount funded as the first-tier settlement guarantee reserve (credit default swap transaction:

¥1.5 billion, interest rate swap transaction: ¥2.0 billion) for the measure in 2), or compensation made by JSCC up to the amount funded as the second-tier settlement guarantee reserve (credit default swap transaction: ¥1.5 billion, interest rate swap transaction: ¥2.0 billion) for the measure in 3).

If losses on settlement default are incurred in clearing of OTC traded Japanese government bonds, the losses will be compensated under the following multi-tiered scheme:

1) Compensation by collateral deposited by the defaulting clearing participant (initial margin and clearing funds)
2) Compensation by JSCC (first-tier settlement guarantee reserve)
3) Compensation by clearing funds contributed by non-defaulting clearing participants and by JSCC (second-tier settlement guarantee reserve)
4) Compensation by special clearing charges collected from non-defaulting clearing participant
5) Compensation by clearing funds contributed by clearing participants subject to original transaction proration[11] and by JSCC (second-tier settlement guarantee reserve that is not used in 3))
6) Compensation by special clearing charges collected from clearing participants subject to original transaction proration
7) Compensation by non-defaulting clearing participants who are the recipients of variation margin after the default

Hence, in cases where JSCC incurs losses due to settlement default by a clearing participant for an OTC traded Japanese government bond and its losses cannot be fully made up for even through the measure in 1), the Group may incur losses due to compensation made by JSCC up to ¥1.75 billion, which has been funded as the first-tier settlement guarantee reserve, for the measure in 2), or compensation made by JSCC up to ¥1.75 billion, which has been funded as the second-tier settlement guarantee reserve, for the measures 3) and 5).

1 Financial instruments exchanges for buying and selling securities: TSE, Nagoya Stock Exchange, Inc., Sapporo Securities Exchange and Fukuoka Stock Exchange

2 PTS: PTS (Proprietary Trading System) operated by Japannext Co., Ltd. and Chi-X Japan Limited

3 Clearing funds: Clearing participants are required to deposit these funds in order to ensure their performance of obligations to JSCC. The required amount in securities trading is calculated to cover reconstruction expense to cover losses that may be incurred due to shortage of margin, etc. deposited by the defaulting clearing participants in cases including the one where multiple clearing participants defaulted on clearing obligations in an extreme, but possible market situation.

4 Clearing margin: Clearing participants are required to deposit these funds in order to secure their performance of obligations for futures and option transactions to JSCC. The required amount is at least the amount derived by deducting the total amount of net option value from the amount calculated by SPAN®* for open positions of futures and options trading.

* SPAN®: SPAN, which is an abbreviation of Standard Portfolio Analysis of Risk, is a methodology that calculates margin developed by Chicago Mercantile Exchange. The amount of margin is calculated according to risks arising from open positions of the entire futures and options trading.

5 Initial margin: Clearing participants are required to deposit this margin in order to ensure their performance of obligations for futures and option transactions to JSCC. The required amount is calculated by adding the amount to cover certain risks to the amount of losses expected from fluctuations in the price (yield curb for interest rate swap transactions) in the period up to completion of the position processing in cases where a clearing participant defaults on each transaction.

6 Variation margin: For the position of each clearing participant, the fluctuation portion of position value from the previous day is received in the form of cash as variation margin in order to cover a daily fluctuation in the price. Clearing participants for whom the fluctuation portion is negative pay that portion to JSCC, while those for whom the fluctuation portion is positive receive that portion from JSCC.

7 JSCC has introduced Cross Margining system, and profits/losses pertaining to government bond futures transactions subject to Cross Margining are treated as those pertaining to clearing of OTC derivatives transactions (interest rate swap transactions).

8 Compensation from loss compensation of financial instruments exchanges, etc.: Under loss compensation contracts concluded between JSCC and financial instruments exchanges, etc., losses are compensated for up to the amount stipulated in those contracts. For agreements on cash equities, there are contracts between JSCC and five financial instrument exchanges as well as contracts between JSCC and each PTS. The maximum compensation amount totals ¥11.3 billion, of which ¥10.4 billion is the total maximum compensation amount in the contracts with TSE and OSE, two of the Group companies.

9 Settlement guarantee reserve for securities trading, etc. is used to compensate not only losses incurred in clearing of securities trading but also losses incurred in clearing of financial derivatives transactions.

10 Compensation from loss compensation of financial instruments exchanges or commodity exchanges: Under loss compensation contracts concluded between JSCC and financial instruments exchanges, and JSCC and commodity exchanges, losses are compensated for up to the amount stipulated in those contracts. For financial derivatives transactions, contracts have been concluded between JSCC and TSE, and JSCC and OSE, and the maximum compensation amount under these contracts is ¥17.4 billion in total. For commodity derivatives transactions, contracts have been concluded between JSCC and TOCOM, and JSCC and ODE, and the maximum compensation amount of TOCOM, one of the Group companies, is ¥2.1 billion.

11 Clearing participants subject to original transaction proration: These participants are clearing participants who have trust accounts.