(Translation)

This document has been extracted and translated from the Japanese original for reference purpose and the translated document only includes Financial Information chapter. In the event of any discrepancy between the translated document and Japanese original, the original shall prevail.

Financial Information of Annual Securities Report

From January 1, 2019 to December 31, 2019

(The 101st Business term)

Financial Information

1. Preparation of consolidated financial statements and non-consolidated financial statements

(1) The consolidated financial statements of Nissha Co., Ltd. (the "Company") have been prepared in accordance with International Financial Reporting Standards ("IFRS") pursuant to Article 93 of the "Ordinance on Terminology, Forms, and Preparation Methods of Consolidated Financial Statements" (Ordinance of the Ministry of Finance No. 28 of 1976; hereinafter referred to as the "Ordinance on Consolidated Financial Statements").

(2) The non-consolidated financial statements of the Company have been prepared in accordance with the "Ordinance on Terminology, Forms, and Preparation Methods of Financial Statements, etc." (Ordinance of the Ministry of Finance No. 59 of 1963; hereinafter referred to as the "Ordinance on Financial Statements, etc.").

The Company falls under a company which is permitted to submit non-consolidated financial statements prepared in accordance with special provisions, and prepares its non-consolidated financial statements pursuant to Article 127 of the Ordinance on Financial Statements, etc.

2. Audit certificate

The consolidated financial statements and non-consolidated financial statements of the Company for the fiscal year ended December 31, 2019 (from January 1, 2019 to December 31, 2019) have been audited by Deloitte Touche Tohmatsu LLC in accordance with Article 193-2, Paragraph 1 of the Financial Instruments and Exchange Act.

3. Special efforts to ensure fair presentation of consolidated financial statements, etc.

The Company has become a member of the Financial Accounting Standards Foundation and participates in seminars in order to develop a system capable of appropriately understanding the contents of the accounting standards and other rules.

4. Development of internal system to prepare consolidated financial statements, etc. fairly in accordance with IFRS

The Company obtains as necessary press releases and accounting standards published by the International Accounting Standards Board to keep up to date with the latest standards. In addition, the Company develops an internal system, including internal rules and manuals in compliance with IFRS, to prepare consolidated financial statements, etc. fairly in accordance with IFRS.

1 Consolidated Financial Statements, etc.

(1) Consolidated financial statements

1) Consolidated statements of financial position

(Million yen)

	Note	As of January 1, 2018 (Date of transition to IFRS)	As of December 31, 2018	As of December 31, 2019
Assets				
Current assets				
Cash and cash equivalents	6,35	29,291	16,637	17,499
Trade and other receivables	7,35	44,670	38,974	34,177
Inventories	8	27,588	30,287	21,415
Other financial assets	16,35	3,318	4,071	564
Other current assets	9	5,296	5,390	4,713
Subtotal		110,165	95,361	78,371
Assets held for sale	10	–	293	4
Total current assets		110,165	95,654	78,375
Non-current assets				
Property, plant and equipment	11,14	58,462	58,967	45,050
Goodwill	12,14	19,569	19,871	19,589
Intangible assets	12,14	14,459	14,558	13,343
Right-of-use assets	13,14	7,901	9,455	8,041
Investments accounted for using equity method	15	218	0	0
Other financial assets	16,35	20,694	15,369	20,413
Retirement benefit asset	23	111	221	265
Deferred tax assets	17	658	571	879
Other non-current assets	9	199	226	247
Total non-current assets		122,275	119,241	107,830
Total assets		232,440	214,895	186,205

(Million yen)

	Note	As of January 1, 2018 (Date of transition to IFRS)	As of December 31, 2018	As of December 31, 2019
Liabilities and equity				
Liabilities				
Current liabilities				
Trade and other payables	18,35	72,806	62,158	44,538
Borrowings	19,35	12,025	12,574	22,167
Other financial liabilities	20,35	1,308	1,441	1,073
Lease liabilities	13	1,567	1,614	1,562
Income taxes payable, etc.	17	1,566	926	447
Provisions	21	25	300	53
Other current liabilities	22	7,978	5,272	4,237
Subtotal		97,278	84,288	74,080
Liabilities directly associated with assets held for sale	10	—	112	—
Total current liabilities		97,278	84,401	74,080
Non-current liabilities				
Bonds and borrowings	19,35	16,383	16,319	14,244
Other financial liabilities	20,35	1,616	1,695	442
Lease liabilities	13	6,420	7,990	7,926
Retirement benefit liability	23	4,775	4,543	4,913
Provisions	21	164	162	47
Deferred tax liabilities	17	9,834	7,941	9,212
Other non-current liabilities	22	293	293	331
Total non-current liabilities		39,488	38,947	37,118
Total liabilities		136,766	123,348	111,198
Equity				
Share capital	24	12,069	12,119	12,119
Capital surplus	24	15,027	15,071	14,931
Retained earnings	24	57,940	60,931	42,363
Treasury shares	24	(239)	(1,900)	(1,899)
Other components of equity	24	10,638	5,341	7,494
Total equity attributable to owners of parent		95,435	91,564	75,010
Non-controlling interests		237	(17)	(3)
Total equity		95,673	91,546	75,007
Total liabilities and equity		232,440	214,895	186,205

2) Consolidated statements of profit or loss and comprehensive income

Consolidated statements of profit or loss

(Million yen)

	Note	Fiscal Year ended December 31, 2018	Fiscal Year ended December 31, 2019
Net sales	26	204,210	174,035
Cost of sales	28	(166,337)	(149,898)
Gross profit		37,872	24,137
Selling, general and administrative expenses	27,28	(29,152)	(27,668)
Other income	29	1,404	6,200
Other expenses	29	(2,956)	(18,917)
Share of profit (loss) of investments accounted for using equity method	15	(213)	—
Operating profit (loss)		6,954	(16,247)
Finance income	30	663	1,056
Finance costs	30	(1,249)	(1,437)
Profit (loss) before tax		6,367	(16,628)
Income tax expense	17	(2,113)	(590)
Profit (loss)		4,254	(17,219)
Profit (loss) attributable to:			
Owners of parent		4,523	(17,179)
Non-controlling interests		(269)	(39)
Profit (loss)		4,254	(17,219)
Earnings (loss) per share attributable to owners of parent			
Basic earnings (loss) per share (Yen)	32	89.79	(344.19)
Diluted earnings (loss) per share (Yen)	32	87.55	(344.19)

Consolidated statements of comprehensive income

(Million yen)

	Note	Fiscal Year ended December 31, 2018	Fiscal Year ended December 31, 2019
Profit (loss)		4,254	(17,219)
Other comprehensive income			
Items that will not be reclassified to profit or loss			
Net change in fair value of financial assets measured through other comprehensive income	31	(3,689)	3,170
Remeasurements of defined benefit plans	31	(2)	(72)
Total of items that will not be reclassified to profit or loss		(3,691)	3,098
Items that may be reclassified to profit or loss			
Exchange differences on translation of foreign operations	31	(1,615)	(839)
Share of other comprehensive income of investments accounted for using equity method	31	(5)	—
Total of items that may be reclassified to profit or loss		(1,620)	(839)
Total other comprehensive income		(5,312)	2,258
Total comprehensive income		(1,058)	(14,960)
Comprehensive income attributable to:			
Owners of parent		(788)	(14,923)
Non-controlling interests		(269)	(37)
Total comprehensive income		(1,058)	(14,960)

3) Consolidated statements of changes in equity

(Million yen)

		Equity attributable to owners of parent										
						Other components of equity						
	Note	Share capital	Capital surplus	Retained earnings	Treasury shares	Net change in fair value of financial assets measured through other compre-hensive income	Remeasure-ments of defined benefit plans	Exchange differences on translation of foreign operations	Total other compo-nents of equity	Total equity attributable to owners of parent	Non-controlling interests	Total equity
Balance at January 1, 2018		12,069	15,027	57,940	(239)	10,638	—	—	10,638	95,435	237	95,673
Profit (loss)		—	—	4,523	—	—	—	—	—	4,523	(269)	4,254
Other comprehensive income		—	—	—	—	(3,689)	(3)	(1,619)	(5,312)	(5,312)	(0)	(5,312)
Total comprehensive income		—	—	4,523	—	(3,689)	(3)	(1,619)	(5,312)	(788)	(269)	(1,058)
Issuance of new shares	24	50	47	—	—	—	—	—	—	97	—	97
Purchase of treasury shares	24	—	—	—	(1,732)	—	—	—	—	(1,732)	—	(1,732)
Disposal of treasury shares	24	—	(22)	—	70	—	—	—	—	48	—	48
Dividends of surplus	25	—	—	(1,516)	—	—	—	—	—	(1,516)	—	(1,516)
Share-based payment transactions	34	—	19	—	—	—	—	—	—	19	—	19
Changes in ownership interest in subsidiaries		—	—	—	—	—	—	—	—	—	—	—
Loss of control of subsidiaries		—	—	—	—	—	—	—	—	—	—	—
Put options granted to non-controlling interests		—	—	—	—	—	—	—	—	—	—	—
Transfer from other components of equity to retained earnings		—	—	(16)	—	12	3	—	16	—	—	—
Other		—	—	—	—	—	—	—	—	—	14	14
Total transactions with owners, etc.		50	44	(1,532)	(1,661)	12	3	—	16	(3,082)	14	(3,068)
Balance at December 31, 2018		12,119	15,071	60,931	(1,900)	6,961	—	(1,619)	5,341	91,564	(17)	91,546
Profit (loss)		—	—	(17,179)	—	—	—	—	—	(17,179)	(39)	(17,219)
Other comprehensive income		—	—	—	—	3,170	(72)	(841)	2,256	2,256	2	2,258
Total comprehensive income		—	—	(17,179)	—	3,170	(72)	(841)	2,256	(14,923)	(37)	(14,960)
Issuance of new shares		—	—	—	—	—	—	—	—	—	—	—
Purchase of treasury shares	24	—	—	—	(0)	—	—	—	—	(0)	—	(0)
Disposal of treasury shares	24	—	(1)	—	2	—	—	—	—	1	—	1
Dividends of surplus	25	—	—	(1,497)	—	—	—	—	—	(1,497)	—	(1,497)
Share-based payment transactions	34	—	16	—	—	—	—	—	—	16	—	16
Changes in ownership interest in subsidiaries	24	—	(981)	—	—	—	15	—	15	(965)	16	(949)
Loss of control of subsidiaries		—	—	(11)	—	—	—	—	—	(11)	35	24
Put options granted to non-controlling interests	24	—	826	—	—	—	—	—	—	826	—	826
Transfer from other components of equity to retained earnings		—	—	119	—	(176)	56	—	(119)	—	—	—
Other		—	—	—	—	—	—	—	—	—	—	—
Total transactions with owners, etc.		—	(139)	(1,389)	1	(176)	72	—	(103)	(1,630)	51	(1,578)
Balance at December 31, 2019		12,119	14,931	42,363	(1,899)	9,955	—	(2,461)	7,494	75,010	(3)	75,007

4) Consolidated statements of cash flows

(Million yen)

	Note	Fiscal Year ended December 31, 2018	Fiscal Year ended December 31, 2019
Cash flows from operating activities			
Profit (loss) before tax		6,367	(16,628)
Depreciation and amortization		10,325	10,067
Impairment losses		246	15,917
Loss (gain) on sale and retirement of non-current assets		538	(4,267)
Gain on sale of shares of subsidiaries and associates		(317)	(878)
Business restructuring expenses		607	47
Loss on disaster		478	—
Share of loss (profit) of investments accounted for using equity method		213	—
Finance income	30	(663)	(1,056)
Finance costs	30	1,249	1,437
Decrease (increase) in trade and other receivables		6,594	4,976
Decrease (increase) in inventories		(3,202)	8,604
Increase (decrease) in trade and other payables		(8,790)	(16,362)
Increase (decrease) in provisions		263	(369)
Increase (decrease) in retirement benefit asset or liability		(327)	201
Other		(4,792)	3,784
Subtotal		8,791	5,475
Interest received		73	47
Dividends received		285	369
Payments for loss on liquidation of business	33	—	(1,402)
Interest paid		(942)	(1,094)
Income taxes paid		(2,597)	(1,954)
Income taxes refund		127	195
Net cash provided by (used in) operating activities		5,737	1,636
Cash flows from investing activities			
Proceeds from withdrawal of time deposits		477	—
Purchase of property, plant and equipment		(11,697)	(7,226)
Payments for retirement of property, plant and equipment		(238)	(489)
Proceeds from sale of property, plant and equipment		7	6,068
Purchase of intangible assets		(731)	(730)
Purchase of investment securities		(26)	(996)
Proceeds from sale of investment securities		7	422
Payments for acquisition of subsidiaries or other businesses	5,33	(2,216)	(2,434)
Proceeds from sale of subsidiaries	5,33	—	698
Payments for sale of subsidiaries	33	—	(81)
Proceeds from sale of shares of subsidiaries and associates		317	—
Other		(125)	(180)
Net cash provided by (used in) investing activities		(14,225)	(4,948)

(Million yen)

	Note	Fiscal Year ended December 31, 2018	Fiscal Year ended December 31, 2019
Cash flows from financing activities			
Proceeds from short-term borrowings	33	21,858	20,484
Repayments of short-term borrowings	33	(21,630)	(10,495)
Repayments of lease liabilities	33	(1,741)	(1,766)
Proceeds from long-term borrowings	33	3,433	1,313
Repayments of long-term borrowings	33	(2,570)	(3,403)
Payments for acquisition of non-controlling interests		—	(950)
Purchase of treasury shares	24	(1,732)	(0)
Proceeds from sale of treasury shares	24	3	0
Dividends paid to owners of parent	25	(1,519)	(1,499)
Other		(11)	(1)
Net cash provided by (used in) financing activities		(3,909)	3,680
Effect of exchange rate changes on cash and cash equivalents		(136)	373
Net increase (decrease) in cash and cash equivalents		(12,533)	742
Cash and cash equivalents at beginning of period	6	29,291	16,757
Cash and cash equivalents at end of period	6	16,757	17,499

Notes to Consolidated Financial Statements

1. Reporting entity

Nissha Co., Ltd. (the "Company") is a corporation domiciled in Japan, and the registered address of its headquarters is Nakagyo-ku, Kyoto, Japan.

The consolidated financial statements of the Company with the fiscal year-end date of December 31 are prepared by combining the financial statements of the Company and its subsidiaries (collectively, the "Group") and the Group's interest in its associates. The Group is engaged in the Industrial Materials business, the Devices business, the Medical Technologies business, the Information and Communication business, and other businesses incidental thereto. The details of the Group's business and major activities are described in Note 4 "Operating segments."

2. Basis of preparation

(1) Statement of compliance with IFRS and notes on first-time adoption

The Company meets the requirements for a "specified company complying with designated international accounting standards" as stipulated in the Ordinance on Consolidated Financial Statements. Therefore, the Group's consolidated financial statements have been prepared in compliance with IFRS pursuant to the provisions set forth in Article 93 of the Ordinance.

The Group has adopted IFRS starting from the fiscal year ended December 31, 2019, with the date of transition to IFRS (the "date of transition") on January 1, 2018. Upon the transition to IFRS, the Group has applied IFRS 1 "First-time Adoption of International Financial Reporting Standards" ("IFRS 1"). The effects of the transition to IFRS on the financial position, operating results and cash flows of the Group are provided in Note 41 "First-time adoption."

(2) Basis of measurement

The consolidated financial statements have been prepared on the historical cost basis, except for certain items including the following items in the consolidated statements of financial position:

・Derivatives are measured at fair value.

・Financial instruments measured at fair value through profit or loss are measured at fair value.

・Financial instruments measured at fair value through other comprehensive income are measured at fair value.

・The net defined benefit liability (asset) is measured at the present value of defined benefit obligations less the fair value of plan assets.

(3) Functional currency and presentation currency

The Group's consolidated financial statements are presented in Japanese yen, which is the Company's functional currency. Unless otherwise noted, amounts are rounded down to the nearest million yen.

(4) Significant accounting judgements and estimates

In preparing the consolidated financial statements in compliance with IFRS, management makes judgements, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities, income and expenses. Actual results may differ from these estimates.

Estimates and their underlying assumptions are reviewed on an ongoing basis. The effects of revisions to accounting estimates are recognized in the accounting period in which the estimates were revised and in any future accounting periods affected.

Accounting judgements that have significant effects on the consolidated financial statements for the fiscal year ended December 31, 2019 and accounting estimates subject to significant revisions in the consolidated financial statements for the subsequent fiscal year are as follows:

・Scope of consolidation – "(1) Basis of consolidation" in Note 3 "Significant accounting policies"

・Timing of sales recognition – "(17) Sales recognition" in Note 3 "Significant accounting policies"

・Impairment of non-financial assets – "(11) Impairment of non-financial assets" in Note 3 "Significant accounting policies," Note 12 "Goodwill and intangible assets" and Note 14 "Impairment of non-financial assets"

・Recoverability of deferred tax assets – "(19) Income taxes" in Note 3 "Significant accounting policies" and Note 17 "Income taxes"

・Measurement of defined benefit obligations – "(13) Employee benefits" in Note 3 "Significant accounting policies" and Note 23 "Post-employment benefits"

・Fair value measurement of financial instruments – "(4) Financial instruments" in Note 3 "Significant accounting policies" and Note 35 "Financial instruments"

(5) Standards and interpretations issued but not yet applied

Of the standards and interpretations newly established or revised by the approval date of the consolidated financial statements, those that have been issued but not yet applied as of December 31, 2019 are mainly as follows. The impact of applying these new standards and revisions on the Group's financial position and operating results is immaterial.

IFRS	Title	Mandatory effective date (Fiscal years beginning on and after)	Timing of initial application by the Group	Summary of new standards and revisions
IFRS 3	Business Combinations	January 1, 2020	Fiscal year ending December 31, 2020	Improvement in the definition of a "business"
IAS 1	Presentation of Financial Statements	January 1, 2020	Fiscal year ending December 31, 2020	Clarification on the definition of "material"
IAS 8	Accounting Policies, Changes in Accounting Estimates and Errors			
IFRS 9	Financial Instruments	January 1, 2020	Fiscal year ending December 31, 2020	Revision to certain requirements for hedge accounting to mitigate the potential effects of uncertainties triggered by the IBOR reform
IAS 39	Financial Instruments: Recognition and Measurement			
IFRS 7	Financial Instruments: Disclosures			
IFRS 17	Insurance Contracts	January 1, 2021 (Note)	Fiscal year ending December 31, 2021	A comprehensive standard for insurance contracts
IAS 1	Presentation of Financial Statements	January 1, 2022	Fiscal year ending December 31, 2022	Clarification on how payables and other liabilities are classified as current or non-current

(Note) The International Accounting Standards Board (the "IASB") has tentatively decided to defer the effective date of the standard by one year to January 1, 2022. The Group will apply the standard for fiscal years on and after the mandatory effective date accordingly.

3. Significant accounting policies

(1) Basis of consolidation

1) Subsidiaries

A subsidiary is an entity over which the Group has control.

The Group controls an investee entity when the Group is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee.

The acquisition date of a subsidiary is the date on which the Group obtains control of the subsidiary, and the subsidiary is consolidated from the acquisition date until the date on which the Group loses control over the subsidiary. When accounting policies applied by a subsidiary differ from those applied by the Group, adjustments are made to the financial statements of the subsidiary.

Changes in the Group's ownership interest in a subsidiary that do not result in a loss of control are accounted for as equity transactions. Any difference between the amount by which the non-controlling interests are adjusted and the fair value of the consideration paid or received is recognized directly as equity attributable to owners of parent in equity.

In preparing the consolidated financial statements, intragroup balances of receivables and payables, intragroup transactions, and unrealized gains and losses arising from intragroup transactions are eliminated.

The fiscal year-end of all subsidiaries is the same as that of the Company.

2) Associates

An associate is an entity in which the Group has significant influence, but not control, over financial and operating policies.

Assessing and deciding whether the Group has significant influence over an entity reflects a comprehensive consideration of various elements. Such elements include the holding of voting rights (if the Group holds, directly or indirectly, 20% to 50% of the voting rights of the investee company, it is presumed that the Group has significant influence over the investee company), the existence of potential voting rights that are substantively exercisable and the percentage of directors that have been seconded from the Group.

An associate is accounted for using the equity method from the date on which the Group obtains significant influence until the date on which the Group loses such influence. When the accounting policies of an associate differ from those of the Group, adjustments are made to bring them in conformity with the accounting policies of the Group. Under the equity method, the amount of an investment in an associate is initially measured at cost and subsequently increased or decreased in proportion to changes in the Group's share of net assets of the associate after the acquisition. The Group's share of the associate's profit or loss is recognized in the Group's profit or loss, and the Group's share of the associate's other comprehensive income is recognized in the Group's other comprehensive income. Profits resulting from significant transactions between the Group and the associate are eliminated to the extent of the Group's interest in the associate.

The fiscal year-end of all associates is the same as that of the Company.

(2) Business combinations

Business combinations are accounted for using the acquisition method.

The consideration transferred is measured at the sum of the acquisition-date fair values of the assets transferred, liabilities assumed, and equity interests issued in exchange for control over the acquiree.

The identifiable assets, liabilities and contingent liabilities in the acquiree are measured at their acquisition-date fair values, except that:

・Deferred tax assets (or deferred tax liabilities) and assets or liabilities related to employee benefit arrangements are recognized and measured in accordance with IAS 12 "Income Taxes" and IAS 19 "Employee Benefits," respectively.

・Liabilities or equity instruments that are related to the acquiree's share-based payment transactions or the replacement of the acquiree's share-based payment transactions with the acquirer's share-based payment transactions are recognized and measured in accordance with IFRS 2 "Share-based Payment."

・Non-current assets or disposal groups that are classified as held for sale at the acquisition date in accordance with IFRS 5 "Non-current Assets Held for Sale and Discontinued Operations" are measured in accordance with that IFRS.

Goodwill is measured as the excess, if any, of the consideration transferred over the net amount of identifiable assets and liabilities as of the acquisition date. If the difference is negative, it is immediately recognized in profit or loss.

If the initial accounting for a business combination is incomplete by the end of the reporting period in which the combination occurs, the items for which the accounting is incomplete are measured at provisional amounts. In case new information obtained during the measurement period, which shall not exceed one year from the acquisition date, if known, would have affected the measurement of the amounts recognized as of the acquisition date, the provisional amounts recognized at the acquisition date are retrospectively adjusted.

Acquisition-related costs incurred to achieve a business combination are expensed as incurred. The acquisition of additional non-controlling interests is accounted for as an equity transaction without recognition of goodwill.

(3) Foreign currency translation

Transactions in foreign currencies are translated into the functional currency of each Group company using the exchange rate at the transaction date or a rate that approximates such rate. Monetary assets and liabilities denominated in foreign currencies are translated into the functional currency of each Group company using the exchange rate at the fiscal year-end. Exchange differences arising from the translation and settlement are recognized in profit or loss. However, exchange differences arising from the translation of investments in equity instruments measured at fair value through other comprehensive income and cash flow hedges are recognized in other comprehensive income.

The assets and liabilities of foreign operations are translated into Japanese yen using the exchange rate at the fiscal year-end, and the income and expenses of foreign operations are translated into Japanese yen using the average exchange rate for the fiscal year, except in cases where the exchange rate fluctuates significantly. Exchange differences arising from the translation are recognized in other comprehensive income. On the disposal of a foreign operation that results in a loss of control or significant influence over the foreign operation, the cumulative exchange differences relating to the foreign operation are recognized in profit or loss for the period of disposal.

(4) Financial instruments

1) Non-derivative financial assets

(i) Initial recognition and measurement

The Group initially recognizes trade and other receivables on the date of occurrence and all the other financial assets on the transaction date when the Group becomes a party to the contract.

At initial recognition, all financial assets are measured at fair value plus transaction costs that are directly attributable to the acquisition of the financial assets, except when they are classified as financial assets measured at fair value through profit or loss. Transaction costs of financial assets measured at fair value through profit or loss are recognized in profit or loss.

(ii) Classification and subsequent measurement

The Group classifies its financial assets as (a) financial assets measured at amortized cost, (b) debt instruments measured at fair value through other comprehensive income, (c) equity instruments measured at fair value through other comprehensive income or (d) financial assets measured at fair value through profit or loss. The classification is determined at initial recognition, and the financial assets are subsequently measured based on their classification as follows:

(a) Financial assets measured at amortized cost

A financial asset that meets both of the following conditions is classified as a financial asset measured at amortized cost:

・the financial asset is held within a business model whose objective is to hold financial assets in order to collect contractual cash flows and

・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.

After initial recognition, financial assets measured at amortized cost are measured at amortized cost using the effective interest method, less impairment losses. Interest income based on the effective interest method is recognized as finance income in profit or loss.

(b) Debt instruments measured at fair value through other comprehensive income

A debt instrument that meets both of the following conditions is classified as a financial asset measured at fair value through other comprehensive income:

・the financial asset is held within a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets and

・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.

After initial recognition, such debt instruments are measured at fair value. Subsequent changes in the fair value are recognized in other comprehensive income, except that foreign exchange gains or losses, impairment gains or losses, and interest income based on the effective interest method are recognized in profit or loss. When these debt instruments are derecognized, cumulative gains or losses recognized in other comprehensive income are reclassified from other components of equity to profit or loss as reclassification adjustments.

(c) Equity instruments measured at fair value through other comprehensive income

The Group has made an irrevocable election to present in other comprehensive income subsequent changes in the fair value of investments in equity instruments, which are classified as financial assets measured at fair value through other comprehensive income.

After initial recognition, such equity instruments are measured at fair value. Subsequent changes in the fair value are recognized in other comprehensive income. When these equity instruments are derecognized, cumulative gains or losses recognized in other comprehensive income are reclassified from other components of equity to retained earnings.

Dividends from financial assets measured at fair value through other comprehensive income are recognized as finance income in profit or loss unless the dividend clearly represents a return of the investment.

(d) Financial assets measured at fair value through profit or loss

Financial assets other than financial assets measured at amortized cost or at fair value through other comprehensive income as mentioned above are classified as financial assets measured at fair value through profit or loss.

There are no financial assets that the Group has elected to irrevocably designate as financial assets measured at fair value through profit or loss at initial recognition.

Financial assets measured at fair value through profit or loss are recognized at fair value at initial recognition, and the transaction costs are recognized in profit or loss as incurred.

After initial recognition, such financial assets are measured at fair value. Subsequent changes in the fair value, net of dividends and interest income, are recognized in profit or loss.

(iii) Impairment of financial assets

An allowance for doubtful accounts is recognized for expected credit losses on financial assets subject to impairment, including financial assets measured at amortized cost.

The Group assesses at each fiscal year-end whether the credit risk on financial instruments has increased significantly since initial recognition.

If the credit risk on a financial instrument has not increased significantly since initial recognition, the allowance for doubtful accounts for the financial instrument is measured at an amount equal to the 12-month expected credit losses. If the credit risk on a financial instrument has increased significantly since initial recognition, the allowance for doubtful accounts for the financial instrument is measured at an amount equal to the lifetime expected credit losses.

When contractual payments are more than 30 days past due, the Group determines in principle that there has been a significant increase in credit risk. In assessing whether credit risk has increased significantly, the Group considers reasonably available and supportable information as well as past due information on contractual payments.

For financial assets including trade receivables that do not contain a significant financing component, the allowance for doubtful accounts is always measured at an amount equal to lifetime expected credit losses irrespective of whether there has been a significant increase in credit risk since initial recognition.

The expected credit losses of a financial instrument are measured in a way that reflects:

・an unbiased and probability-weighted amount that is determined by evaluating a range of possible outcomes;
・the time value of money; and
・reasonable and supportable information that is available without undue cost or effort at the reporting date about past events, current conditions and forecasts of future economic conditions.

A provision of allowance for doubtful accounts for financial assets is recognized in profit or loss. In the event that the recognized allowance for doubtful accounts is reduced, a reversal of allowance for doubtful accounts is recognized in profit or loss.

(iv) Derecognition of financial assets

The Group derecognizes a financial asset only when:

(a) the contractual rights to the cash flows from the financial asset expire, or

(b) it transfers the financial asset so that substantially all the risks and rewards of ownership of the financial asset are transferred.

2) Non-derivative financial liabilities

(i) Initial recognition and measurement

Financial liabilities are classified at initial recognition as (a) financial liabilities measured at amortized cost or (b) financial liabilities measured at fair value through profit or loss. Financial liabilities are initially recognized on the transaction date when the Group becomes a party to the contract. Financial liabilities measured at amortized cost are initially measured at fair value less transaction costs that are directly attributable to the financial liabilities, while financial liabilities measured at fair value through profit or loss are initially measured at fair value.

(ii) Classification and subsequent measurement

(a) Financial liabilities measured at amortized cost

After initial recognition, financial liabilities measured at amortized cost are measured at amortized cost using the effective interest method. Interest expenses based on the effective interest method are recognized as finance costs in profit or loss.

(b) Financial liabilities measured at fair value through profit or loss

After initial recognition, financial liabilities measured at fair value through profit or loss are measured at fair value. Subsequent changes in the fair value are recognized in profit or loss.

(iii) Derecognition of financial liabilities

The Group derecognizes a financial liability when it is extinguished, that is, when the obligation specified in the contract is discharged, cancelled or expires.

3) Presentation of financial assets and financial liabilities

Financial assets and financial liabilities are offset and presented on a net basis in the consolidated statements of financial position only when the Group has a legally enforceable right to set off the balances and intends either to settle on a net basis or to realize the asset and settle the liability simultaneously.

4) Derivative financial instruments

The Group utilizes forward exchange contracts and currency swaps to mitigate the risk of fluctuations in foreign exchange rates and utilizes interest rate swaps to mitigate the risk of fluctuations in interest rates. These derivatives are initially measured at the time when the contract is entered into, and are subsequently remeasured at fair value. Changes in the fair value of derivatives are all recognized in profit or loss.

Hedge accounting is not applied to the above derivatives. Accordingly, derivative financial instruments are classified as financial assets or financial liabilities measured at fair value through profit or loss.

5) Fair value of financial instruments

The fair value of financial instruments is determined using market information, including market prices, and appropriate valuation techniques.

Inputs used to measure fair value are categorized into the following three levels:

Level 1: Quoted prices in active markets for identical assets or liabilities.

Level 2: Inputs (i.e., prices themselves) other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly.

Level 3: Inputs that are not based on observable market data (i.e., unobservable inputs) for the asset or liability.

(5) Cash and cash equivalents

Cash and cash equivalents comprise cash on hand, demand deposits, and short-term investments with a maturity of three months or less from the date of acquisition that are readily convertible to cash and subject to an insignificant risk of changes in value.

(6) Inventories

Inventories are measured at the lower of cost and net realizable value.

The cost of inventories includes all costs of purchase, costs of conversion and other costs incurred in bringing the inventories to their present location and condition.

Net realizable value is determined as the estimated selling price in the ordinary course of business less the estimated costs of completion and estimated costs necessary to make the sale.

Valuation method for each inventory item is as follows:

1) Finished goods (excluding Decorative Film products, etc. of Industrial Materials) and work in process
   Mainly by the specific identification method.
2) Finished goods (Decorative Film products, etc. of Industrial Materials)
   By the moving average method.
3) Raw materials and supplies
   Mainly by the periodic average method.

(7) Property, plant and equipment

Property, plant and equipment are measured using the cost model and are carried at cost less any accumulated depreciation and any accumulated impairment losses.

Depreciable property, plant and equipment are depreciated using the straight-line method over their useful lives.

The useful lives used in determining depreciation are as follow:

Buildings and structures: 15 to 50 years

Machinery and vehicles: 5 to 10 years

Tools, furniture and fixtures: 2 to 10 years

The cost includes any costs directly attributable to the acquisition of the asset; the initial estimate of the costs of dismantling and removing the asset and restoring the site on which it is located; and borrowing costs eligible for capitalization.

The costs of the day-to-day servicing for the repairs and maintenance of property, plant and equipment are expensed as incurred.

When an item of property, plant and equipment consists of components with different useful lives, each component is recognized as a separate item of property, plant and equipment.

The gain or loss arising from the derecognition of property, plant and equipment is included in profit or loss when the asset is derecognized.

The depreciation method, useful life and residual value of an asset are reviewed at each fiscal year-end, and any changes are accounted for prospectively as changes in accounting estimates.

(8) Intangible assets

Intangible assets are measured using the cost model and are carried at cost less any accumulated amortization and any accumulated impairment losses.

Intangible assets with finite useful lives are amortized using the straight-line method over their useful lives.

The estimated useful lives of major intangible assets are as follows:

Software: 5 years

Customer-related assets: 8 to 17 years

Technical assets: 15 years

The useful lives and amortization method are reviewed at each fiscal year-end, and any changes are accounted for prospectively as changes in accounting estimates.

Intangible assets with indefinite useful lives and intangible assets not yet available for use are not amortized but tested for impairment individually or as part of the cash-generating unit to which the asset belongs, annually or whenever there is an indication that the asset may be impaired.

The gain or loss arising from the derecognition of intangible assets is included in profit or loss when the asset is derecognized.

(9) Goodwill

The measurement of goodwill at initial recognition is as described in "(2) Business combinations."

Goodwill is measured at cost less any accumulated impairment losses. Goodwill is not amortized but tested for impairment annually or whenever there is an indication that the asset may be impaired.

(10) Leases

(Lessee)

The Group assesses whether a contract is, or contains, a lease by considering whether the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration.

For leases as lessee, in principle, right-of-use assets and the corresponding lease liabilities are recognized. For short-term leases (with a lease term of 12 months or less) and leases for which the underlying asset is of low value, the lease payments are recognized as expenses on a straight-line basis over the lease term or another systematic basis.

Right-of-use assets are measured at cost at the commencement date, and lease liabilities are measured at the present value of the lease payments that are not made as of the commencement date. If the interest rate implicit in the lease cannot be readily determined, the lease payments are discounted using the lessee's incremental borrowing rate, which is the rate of interest that the lessee would have to pay to borrow the funds necessary to obtain a similar asset over a similar term.

After the commencement date of the lease, the right-of-use assets are measured at cost less any accumulated depreciation and any accumulated impairment losses, and are depreciated from the commencement date to the earlier of the end of the useful life of the right-of-use asset or the end of the lease term. Lease liabilities are measured by increasing the book value to reflect interest on the lease liability based on the effective interest method and reducing the book value to reflect the lease payments made.

In cases such as where there is a change in the lease term or a lease modification is not accounted for as a separate lease, the lease liability is remeasured with a corresponding adjustment to the right-of-use asset.

(11) Impairment of non-financial assets

Non-financial assets other than inventories and deferred tax assets are assessed at the end of each reporting period whether there is any indication of impairment. If any such indication exists, the recoverable amount of the asset or the cash-generating unit (or a group of cash-generating units) is estimated. Goodwill and intangible assets with indefinite useful lives or not yet available for use are tested for impairment at least annually, irrespective of whether there is any indication of impairment.

The recoverable amount of an asset or a cash-generating unit (or a group of cash-generating units) is the higher of its fair value less costs of disposal and its value in use. The value in use is determined by discounting the estimated future cash flows of the asset or the cash-generating unit (or a group of cash-generating units) to the present value at a pre-tax discount rate that reflects the time value of money and risks specific to the asset. A cash-generating unit is the smallest identifiable group of assets that generates cash inflows that are largely independent of the cash inflows from other assets or groups of assets. If the recoverable amount of an asset or a cash-generating unit is less than its book value, an impairment loss is recognized in profit or loss.

At the end of each reporting period, it is assessed whether there is an indication that impairment losses recognized previously for an asset may no longer exist or may have decreased. If any such indication exists, the recoverable amount of the asset is estimated. If the estimated recoverable amount exceeds the book value of the asset, impairment losses are reversed. The book value after the reversal is recognized to the extent that it does not exceed the book value (net of accumulated depreciation or amortization) that would have been determined had no impairment loss been recognized previously for the asset. The amount of reversal of impairment losses is recognized in profit or loss.

Impairment losses recognized for goodwill are not reversed.

(12) Provisions

The Group recognizes a provision when the Group has a present legal or constructive obligation as a result of a past event; it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation; and a reliable estimate can be made of the amount of the obligation.

A provision is recognized for the best estimate of the expenditure required to settle the present obligation at the fiscal year-end. Where the effect of the time value of money is material, a provision is measured at the present value of the expenditure discounted at a discount rate that reflects the risks specific to the liability. Where discounting is applied, an increase in the provision arising from the passage of time is recognized as finance costs.

(13) Employee benefits

1) Post-employment benefits

The Group has adopted defined benefit plans and defined contribution plans as post-employment benefit plans.

(i) Defined benefit plans

The present value of defined benefit obligations and the related current service cost and past service cost are determined using the projected unit credit method for each plan separately.

The discount rate is determined by reference to yields at the fiscal year-end on high quality corporate bonds with a term to maturity corresponding to the discount period, which is set based on the period until the expected maturity of benefit payments in each future fiscal year.

The present value of defined benefit obligations less the fair value of plan assets is recognized as a liability or an asset.

Current service cost, past service cost and net interest on the net defined benefit liability (asset) are recognized in profit or loss. Remeasurements of the net defined benefit liability (asset) are recognized collectively in other comprehensive income for the period in which they are incurred and immediately reclassified to retained earnings.

(ii) Defined contribution plans

Retirement benefit expenses of the defined contribution plans are recognized as expenses for the period in which employees render the related services.

2) Short-term employee benefits

Short-term employee benefits are not discounted but are expensed at the time when employees render the related services.

When the Group has a present legal or constructive obligation to make payments as a result of past service rendered by employees, and a reliable estimate can be made of the amount of the obligation, the estimated amount to be paid is recognized as a liability.

3) Other long-term employee benefits

Long-term employee benefits other than post-employment benefits are determined by discounting to the present value the future benefits that employees have earned in return for their services rendered in the current and prior fiscal years.

(14) Government grants

Government grants are recognized at fair value when there is reasonable assurance that the Group will comply with the conditions attaching to the grants and that the grants will be received.

Government grants related to income are recognized as income on a systematic basis over the periods in which the Group recognizes as expenses the related costs for which the grants are intended to compensate.

Government grants related to assets are presented by deducting the grant from the cost of the asset in arriving at the book value of the asset.

(15) Equity

1) Share capital and capital surplus

Equity instruments issued by the Company are recognized at issue value in share capital and capital surplus. Transaction costs directly attributable to the issuance are deducted from capital surplus.

2) Treasury shares

Any treasury shares acquired are recognized at cost and deducted from equity. Transaction costs directly attributable to the acquisition are deducted from equity.

Any treasury shares disposed of are recognized as an increase in equity at the consideration received, and the difference between the book value and the consideration received is included in capital surplus.

(16) Share-based payment plans

The Group has adopted equity-settled and cash-settled share-based payment plans for Directors of the Board (excluding Independent Outside Directors of the Board), Corporate Officers and employees of the Company and certain directors of the board and employees of the Company's subsidiaries.

1) Equity-settled

For equity-settled share-based payments, the consideration for the services received is measured at fair value of the equity instruments at grant date and recognized as an expense, with the corresponding increase in equity.

2) Cash-settled

For cash-settled share-based payments, the services received and the liability incurred are measured at the fair value of the liability and recognized as expenses over the vesting period with the corresponding increase recognized as a liability. Until the liability is settled, the fair value of the liability is remeasured at the end of each quarterly period and at the date of settlement with any changes in fair value recognized in profit or loss.

3) Share-based payment transactions with cash alternatives

A share-based payment transaction with cash alternatives is accounted for as a cash-settled payment transaction if, and to the extent that, the Group has incurred a liability to settle in cash or other assets, or as an equity-settled payment transaction if, and to the extent that, no such liability has been incurred.

(17) Sales recognition

Except for interest and dividend income and other income items under IFRS 9, the Group recognizes sales in an amount that reflects the consideration to which the Group expects to be entitled in exchange for the transfer of goods or services to customers, based on the following five-step approach:

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 each distinct performance obligation in the contract.

Step 5: Recognize sales when (or as) a performance obligation is satisfied.

For products (see Note 26 "Sales") that the Group has promised to deliver to a customer, the performance obligation in the contract is satisfied at a point at which the customer is deemed to have obtained control of the product in light of contractual terms and conditions, and the Group recognizes sales primarily upon delivery of the product to the customer or the customer's acceptance, or based on terms and conditions of trade. For performance obligations in service contracts and other contracts that meet the criteria for determining whether control of goods or services is transferred over time, sales are recognized over time by measuring the progress based on input methods, such as costs incurred.

Sales are measured at the amount net of returned products, rebates and discounts.

The consideration in the sales contracts on goods is collected mainly within one year from the time when control of the goods has been transferred to the customer. Those contracts do not contain a significant financing component.

(18) Borrowing costs

Borrowing costs that are directly attributable to the acquisition, construction or production of a qualifying asset (an asset that necessarily takes a substantial period of time to get ready for its intended use or sale) are included in the cost of the asset. All other borrowing costs are recognized in profit or loss for the period in which they are incurred.

(19) Income taxes

Income tax expense is presented as the aggregate amount of current and deferred tax, and recognized in profit or loss, except for those related to business combinations and items recognized in other comprehensive income or directly in equity.

Current tax is measured at the amount expected to be paid to or recovered from the taxation authorities, using the tax rates and tax laws that have been enacted or substantively enacted by the fiscal year-end.

Deferred tax is recognized primarily for temporary differences between the tax base and the accounting book value of an asset and liability at the fiscal year-end. Deferred tax assets are recognized for deductible temporary differences and the carryforward of unused tax losses and tax credits to the extent that it is probable that taxable profit will be available against which they can be utilized. Deferred tax liabilities are, in principle, recognized for all taxable temporary differences.

Deferred tax assets or liabilities are not recognized for the following temporary differences:

・Taxable temporary differences arising from the initial recognition of goodwill.

・Temporary differences arising from the initial recognition of an asset or liability in a transaction that is not a business combination and affects neither accounting profit (loss) nor taxable profit (tax loss).

・Deductible temporary differences associated with investments in subsidiaries and associates where it is probable that the temporary difference will not reverse in the foreseeable future, or taxable profit will not be available against which the temporary difference can be utilized.

・Taxable temporary differences associated with investments in subsidiaries and associates where it is probable that the Group is able to control the timing of the reversal of the temporary difference, and the temporary difference will not reverse in the foreseeable future.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply to the fiscal year when the asset is realized or the liability is settled, based on tax rates and tax laws that have been enacted or substantively enacted by the fiscal year-end.

(20) Earnings per share

Basic earnings per share are calculated by dividing profit or loss attributable to ordinary shareholders of the parent company by the basic weighted average number of common shares outstanding during the period, adjusted for the number of treasury shares. Diluted earnings per share are calculated by adjusting for the effects of all dilutive potential common shares.

(21) Segment information

An operating segment is a component of business activities from which the Group earns sales and incurs expenses, including transactions with other operating segments. The operating results of all operating segments, for which separate financial information is available, are regularly reviewed by the Company’s Board of Directors in order to decide the allocation of management resources to each segment and to assess its performance.

(22) Assets held for sale

A non-current asset (or a disposal group) is classified as held for sale if its book value will be recovered principally through a sale transaction rather than through continuing use.

An asset held for sale is measured at the lower of its “book value” and “fair value less costs to sell.” Property, plant and equipment and intangible assets are not depreciated or amortized once classified as held for sale.

4. Operating segments

(1) Description of reportable segments

The Group's reportable segments are those for which separate financial information is available and regular evaluation by the board of directors is being performed in order to decide the allocation of management resources and to review business results.

The Group sets up divisions by product or service. Each division draws up a plan for comprehensive strategies in Japan and overseas for the products and services it handles, and thereupon develops its business activities.

Accordingly, the Group consists of segments by product and service based on divisions, and the reportable segments are the Industrial Materials segment, Devices segment, Medical Technologies segment, and Information and Communication segment.

The Industrial Materials segment manufactures and sells decorative films, molds, molded plastic products, and metallized papers. The Devices segment manufactures and sells film-based Touch Sensors and gas sensors and others. The Medical Technologies segment manufactures and sells consumable medical products such as medical electrodes, medical chart paper and others and also provides contract manufacturing services for major medical device manufacturers. The Information and Communication segment manufactures and sells products in the fields of publication printing and art solution, and provides services related to commercial printing and sales promotion.

(2) Methods of measurement for the amounts of sales, profit (loss), assets and other items for each reportable segment

The accounting method for each reportable segment is the same as that set forth in Note 3 "Significant accounting policies." Segment profit is based on operating profit, and inter-segment sales are based on current market prices.

(3) Information about sales, profit (loss), assets, and other items by reportable segment

Date of transition to IFRS (January 1, 2018)

(Million yen)

	Reportable segment					Other (Note 1)	Total	Reconciliations (Note 2)	Consolidated
	Industrial Materials	Devices	Medical Technologies	Information and Communication	Sub-total				
Segment assets	54,035	73,885	29,953	4,729	162,603	812	163,416	69,024	232,440
Other items									
Investments accounted for using equity method	—	218	—	—	218	—	218	—	218

(Notes) 1. The "Other" category consists of an operating segment not included in the reportable segments and includes the landscaping business, etc.

2. The positive ¥69,024 million of reconciliations consists of the positive ¥69,308 million in total of cash and cash equivalents, investment securities, corporate (R&D and administrative) property, plant and equipment, etc., not allocated to reportable segments and the negative ¥284 million of inter-segment elimination of receivables and payables.

The fiscal year ended December 31, 2018 (January 1, 2018 to December 31, 2018)

(Million yen)

	Reportable segment					Other (Note 1)	Total	Reconciliations (Note 2)	Consolidated (Note 3)
	Industrial Materials	Devices	Medical Technologies	Information and Communication	Sub-total				
Sales from external customers	46,952	122,779	22,351	11,674	203,758	452	204,210	—	204,210
Inter-segment sales	751	627	—	116	1,496	1,837	3,334	(3,334)	—
Total	47,704	123,407	22,351	11,791	205,255	2,289	207,544	(3,334)	204,210
Segment profit (loss)	(18)	10,631	738	(1,237)	10,113	104	10,217	(3,263)	6,954
Finance income	—	—	—	—	—	—	—	—	663
Finance costs	—	—	—	—	—	—	—	—	(1,249)
Profit (loss) before tax	—	—	—	—	—	—	—	—	6,367
Segment assets	54,202	68,408	34,166	4,011	160,789	902	161,691	53,203	214,895
Other items									
Depreciation and amortization	3,870	4,417	996	263	9,546	97	9,644	681	10,325
Share of profit (loss) of investments accounted for using equity method	—	(213)	—	—	(213)	—	(213)	—	(213)
Impairment losses (see Note 14)	32	276	—	158	466	—	466	—	466
Increase in property, plant and equipment, intangible assets and right-of-use assets	4,510	6,009	1,852	71	12,443	135	12,578	1,993	14,572
Investments accounted for using equity method	—	0	—	—	0	—	0	—	0

(Notes) 1. The “Other” category consists of an operating segment not included in the reportable segments and includes the landscaping business, etc.

2. Reconciliations are as follows:

(1) The negative ¥3,263 million of reconciliations in segment profit (loss) includes unallocated corporate expenses, etc. Corporate expenses mainly consist of general and administrative expenses not attributable to any reportable segment.

(2) The positive ¥53,203 million of reconciliations in segment assets consists of the positive ¥53,405 million in total of cash and cash equivalents, investment securities, corporate (R&D and administrative) property, plant and equipment, etc., not allocated to reportable segments and the negative ¥202 million of inter-segment elimination of receivables and payables.

(3) The positive ¥681 million of reconciliations in depreciation and amortization relates to corporate (R&D and administrative) property, plant and equipment, etc.

(4) The positive ¥1,993 million of reconciliations in increase in property, plant and equipment, intangible assets and right-of-use assets is the amount of corporate (R&D and administrative) capital investment.

3. Segment profit (loss) is reconciled with operating profit (loss) recorded in the consolidated statements of profit or loss.

The fiscal year ended December 31, 2019 (January 1, 2019 to December 31, 2019)

(Million yen)

	Reportable segment					Other (Note 1)	Total	Reconciliations (Note 2)	Consolidated (Note 3)
	Industrial Materials	Devices	Medical Technologies	Information and Communication	Sub-total				
Sales from external customers	46,279	96,196	24,077	6,950	173,503	532	174,035	—	174,035
Inter-segment sales	1,006	130	—	55	1,193	1,665	2,858	(2,858)	—
Total	47,285	96,327	24,077	7,005	174,696	2,198	176,894	(2,858)	174,035
Segment profit (loss)	(7,278)	(11,769)	918	5,463	(12,665)	23	(12,642)	(3,605)	(16,247)
Finance income	—	—	—	—	—	—	—	—	1,056
Finance costs	—	—	—	—	—	—	—	—	(1,437)
Profit (loss) before tax	—	—	—	—	—	—	—	—	(16,628)
Segment assets	45,165	46,044	33,614	2,715	127,539	4,795	132,335	53,870	186,205
Other items									
Depreciation and amortization	3,670	4,260	1,169	200	9,300	162	9,463	604	10,067
Share of profit (loss) of investments accounted for using equity method	—	—	—	—	—	—	—	—	—
Impairment losses (see Note 14)	5,246	10,671	—	—	15,917	—	15,917	—	15,917
Increase in property, plant and equipment, intangible assets and right-of-use assets	3,535	2,329	972	626	7,463	60	7,523	1,424	8,948
Investments accounted for using equity method	—	0	—	—	0	—	0	—	0

(Notes) 1. The "Other" category consists of an operating segment not included in the reportable segments and includes the landscaping business, etc.

2. Reconciliations are as follows:

(1) The negative ¥3,605 million of reconciliations in segment profit (loss) includes unallocated corporate expenses, etc. Corporate expenses mainly consist of general and administrative expenses not attributable to any reportable segment.

(2) The positive ¥53,870 million of reconciliations in segment assets consists of the positive ¥54,108 million in total of cash and cash equivalents, investment securities, corporate (R&D and administrative) property, plant and equipment, etc., not allocated to reportable segments and the negative ¥238 million of inter-segment elimination of receivables and payables.

(3) The positive ¥604 million of reconciliations in depreciation and amortization relates to corporate (R&D and administrative) property, plant and equipment, etc.

(4) The positive ¥1,424 million of reconciliations in increase in property, plant and equipment, intangible assets and right-of-use assets is the amount of corporate (R&D and administrative) capital investment.

3. Segment profit (loss) is reconciled with operating profit (loss) recorded in the consolidated statements of profit or loss.

(4) Information about products and services

This information is omitted since the same information is disclosed in (3) Information about sales, profit (loss), assets, and other items by reportable segment.

(5) Information by region

Date of transition to IFRS (January 1, 2018)

Non-current assets

(Million yen)

Japan	United States	Other	Total
52,113	25,556	23,140	100,810

(Notes) 1. Financial instruments, deferred tax assets, retirement benefit asset, and rights arising under insurance contracts are not included.
2. Non-current assets are categorized by country or region based on the locations of assets.

The fiscal year ended December 31. 2018 (January 1, 2018 to December 31, 2018)

1) Sales from external customers

(Million yen)

Japan	Ireland	United States	Other	Total
31,059	99,550	30,580	43,019	204,210

(Notes) 1. Sales are categorized by country or region based on the locations of customers.
2. Sales from external customers in Ireland consists mainly of that from APPLE OPERATIONS listed in (6) Information by major customer.

2) Non-current assets

(Million yen)

Japan	United States	Other	Total
51,956	27,874	23,248	103,079

(Notes) 1. Financial instruments, deferred tax assets, retirement benefit asset, and rights arising under insurance contracts are not included.
2. Non-current assets are categorized by country or region based on the locations of assets.

The fiscal year ended December 31, 2019 (January 1, 2019 to December 31, 2019)

1) Sales from external customers

(Million yen)

Japan	Ireland	United States	Other	Total
25,840	71,039	32,115	45,039	174,035

(Notes) 1. Sales are categorized by country or region based on the locations of customers.
2. Sales from external customers in Ireland consists mainly of that from APPLE OPERATIONS listed in (6) Information by major customer.

2) Non-current assets

(Million yen)

Japan	United States	Other	Total
37,932	27,492	20,846	86,271

(Notes) 1. Financial instruments, deferred tax assets, retirement benefit asset, and rights arising under insurance contracts are not included.
2. Non-current assets are categorized by country or region based on the locations of assets.

(6) Information by major customer

Details of sales from a major customer are as follows:

(Million yen)

Customer	Related Segment	Fiscal year ended December 31, 2018	Fiscal year ended December 31, 2019
APPLE OPERATIONS and its group companies	Devices, Industrial Materials, and Information and Communication	100,819	74,200

(Note) The sales are reported under Ireland, United States and Japan in 1) Sales from external customers under (5) Information by region.

5. Business combinations

The fiscal year ended December 31, 2018 (January 1, 2018 to December 31, 2018)

Acquisition of Heart Sync, Inc.

(1) Overview of the business combination

1. Name of the acquired company and details of the acquired business

Name of the acquired company	Heart Sync, Inc. (hereinafter, "Heart Sync")
Details of the acquired business	Design and sales of defibrillation electrodes (*)

(*) Defibrillation electrodes are conductors that deliver controlled electrical shock from the defibrillator to the patient to restore a regular heartbeat. The electrode also function as an ECG electrode to determine whether to deliver an electrical shock.

2. Major reason for the business combination

In the Sixth Medium-term Business Plan (from the fiscal year ended December 31, 2018 to the fiscal year ending December 31, 2020), the Company identifies consumer electronics (IT), automotive, medical devices, and high-function packaging materials as its four focus markets, and is executing a growth strategy that maximizes its business foundation acquired and established thus far. The Company seeks to accelerate expansion of its business domain particularly in the promising global growth market of medical devices.

The Company achieved full-scale entry into the medical devices market in September 2016, with the establishment of the Medical Technologies Business Unit and the acquisition as a subsidiary of U.S.-based medical devices manufacturer, Graphic Controls Group. Offerings at present focus on medical electrodes, medical surgical devices, and other products for cardiology, which are highly related to the Company's core technologies of patterning, coating and molding. These are manufactured on contract for major medical devices manufacturers across the globe, and produced and distributed as a proprietary brand for medical institutions. Through these business models, the Medical Technologies Business Unit aims to enhance its product development and design capabilities, and enrich its lineup of distinctive products toward sustainable growth.

Heart Sync, also a manufacturer of medical electrodes, specializes in the potential high growth market of defibrillation electrodes. It boasts product development and design capabilities that accurately grasp the needs of health care providers.

With an enhanced lineup of defibrillation electrodes, sales channels, and highly competitive design and development capabilities resulting from the acquisition of Heart Sync's tangible and intangible assets, the Company intends to create synergies between Graphic Controls Group and its Medical Technologies Business Unit.

3. Acquisition date

May 18, 2018

4. Method by which the acquiring company obtained control of the acquired company

Transfer of business for cash consideration

5. Name of the company after the combination

The company name will remain unchanged.

(2) Consideration transferred

	(Million yen)
Cash (including payables)	1,118
Contingent consideration	168
Total consideration transferred	1,287

(Note) Contingent consideration is not finalized at the present time.

(3) Contingent consideration

Contingent consideration is included in the consideration transferred as part of the contract. The contingent consideration is an obligation to make additional payments of up to US$2 million (undiscounted) in accordance with the sales achievement level of the acquired company over the three years following the business combination.

The contingent consideration was determined using the scenario-based method and categorized within Level 3 of the fair value hierarchy. The key assumptions considered were the probability of meeting the sales target, the projected future operating results, and the discount rate.

The breakdown of changes in the contingent consideration, which is recorded in other financial liabilities (see Note 20), is as follows:

(Million yen)

Balance at January 1, 2018	—
Increase resulting from the business combination	168
Change in fair value	—
Effect of changes in exchange rates	(0)
Balance at December 31, 2018	168

(4) Acquisition-related costs

Acquisition-related costs of ¥40 million were recorded in selling, general and administrative expenses.

(5) Amount of goodwill incurred and reasons for the goodwill incurred

1. Amount of goodwill incurred

   ¥460 million

   The total amount of goodwill recognized is expected to be deductible for tax purposes.

2. Reasons for the goodwill incurred

   Goodwill was incurred from expected excess earnings power in the future arising from further business development.

(6) Amounts recognized of assets acquired and liabilities assumed

	(Million yen)
Current assets	
Inventories	38
Non-current assets	
Property, plant and equipment	0
Intangible assets (Note 1)	787
Total assets	826
Current liabilities	—
Non-current liabilities	—
Total liabilities (Note 2)	—

(Notes) 1. The major components allocated to intangible assets are customer-related assets of ¥654 million and trademark rights of ¥88 million.

2. There are no contingent liabilities.

(7) Impact on the consolidated statements of profit or loss

1. The acquired company's operating results recognized in the consolidated statements of profit or loss on and after the acquisition date

	(Million yen)
Sales	466
Profit (loss) attributable to owners of parent	(10)

The above profit attributable to owners of parent includes the impact of amortization of intangible assets recognized at the acquisition date.

2. The amount of the impact on the consolidated statements of profit or loss assuming that the business combination was conducted at the beginning of the fiscal year.

	(Million yen)
Sales	339
Profit (loss) attributable to owners of parent	(45)

(Method of calculating the estimated amounts)

The estimated amounts of the impact are the difference between sales and operating results assuming that the business combination has been completed at the beginning of the fiscal year, and sales and operating results on the acquired company's consolidated statements of profit or loss. The estimated amounts reflect the amortization of intangible assets assuming that the intangible assets have been incurred at the beginning of the fiscal year.

This note has not been audited.

Acquisition of Sequel Special Products, LLC and RSS Design, LLC

(1) Overview of the business combination

1. Name of the acquired company and details of the acquired business

Name of the acquired company	Sequel Special Products, LLC RSS Design, LLC
Details of the acquired business	Contract manufacturing of surgical instruments for minimally invasive surgery (*) and orthopedics. (*) Medical examination and treatment procedures that minimize the physical risk for the patient

2. Major reason for the business combination

The Company achieved full-scale entry into the medical devices market in September 2016, with the establishment of the Medical Technologies Business Unit and the acquisition as a subsidiary of U.S.-based medical devices manufacturer, Graphic Controls Group. Offerings at present focus on medical electrodes, medical surgical devices, and other products for cardiology, which are highly related to the Company's core technologies of printing, coating, lamination, molding, and patterning. These are manufactured on contract for major medical devices manufacturers across the globe, and produced and distributed as a proprietary brand for medical institutions. Going forward, the Medical Technologies Business Unit aims to enhance its product development and design capabilities, and enrich its lineup of distinctive products toward sustainable growth.

With major medical device manufacturers increasingly focusing on R&D and marketing activities and preferring to outsource the manufacturing process, the Medical Technologies Business Unit positions the expansion of contract manufacturing services as a main strategy for growth. The products produced by the Medical Technologies Business Unit include electro-surgical devices, diagnostic sensing devices, in addition to medical devices and surgical instruments for minimally invasive surgery such as catheters and catheter guide wires. This acquisition will provide the Medical Technologies Business Unit with new sales channels in contract manufacturing, increased production capacity, and expanded product development and design functions to improve its value chain from development to production to sales and in turn increase business performance.

3. Acquisition date

June 25, 2018

4. Method by which the acquiring company obtained control of the acquired company

Equity acquisition for cash consideration

5. Name of the company after the combination

Sequel Special Products, LLC

RSS Design, LLC

6. Ratio of voting equity interests acquired

100%

(2) Consideration transferred

	(Million yen)
Cash	1,545
Contingent consideration	449
Total consideration transferred	1,995

(Note) Contingent consideration is not finalized at the present time.

(3) Contingent consideration

Contingent consideration is included in consideration transferred as part of the contract. The contingent consideration is an obligation to make additional payments of up to US$12 million (undiscounted) in accordance with the sales achievement level of the acquired company over the three years following the business combination.

The contingent consideration was determined by the scenario-based method and Monte Carlo simulation model, and was categorized within Level 3 of the fair value hierarchy. The key assumptions considered were the probability of meeting the sales target, the projected future operating results, and the discount rate.

The breakdown of changes in the contingent consideration, which is recorded in other financial liabilities (see Note 20), is as follows:

(Million yen)

Balance at January 1, 2018	–
Increase resulting from the business combination	449
Change in fair value	–
Effect of changes in exchange rates	1
Balance at December 31, 2018	451

(4) Acquisition-related costs

Acquisition-related costs of ¥45 million were recorded in selling, general and administrative expenses.

(5) Amount of goodwill incurred and reasons for the goodwill incurred

1. Amount of goodwill incurred

¥438 million

The total amount of goodwill recognized is expected to be deductible for tax purposes.

2. Reasons for the goodwill incurred

Goodwill was incurred from expected excess earnings power in the future arising from further business development.

(6) Amounts recognized of assets acquired and liabilities assumed

	(Million yen)
Current assets	
Cash and cash equivalents	26
Trade and other receivables (Note 1)	319
Inventories	385
Other	4
Non-current assets	
Property, plant and equipment	492
Intangible assets (Note 2)	523
Total assets	1,752
Current liabilities	195
Total liabilities (Note 3)	195

(Notes) 1. For the fair value of ¥319 million of the trade and other receivables acquired in this acquisition, the gross contractual amount receivable is ¥319 million.

2. The major component allocated to intangible assets is customer-related assets of ¥486 million.

3. There are no contingent liabilities.

(7) Impact on the consolidated statements of profit or loss

1. The acquired company's operating results recognized in the consolidated statements of profit or loss on and after the acquisition date

	(Million yen)
Sales	1,647
Profit (loss) attributable to owners of parent	173

The above profit attributable to owners of parent includes the impact of amortization of intangible assets recognized at the acquisition date.

2. The amount of the impact on the consolidated statements of profit or loss assuming that the business combination was conducted at the beginning of the fiscal year.

	(Million yen)
Sales	1,446
Profit (loss) attributable to owners of parent	171

(Method of calculating the estimated amounts)

The estimated amounts of the impact are the difference between sales and operating results assuming that the business combination has been completed at the beginning of the fiscal year, and sales and operating results on the acquired company's consolidated statements of profit or loss. The estimated amounts reflect the amortization of intangible assets assuming that the intangible assets have been incurred at the beginning of the fiscal year.

This note has not been audited.

The fiscal year ended December 31, 2019 (January 1, 2019 to December 31, 2019)

Acquisition of Zonnebodo Pharmaceutical Co., Ltd.

(1) Overview of the business combination

1. Name of the acquired company and details of the acquired business

Name of the acquired company	Zonnebodo Pharmaceutical Co., Ltd. (hereinafter, “Zonnebodo Pharmaceutical”)
Details of the acquired business	Manufacturing and marketing authorization holder of pharmaceuticals and quasi drugs

2. Major reason for the business combination

In the “medical” market*1, the Company has focused on Drug Delivery Systems*2 (DDS), and has been considering an entry to the pharmaceutical market. Specifically, Nissha has been developing film type of pharmaceuticals by use of our core technologies such as printing and coating that the Company has cultivated since it was founded. Film type of pharmaceuticals are expected to contribute to improvements in dosage compliance and quality of life (QOL) for patients. The market is forecast to expand as the form of dosage shifts away from traditional pills and injections.

Zonnebodo Pharmaceutical’s history stretches back eighty years, and it is engaged in manufacturing and marketing authorization holder of in-house developed prescription pharmaceuticals (brand-name drugs) and quasi drugs. It manages long-selling products such as tablets for mitigating tinnitus and “Renovigo” for the prevention of tooth decay, and these items are sold at pharmacies and drug stores nationwide. Zonnebodo Pharmaceutical also possesses sophisticated manufacturing technologies and quality control capabilities in relation to a variety of drug forms, such as tablets, liquids and powders, and is building a robust business foundation in the pharmaceutical market.

With this acquisition, the Company obtains the business foundation necessary to put film type of pharmaceuticals on the market, including business license, GMP compliant manufacturing facilities, quality control systems, and sales channels. By means of the core technologies it has cultivated since it was founded, as well as other innovations, the Company aims to make a corporate contribution to the pharmaceutical market, as it has in other markets, in such a way as to enrich people’s lives.

*1 The Company has been currently operating the Sixth Medium-term Business Plan (three-year plan) centering on the growth by reorganizing and optimizing its business portfolio. We have set the markets of mobility (automotive), medical devices and sustainable packaging materials as our focused markets, in addition to the mainstay consumer electronics (IT), and aim to develop well-balanced business bases and enhance our corporate value by implementing global based growth strategy.

*2 A dosing system designed to optimize operation so that the required volume of drugs is administered to the required part of the body for only the required length of time.

3. Acquisition date

November 25, 2019

4. Method by which the acquiring company obtained control of the acquired company

Acquisition of shares for cash consideration

5. Name of the company after the combination

The company name will remain unchanged.

(2) Consideration transferred

	(Million yen)
Cash	2,500
Total consideration transferred	2,500

(3) Acquisition-related costs

Acquisition-related costs of ¥12 million were recorded in selling, general and administrative expenses.

(4) Amount of goodwill incurred and reasons for the goodwill incurred

1. Amount of goodwill incurred

¥1,687 million

As the fair values of assets acquired and liabilities assumed have not been finalized, the amount of goodwill has been determined provisionally. There is no amount of goodwill expected to be deducted for tax purposes.

2. Reasons for the goodwill incurred

Goodwill was incurred from expected excess earnings power in the future arising from further business development.

(5) Ratio of voting equity interests acquired

100%

(6) Amounts recognized of assets acquired and liabilities assumed

	(Million yen)
Current assets	
Cash and cash equivalents	65
Trade and other receivables	505
Inventories	98
Other	124
Non-current assets	
Property, plant and equipment	340
Intangible assets	0
Other	116
Total assets (Note 1)	1,252
Current liabilities	262
Non-current liabilities	177
Total liabilities (Notes 1, 2)	439

(Notes) 1. As allocation of the cost is not completed in the current fiscal year, the amounts of assets acquired and liabilities assumed are determined provisionally based on information available at the present time.

2. There are no contingent liabilities.

(7) Impact on the consolidated statements of profit or loss

1. The acquired company's operating results recognized in the consolidated statements of profit or loss on and after the acquisition date

	(Million yen)
Sales	99
Profit (loss) attributable to owners of parent	26

2. The amount of the impact on the consolidated statements of profit or loss assuming that the business combination was conducted at the beginning of the fiscal year.

	(Million yen)
Sales	958
Profit (loss) attributable to owners of parent	32

(Method of calculating the estimated amounts)

Sales and operating results are determined assuming that the business combination has been completed at the beginning of the fiscal year.

This note has not been audited.

Acquisition of non-controlling interests

On June 28, 2019, the Group additionally acquired 2.87% of shares in Graphic Controls Holdings, Inc. held by non-controlling shareholders to further improve the corporate value of the Group. As a result, the ratio of the Group's voting rights in Graphic Controls Holdings, Inc. has increased from 97.13% to 100%.

Consideration for additional acquisition of ¥770 million was paid in cash to non-controlling shareholders, and the book value of non-controlling interests decreased by ¥107 million upon the additional acquisition. The difference between the two amounting to ¥663 million has been accounted for as a decrease in capital surplus.

Loss of control of a subsidiary

Nissha Printing Communications, Inc., a consolidated subsidiary of the Company in charge of Information and Communications business, executed an absorption-type split (summary form) of its business in the Tokyo area (market and business foundation, with exceptions, in the Tokyo area) into a newly established subsidiary (Kyodo Nissha Printing Co., Ltd.), and as of January 7, 2019, transferred 90% of the issued shares of such subsidiary to Kyodo Printing Co., Ltd.

(1) Overview of loss of control

1. Outline of the business resulting in loss of control

Information and Communications business operated by Nissha Printing Communications, Inc., a consolidated subsidiary of the Company, in the Tokyo area (market and business foundation, with exceptions, in the Tokyo area)

2. Main reason for the loss of control

The Japanese general printing market has been shrinking against a backdrop of stagnating demand and other factors triggered by the diversification of information media. In the light of this market environment, Nissha Printing Communications, Inc. and Kyodo Printing Co., Ltd. concluded the business alliance contract and the production consignment contract in March 2016, and have since worked toward constructing a collaborative relationship for the outsourcing of production from Nissha Printing Communications, Inc. to Kyodo Printing Co., Ltd., reorganizing their production system, establishing a quality control system, and streamlining and optimizing procurement activities and distribution operations.

The two companies moved to implement the transfer of the business based on their collaborative partnership and relationship of trust built from 2016 to the present. Nissha Printing Communications, Inc. will reduce its business in the Tokyo area and consolidate its business foundation in the Kansai area. The transfer seeks to appropriately allocate management resources to markets and business domains in which Nissha Printing Communications, Inc. may leverage its assets in the central field where it can maximize its strength in high-accuracy color reproduction, and thereby improve business sales.

3. Other matters pertaining to outline of transactions, including legal form

Transfer of shares with assets, including cash, as sole consideration

(2) Gain on the loss of control of a subsidiary

Gain recognized from the loss of control of a subsidiary was ¥701 million, which is recorded in "Other income" (see Note 29) in the consolidated statements of profit or loss.

The valuation gain or loss of the residual investment measured at fair value as of the date of loss of control is immaterial.

(3) Assets and liabilities involving loss of control (see Note 33)

	(Million yen)
Current assets	237
Non-current assets	23
Total assets	261
Current liabilities	17
Non-current liabilities	95
Total liabilities	112

(4) Cash flows arising from loss of control (see Note 33)

	(Million yen)
Consideration received	818
Cash and cash equivalents included in the assets at the time control was lost	(120)
Net proceeds from sale of subsidiaries	698

6. Cash and cash equivalents

The breakdown of cash and cash equivalents is as follows:

(Million yen)

	As of January 1, 2018 (Date of transition to IFRS)	As of December 31, 2018	As of December 31, 2019
(Cash and cash equivalents)			
Cash and deposits	25,567	13,662	14,056
Time deposits with maturities of three months or less	3,723	2,975	3,442
Cash and cash equivalents in the consolidated statements of financial position	29,291	16,637	17,499
Cash and cash equivalents included in assets held for sale	—	120	—
Cash and cash equivalents in the consolidated statements of cash flows	29,291	16,757	17,499

7. Trade and other receivables

The breakdown of trade and other receivables is as follows:

(Million yen)

	As of January 1, 2018 (Date of transition to IFRS)	As of December 31, 2018	As of December 31, 2019
Notes and accounts receivable-trade	44,357	37,738	34,200
Accounts receivable-other	596	1,504	339
Allowance for doubtful accounts	(282)	(268)	(362)
Total	44,670	38,974	34,177

(Notes) 1. Trade and other receivables are classified as financial assets measured at amortized cost.
2. Trade and other receivables are stated at net of allowance for doubtful accounts in the consolidated statements of financial position.
3. Credit risk management is described in Note 35 “Financial instruments.”

8. Inventories

The breakdown of inventories is as follows:

(Million yen)

	As of January 1, 2018 (Date of transition to IFRS)	As of December 31, 2018	As of December 31, 2019
Merchandise and finished goods	11,815	14,091	8,972
Work in process	7,998	8,431	5,853
Raw materials and supplies	7,774	7,765	6,589
Total	27,588	30,287	21,415

(Notes) 1. Inventories recognized as an expense in cost of sales for the fiscal years ended December 31, 2018 and December 31, 2019 were ¥165,230 million and ¥149,158 million, respectively.

2. As a result of valuing inventories at net realizable value, write-downs of ¥955 million and ¥597 million were recognized for the fiscal years ended December 31, 2018 and December 31, 2019, respectively.

3. There was no material reversal of write-downs recognized for the fiscal years ended December 31, 2018 and December 31, 2019.

9. Other assets

The breakdown of other current assets and other non-current assets is as follows:

(Million yen)

	As of January 1, 2018 (Date of transition to IFRS)	As of December 31, 2018	As of December 31, 2019
(Other current assets)			
Advance payments-other and prepaid expenses	776	1,215	999
Consumption taxes receivable	4,101	3,740	3,019
Income taxes receivable, etc.	298	356	591
Other	119	78	103
Total	5,296	5,390	4,713
(Other non-current assets)			
Long-term prepaid expenses	118	133	124
Other	81	92	122
Total	199	226	247

10. Assets held for sale and liabilities directly associated with assets held for sale

The breakdown of assets held for sale and liabilities directly associated with assets held for sale is as follows:

(Million yen)

	As of January 1, 2018 (Date of transition to IFRS)	As of December 31, 2018	As of December 31, 2019
(Assets held for sale)			
Cash and cash equivalents	—	120	—
Inventories	—	52	—
Trade and other receivables	—	51	—
Other current assets	—	13	—
Property, plant and equipment	—	29	4
Intangible assets	—	18	—
Retirement benefit asset	—	6	—
Total	—	293	4
(Liabilities directly associated with assets held for sale)			
Trade and other payables	—	2	—
Other current liabilities	—	15	—
Retirement benefit liability	—	95	—
Total	—	112	—

The Company, Nissha Printing Communications, Inc. ("Nissha Printing Communications") in charge of the Information and Communication business, and Kyodo Printing Co., Ltd. ("Kyodo Printing") concluded a stock purchase agreement on September 4, 2018, for the transfer of Nissha Printing Communications' business in the Tokyo area (market and business foundation, with exceptions, in the Tokyo area; the "Business") to Kyodo Printing. Assets held for sale and liabilities directly associated with assets held for sale as of December 31, 2018 consist principally of assets and liabilities related to the Business, which are classified as held for sale. The stock purchase was completed in January 2019 (see Note 5 "Business combinations").

11. Property, plant and equipment

Changes in cost, accumulated depreciation and accumulated impairment losses, and the book value of property, plant and equipment are as follows:

(Million yen)

Cost	Buildings and structures	Machinery and vehicles	Tools, furniture and fixtures	Land	Construction in progress	Total
As of January 1, 2018 (Date of transition to IFRS)	55,563	53,093	10,117	7,131	5,909	131,816
Acquisitions	1,707	1,254	1,033	9	5,992	9,996
Business combinations (Note 3)	266	52	15	158	—	493
Reclassification to assets held for sale (Note 4)	—	—	—	—	(29)	(29)
Disposals	(1,693)	(2,360)	(362)	—	(954)	(5,371)
Transfers (Note 6)	4,421	3,102	308	90	(8,244)	(322)
Foreign currency translation differences	(186)	(1,184)	(72)	(5)	(49)	(1,499)
As of December 31, 2018	60,078	53,956	11,039	7,385	2,624	135,083
Acquisitions	917	1,048	465	2	3,949	6,383
Business combinations (Note 3)	171	78	25	64	0	340
Reclassification to assets held for sale (Note 4)	(166)	(449)	(13)	—	—	(629)
Disposals	(1,954)	(3,022)	(515)	(51)	(284)	(5,827)
Transfers (Note 6)	1,546	3,576	198	—	(5,257)	63
Foreign currency translation differences	(105)	(517)	(67)	(5)	(10)	(705)
As of December 31, 2019	60,486	54,672	11,132	7,395	1,021	134,707

(Million yen)

Accumulated depreciation and accumulated impairment losses	Buildings and structures	Machinery and vehicles	Tools, furniture and fixtures	Land	Construction in progress	Total
As of January 1, 2018 (Date of transition to IFRS)	(23,871)	(41,507)	(7,012)	(961)	—	(73,353)
Depreciation	(2,808)	(3,430)	(1,012)	—	—	(7,251)
Impairment losses (Note 5)	(206)	(11)	(2)	—	(246)	(466)
Disposals	1,517	2,275	346	—	—	4,139
Foreign currency translation differences	76	691	47	—	—	815
As of December 31, 2018	(25,291)	(41,982)	(7,633)	(961)	(246)	(76,116)
Reclassification to assets held for sale (Note 4)	165	449	8	—	—	623
Depreciation	(2,883)	(2,841)	(1,038)	—	—	(6,763)
Impairment losses	(8,375)	(2,859)	(478)	(1,164)	(50)	(12,927)
Disposals	1,694	2,812	454	—	246	5,208
Transfers (Note 6)	—	(38)	(58)	—	—	(97)
Foreign currency translation differences	38	320	55	—	(0)	414
As of December 31, 2019	(34,650)	(44,139)	(8,690)	(2,126)	(50)	(89,657)

(Million yen)

Book value	Buildings and structures	Machinery and vehicles	Tools, furniture and fixtures	Land	Construction in progress	Total
As of January 1, 2018 (Date of transition to IFRS)	31,692	11,585	3,105	6,169	5,909	58,462
As of December 31, 2018	34,787	11,973	3,406	6,423	2,377	58,967
As of December 31, 2019	25,835	10,532	2,441	5,268	971	45,050

(Notes) 1. Depreciation of property, plant and equipment is included in cost of sales and selling, general and administrative expenses in the consolidated statements of profit or loss.

2. Expenditures related to property, plant and equipment under construction are presented as construction in progress in the above tables.

3. Business combinations are described in Note 5 "Business combinations."

4. Assets held for sale are described in Note 10 "Assets held for sale and liabilities directly associated with assets held for sale."

5. Impairment losses are described in Note 14 "Impairment of non-financial assets."

6. Transfers principally represent transfers from construction in progress to the related accounts of property, plant and equipment.

12. Goodwill and intangible assets

(1) Reconciliations

Changes in cost, accumulated amortization and accumulated impairment losses, and the book value of goodwill and intangible assets are as follows:

(Million yen)

Cost	Goodwill	Trademark rights	Software	Technical assets	Customer-related assets	Other	Total
As of January 1, 2018 (Date of transition to IFRS)	23,570	3,860	7,239	2,687	7,676	1,102	46,136
Additions from internal development	—	—	—	—	—	44	44
Acquisitions	—	—	195	—	—	484	680
Business combinations (Note 2)	899	88	—	—	1,140	81	2,211
Reclassification to assets held for sale (Note 3)	—	—	(48)	—	—	—	(48)
Transfers (Note 4)	—	12	279	—	—	(313)	(20)
Disposals	—	—	(43)	—	—	(0)	(43)
Foreign currency translation differences	(821)	(81)	(34)	(160)	(307)	(16)	(1,422)
As of December 31, 2018	23,648	3,880	7,588	2,526	8,509	1,383	47,537
Additions from internal development	—	—	—	—	—	49	49
Acquisitions	—	0	234	—	—	434	670
Business combinations (Note 2)	1,687	—	0	—	—	0	1,688
Reclassification to assets held for sale (Note 3)	—	(0)	—	—	—	—	(0)
Transfers (Note 4)	—	—	272	—	—	(271)	0
Disposals	—	—	(289)	—	—	(13)	(303)
Foreign currency translation differences	(479)	(51)	(20)	(87)	(187)	(400)	(1,225)
As of December 31, 2019	24,855	3,829	7,785	2,439	8,322	1,183	48,416

(Million yen)

Accumulated amortization and accumulated impairment losses	Goodwill	Trademark rights	Software	Technical assets	Customer-related assets	Other	Total
As of January 1, 2018 (Date of transition to IFRS)	(4,001)	—	(6,295)	(418)	(1,107)	(286)	(12,108)
Reclassification to assets held for sale (Note 3)	—	—	29	—	—	—	29
Amortization	—	—	(379)	(173)	(596)	(156)	(1,305)
Disposals	—	—	42	—	—	0	42
Foreign currency translation differences	224	—	22	29	(35)	(6)	234
As of December 31, 2018	(3,776)	—	(6,580)	(561)	(1,738)	(449)	(13,107)
Transfers (Note 4)	—	—	(26)	—	—	—	(26)
Amortization	—	—	(400)	(162)	(715)	(143)	(1,421)
Impairment losses	(1,612)	—	(43)	—	(70)	(54)	(1,780)
Disposals	—	—	269	—	—	8	277
Foreign currency translation differences	122	—	12	18	27	393	574
As of December 31, 2019	(5,266)	—	(6,769)	(704)	(2,497)	(245)	(15,484)

(Million yen)

Book value	Goodwill	Trademark rights	Software	Technical assets	Customer-related assets	Other	Total
As of January 1, 2018 (Date of transition to IFRS)	19,569	3,860	944	2,269	6,569	816	34,028
As of December 31, 2018	19,871	3,880	1,007	1,965	6,770	934	34,429
As of December 31, 2019	19,589	3,829	1,015	1,734	5,825	938	32,932

(Notes) 1. Amortization of intangible assets is included in cost of sales and selling, general and administrative expenses in the consolidated statements of profit or loss.

2. Business combinations are described in Note 5 "Business combinations."

3. Assets held for sale are described in Note 10 "Assets held for sale and liabilities directly associated with assets held for sale."

4. Transfers principally represent transfers from software in progress included in other to the related accounts of intangible assets.

5. Research and development expenses that do not meet asset recognition criteria are recognized as expenses as incurred and are recorded as selling, general and administrative expenses (see Note 27). Research and development expenses recognized as expenses for the fiscal years ended December 31, 2018 and December 31, 2019 were ¥3,949 million and ¥3,659 million, respectively.

(2) Impairment test for goodwill and intangible assets with indefinite useful lives

The book values of goodwill and intangible assets with indefinite useful lives allocated to each cash-generating unit are principally as follows.

Those that were significant as of December 31, 2018 and 2019 are attributable to the acquisitions of AR Metallizing N.V. in August 2015 and Graphic Controls Holdings, Inc. in September 2016.

(Million yen)

Cash-generating unit	Segment	Account	As of January 1, 2018 (Date of transition to IFRS)	As of December 31, 2018	As of December 31, 2019
			Book value	Book value	Book value
AR Metallizing N.V.	Industrial Materials	Goodwill	5,527	5,197	3,406
Graphic Controls Holdings, Inc.	Medical Technologies	Goodwill	13,535	14,168	13,989
		Trademark rights (Note)	3,700	3,718	3,671

(Note) Trademark rights are expected to exist as long as the business continues. Therefore, their useful lives are considered indefinite.

Information including major assumptions used for determining the recoverable amount of each cash-generating unit is as follows:

1. AR Metallizing N.V.

The recoverable amount is determined as the value in use. The value in use is calculated by discounting the estimated future cash flows to present value. Those cash flows reflect past experience and information from external sources, and are based on the three-year business plan approved by management.

In estimating the future cash flows, the growth rate is determined by reference to the long-term expected growth rate of the market which the cash-generating unit belongs to (2% as of January 1, 2018; 2% as of December 31, 2018; 2% as of December 31, 2019).

The discount rate is determined based on the pre-tax weighted average cost of capital (9.0% as of January 1, 2018; 9.3% as of December 31, 2018; 9.4% as of December 31, 2019).

As a result of the impairment test, impairment losses of ¥1,612 million were recognized for the fiscal year ended December 31, 2019 in the Industrial Materials segment.

2. Graphic Controls Holdings, Inc.

The recoverable amount is determined as the value in use. The value in use is calculated by discounting the estimated future cash flows to present value. Those cash flows reflect past experience and information from external sources, and are based on the three-year business plan approved by management.

In estimating the future cash flows, the growth rate is determined by reference to the long-term expected growth rate of the market which the cash-generating unit belongs to (3% as of January 1, 2018; 3% as of December 31, 2018; 3% as of December 31, 2019).

The discount rate is determined based on the pre-tax weighted average cost of capital (9.2% as of January 1, 2018; 9.9% as of December 31, 2018; 8.4% as of December 31, 2019).

The recoverable amount exceeded the book value by ¥9,175 million as of December 31, 2019. It is estimated that a 2.3% decrease in the growth rate or a 1.7% increase in the discount rate would result in recognizing impairment losses.

The above presumption of thresholds for impairment losses is derived under the assumption that the decrease in the growth rate and the increase in the discount rate occur independently.

(3) Significant intangible assets

Significant intangible assets recognized in the consolidated statements of financial position are as follows:

- “Customer-related assets” and “Technical assets” that were incurred from the acquisition of AR Metallizing N.V. in August 2015

  For customer-related assets, the book value was ¥2,665 million as of January 1, 2018, ¥2,335 million as of December 31, 2018 and ¥2,089 million as of December 31, 2019, and the remaining amortization period is 12 years.

  For technical assets, the book value was ¥2,269 million as of January 1, 2018, ¥1,965 million as of December 31, 2018 and ¥1,734 million as of December 31, 2019, and the remaining amortization period is 10 years.

- “Customer-related assets” that were incurred from the acquisition of Graphic Controls Holdings, Inc. in September 2016

  The book value was ¥2,777 million as of January 1, 2018, ¥2,435 million as of December 31, 2018 and ¥2,119 million as of December 31, 2019, and the remaining amortization period is 10 years.

13. Leases

(1) The balance of right-of-use assets as of each fiscal year-end is as follows:

(Million yen)

	Buildings and structures	Machinery and vehicles	Tools, furniture and fixtures	Land	Intangible assets	Total
As of January 1, 2018 (Date of transition to IFRS)	6,834	841	103	116	4	7,901
As of December 31, 2018	8,551	651	132	108	11	9,455
As of December 31, 2019	7,199	632	116	87	5	8,041

Additions to right-of-use assets are described in Note 33 "Cash flow information."

Depreciation and amortization for right-of-use assets are as follows:

(Million yen)

	Buildings and structures	Machinery and vehicles	Tools, furniture and fixtures	Land	Intangible assets	Total
Fiscal year ended December 31, 2018	1,409	322	31	3	2	1,769
Fiscal year ended December 31, 2019	1,502	310	62	3	4	1,883

(2) The maturity analysis of lease liabilities is as follows:

(Million yen)

		As of January 1, 2018 (Date of transition to IFRS)	As of December 31, 2018	As of December 31, 2019
Book value	Lease liabilities (current)	1,567	1,614	1,562
	Lease liabilities (non-current)	6,420	7,990	7,926
	Total lease liabilities	7,988	9,604	9,488
Contractual cash flows	Total	9,092	11,844	10,635
	1 year or less	1,757	1,954	1,701
	Over 1 year to 5 years	4,422	4,901	4,600
	Over 5 years	2,912	4,988	4,333

(3) Expenses and cash outflows relating to leases are as follows:

(Million yen)

	Fiscal year ended December 31, 2018	Fiscal year ended December 31, 2019
Repayments of lease liabilities	1,741	1,766
Interest expenses on lease liabilities	155	205
Variable lease payments not included in the measurement of lease liabilities	—	—
Expenses relating to short-term leases	601	472
Expenses relating to leases of low-value assets (excluding expenses relating to short-term leases of low-value assets)	267	187

Total cash outflow for leases was ¥2,765 million for the fiscal year ended December 31, 2018 and ¥2,631 million for the fiscal year ended December 31, 2019.

14. Impairment of non-financial assets

(1) Cash-generating unit

The Group carries out grouping by the smallest cash-generating unit that generates cash inflows that are largely independent of the cash inflows from other units.

(2) Impairment losses

The Group recognizes impairment losses if the recoverable amount of an asset or a group of assets has fallen below its book value. Impairment losses are included in other expenses in the consolidated statements of profit or loss (see Note 29 “Other income and other expenses”).

The amount incurred by each reportable segment is as described in Note 4 “Operating segments.”

The fiscal year ended December 31, 2018 (January 1, 2018 to December 31, 2018)

For assets including assets to be disposed of and idle assets not expected to be used in the future, the book value of those assets was reduced to their recoverable amount, and impairment losses of ¥466 million were recognized. The recoverable amount was determined primarily at fair value (Level 3) less costs of disposal and evaluated based on memorandum value.

The fiscal year ended December 31, 2019 (January 1, 2019 to December 31, 2019)

(Long-lived assets for business use)

For the long-lived assets for business use of the cash-generating units that belonged to the Industrial Materials segment and the Devices segment, as the recovery of investment was considered unlikely due to a decline in profitability resulting from a deteriorated business environment, the book value of those assets was reduced to their recoverable amount, and impairment losses were recognized.

The recoverable amount was measured at the value in use, and the discount rate was determined based on the after-tax weighted average cost of capital.

In measuring the recoverable amount of Nissha GSI Technologies, Inc. as a cash-generating unit, given that the future cash flows were expected to be negative, the value in use was assessed at zero.

Cash-generating unit	Segment	Discount rate	Type of assets	Amount (Million yen)
Industrial Materials (decoration)	Industrial Materials	10.9%	Buildings and structures	1,114
			Machinery and vehicles	410
			Tools, furniture and fixtures	78
			Land	420
			Right-of-use assets	126
			Other	31
			Subtotal	2,181
Nissha PMX Technologies, S.A. de C.V.	Industrial Materials	12.3%	Machinery and vehicles	433
			Right-of-use assets	146
			Other	94
			Subtotal	674
Nissha GSI Technologies, Inc.	Industrial Materials	—	Machinery and vehicles	163
			Right-of-use assets	78
			Other	42
			Subtotal	283
Devices (excluding gas sensors)	Devices	8.2%	Buildings and structures	7,056
			Machinery and vehicles	1,469
			Tools, furniture and fixtures	379
			Land	743
			Right-of-use assets	845
			Other	114
			Subtotal	10,608
Total				13,748

(Assets to be disposed of)

For assets including assets to be disposed of and idle assets not expected to be used in the future, the book value of those assets was reduced to their recoverable amount, and impairment losses of ¥556 million were recognized.

The breakdown by major type of assets for which impairment losses were recognized was buildings and structures of ¥157 million, machinery and vehicles of ¥382 million, tools, furniture and fixtures of ¥3 million and right-of-use assets of ¥12 million.

The recoverable amount was determined primarily at fair value (Level 3) less costs of disposal.

(Goodwill)

For goodwill allocated to AR Metallizing N.V. in the Industrial Materials segment as a cash-generating unit, as the goodwill was not likely to be profitable as initially expected, impairment losses of ¥1,612 million were recognized.

For information including the method and major assumptions used for determining the recoverable amount, see "(2) Impairment test for goodwill and intangible assets with indefinite useful lives" in Note 12 "Goodwill and intangible assets."

15. Investments accounted for using equity method

The book value of investments in associates that are not individually material is as follows:

(Million yen)

	As of January 1, 2018 (Date of transition to IFRS)	As of December 31, 2018	As of December 31, 2019
Book value of investments accounted for using equity method	218	0	0

Financial information on associates that are not individually material is as follows:

(Million yen)

	Fiscal year ended December 31, 2018	Fiscal year ended December 31, 2019
Share of profit	(213)	—
Share of other comprehensive income	(5)	—
Share of total comprehensive income	(218)	—

The unrecognized share of loss on associates which the Group has stopped recognizing when applying the equity method is as follows:

(Million yen)

	Fiscal year ended December 31, 2018	Fiscal year ended December 31, 2019
Unrecognized share of loss	(562)	(938)
Unrecognized share of accumulated loss	(1,320)	(2,258)

16. Other financial assets

The breakdown of other financial assets is as follows:

(Million yen)

	As of January 1, 2018 (Date of transition to IFRS)	As of December 31, 2018	As of December 31, 2019
(Current assets)			
Financial assets measured at amortized cost			
Time deposits with maturities of more than three months	499	5	127
Advances paid	2,728	4,011	423
Other	64	63	20
Allowance for doubtful accounts	(9)	(8)	(8)
Financial assets measured at fair value through profit or loss			
Derivatives	2	0	0
Debt instruments	33	—	—
Total	3,318	4,071	564
(Non-current assets)			
Financial assets measured at amortized cost			
Guarantee deposits	307	398	308
Long-term loans receivable	300	281	265
Other	225	225	236
Allowance for doubtful accounts	(485)	(468)	(457)
Financial assets measured at fair value through profit or loss			
Debt instruments	1,158	1,007	869
Financial assets measured at fair value through other comprehensive income			
Equity instruments (Note)	19,187	13,926	19,191
Total	20,694	15,369	20,413

(Note) The individual issuer and fair value of equity instruments designated as measured at fair value through other comprehensive income are as described in Note 35 “Financial instruments.”

17. Income taxes

(1) Deferred taxes

The breakdown by major cause and changes in deferred tax assets and deferred tax liabilities are as follows:

The fiscal year ended December 31, 2018 (January 1, 2018 to December 31, 2018)

(Million yen)

	As of January 1, 2018 (Date of transition to IFRS)	Amount recognized in profit or loss	Amount recognized in other comprehensive income	Business combinations	Foreign currency translation differences	As of December 31, 2018
Deferred tax assets:						
Inventories	445	(103)	—	—	(2)	339
Property, plant and equipment and intangible assets	292	220	—	—	(14)	499
Allowance for doubtful accounts	14	20	—	—	(0)	34
Accrued bonuses	457	(141)	—	—	(0)	315
Obligation for paid absences	50	7	—	—	(0)	57
Accounts payable-other and accrued expenses, etc.	235	0	—	—	(1)	234
Retirement benefit liability	21	40	—	—	(0)	61
Unused tax losses	624	(483)	—	—	(3)	137
Other	266	24	(0)	—	(2)	287
Total	2,408	(414)	(0)	—	(27)	1,966
Deferred tax liabilities:						
Financial assets measured at fair value through other comprehensive income	(5,114)	—	1,581	—	—	(3,532)
Property, plant and equipment and intangible assets	(1,836)	84	—	—	9	(1,742)
Assets identified in business combinations	(4,460)	369	—	—	229	(3,860)
Other	(174)	(28)	—	—	1	(201)
Total	(11,585)	425	1,581	—	240	(9,336)
Net deferred tax assets (liabilities)	(9,176)	11	1,580	—	213	(7,370)

The fiscal year ended December 31, 2019 (January 1, 2019 to December 31, 2019)

(Million yen)

	As of January 1, 2019	Amount recognized in profit or loss	Amount recognized in other comprehensive income	Business combinations	Foreign currency translation differences	As of December 31, 2019
Deferred tax assets:						
Inventories	339	(197)	—	11	(1)	151
Property, plant and equipment and intangible assets	499	(78)	—	—	(6)	413
Allowance for doubtful accounts	34	(12)	—	—	(0)	22
Accrued bonuses	315	(304)	—	12	(0)	22
Obligation for paid absences	57	3	—	9	(0)	68
Accounts payable-other and accrued expenses, etc.	234	(122)	—	5	(1)	116
Retirement benefit liability	61	(35)	—	21	(0)	47
Unused tax losses	137	90	—	—	(0)	227
Other	287	(123)	(0)	0	(7)	155
Total	1,966	(780)	(0)	60	(20)	1,226
Deferred tax liabilities:						
Financial assets measured at fair value through other comprehensive income	(3,532)	—	(1,564)	—	—	(5,097)
Property, plant and equipment and intangible assets	(1,742)	1,189	—	—	7	(544)
Assets identified in business combinations	(3,860)	292	—	—	96	(3,471)
Other	(201)	(248)	3	(0)	0	(445)
Total	(9,336)	1,233	(1,561)	(0)	104	(9,559)
Net deferred tax assets (liabilities)	(7,370)	453	(1,561)	60	84	(8,333)

Unused tax losses and deductible temporary differences for which deferred tax assets are not recognized

(Million yen)

	As of January 1, 2018 (Date of transition to IFRS)	As of December 31, 2018	As of December 31, 2019
Unused tax losses (Note)	23,428	21,959	26,087
Deductible temporary differences	10,758	11,888	25,303

(Note) Amount by expiration period of unused tax losses for which deferred tax assets are not recognized

(Million yen)

	As of January 1, 2018 (Date of transition to IFRS)	As of December 31, 2018	As of December 31, 2019
1st year	—	87	2,366
2nd year	135	2,437	1,122
3rd year	4,493	2,863	1,580
4th year	4,019	1,516	751
5th year	1,766	243	637
After 5th year	13,013	14,812	19,629
Total	23,428	21,959	26,087

Taxable temporary differences associated with investments in the Group's subsidiaries for which deferred tax liabilities were not recognized were ¥19,364 million as of January 1, 2018, ¥19,754 million as of December 31, 2018 and ¥13,092 million as of December 31, 2019.

This was because the Group was able to control the timing of the reversal of the temporary difference, and it is probable that the temporary difference would not reverse in the foreseeable future.

(2) Income tax expense

The breakdown of income tax expense is as follows:

(Million yen)

	Fiscal year ended December 31, 2018	Fiscal year ended December 31, 2019
Current tax expense	2,205	1,045
Tax expense for prior periods	(80)	(1)
Deferred tax expense	(11)	(453)
Total	2,113	590

(Notes) 1. The amount of the benefits arising from previously unrecognized tax losses, tax credits or temporary differences of prior periods that were used to reduce current tax expense for the fiscal years ended December 31, 2018 and December 31, 2019 were ¥1,998 million and ¥403 million, respectively.

2. The amount of the benefits arising from previously unrecognized tax losses, tax credits or temporary differences of prior periods that were used to reduce deferred tax expense for the fiscal years ended December 31, 2018 and December 31, 2019 were ¥371 million and ¥30 million, respectively.

3. Deferred tax expense includes expenses arising from write-downs, or reversal of previous write-downs, of deferred tax assets. This does not cause any material changes in deferred tax expense for the fiscal years ended December 31, 2018 and December 31, 2019.

The Company is mainly subject to income taxes, inhabitants' taxes, and tax deductible enterprise taxes, based on which the statutory effective tax rate is calculated. Following the "Act for Partial Amendment of the Income Tax Act, etc." (Act No. 15 of 2016), corporate tax rates were lowered. As a result, the Company's statutory effective tax rate was lowered to 30.8% and 30.5% for the fiscal years ended December 31, 2018 and December 31, 2019, respectively.

The foreign subsidiaries are subject to tax rates in the jurisdiction where they operate.

The difference between the statutory effective tax rate and the average actual effective tax rate consists of the following factors:

	Fiscal year ended December 31, 2018	Fiscal year ended December 31, 2019
Statutory effective tax rate	30.8%	30.5%
(Adjustments)		
Difference in tax rate of foreign subsidiaries	1.0%	0.8%
Share of profit (loss) of investments accounted for using equity method	1.0%	−%
Changes in recoverability of deferred tax assets	2.9%	(35.3)%
Permanent non-deductible expenses	1.0%	(1.1)%
Tax credits	(2.8)%	0.7%
Other	(0.7)%	0.8%
Actual effective tax rate	33.2%	(3.6)%

18. Trade and other payables

The breakdown of trade and other payables is as follows:

(Million yen)

	As of January 1, 2018 (Date of transition to IFRS)	As of December 31, 2018	As of December 31, 2019
Notes and accounts payable-trade	50,173	44,004	32,413
Electronically recorded obligations-operating	8,909	6,772	4,548
Accounts payable-other and accrued expenses	8,234	8,024	5,017
Electronically recorded obligations-non-operating	2,113	2,306	1,640
Notes payable-facilities and accounts payable-facilities	3,374	1,051	919
Total	72,806	62,158	44,538

(Note) Trade and other payables are classified as financial liabilities measured at amortized cost.

19. Bonds and borrowings

(1) Bonds

Company name	Bond name	Date of issuance	As of January 1, 2018 (Date of transition to IFRS) (Million yen)	As of December 31, 2018 (Million yen)	As of December 31, 2019 (Million yen)	Interest rate (%)	Collateral	Maturity date
Nissha Co., Ltd.	Zero Coupon Convertible Bonds due 2021 (bonds with stock acquisition rights)	March 7, 2016	2,868	2,794	2,817	0.82	None	March 8, 2021

(Note) The stock acquisition rights attached to Zero Coupon Convertible Bonds due 2021 (bonds with stock acquisition rights) are recognized as embedded derivatives. Accordingly, they are separated from the host contract, measured at fair value, and recorded as capital surplus after tax effects.

(2) Borrowings

	As of January 1, 2018 (Date of transition to IFRS) (Million yen)	As of December 31, 2018 (Million yen)	As of December 31, 2019 (Million yen)	Average interest rate (Note 1) (%)	Repayment date (Note 2)
Short-term loans payable	10,669	10,858	20,803	0.54	—
Current portion of long-term loans payable	1,356	1,716	1,363	3.09	—
Long-term loans payable (excluding current portion)	13,514	13,525	11,427	3.84	2021 to 2032
Total	25,539	26,099	33,594	—	—

(Notes) 1. Average interest rate represents the weighted average interest rate on the balance as of December 31, 2019.

2. Repayment date represents the due date for the balance as of December 31, 2019.

The breakdown of assets pledged as collateral and corresponding liabilities is as follows:

(Million yen)

	As of January 1, 2018 (Date of transition to IFRS)	As of December 31, 2018	As of December 31, 2019
Assets pledged as collateral			
Cash and cash equivalents	1,901	809	298
Trade and other receivables	4,353	4,207	2,742
Inventories	4,561	5,746	4,524
Other financial assets (current)	41	38	—
Other current assets	373	241	212
Property, plant and equipment	2,626	2,526	1,531
Intangible assets	3,397	3,790	4,001
Right-of-use assets	—	35	34
Other financial assets (non-current)	9	11	—
Other non-current assets	60	69	66
Total	17,325	17,474	13,411
Corresponding liabilities			
Borrowings	1,893	2,458	2,139
Bonds and borrowings	13,387	13,348	11,139
Total	15,280	15,806	13,278

(Note) Other than those listed above, there are assets pledged as collateral that were eliminated in the consolidated financial statements, including shares of subsidiaries and associates (¥22,540 million as of January 1, 2018; ¥23,940 million as of December 31, 2018; ¥23,992 million as of December 31, 2019) and notes and accounts receivable-trade (¥6,593 million as of January 1, 2018; ¥5,582 million as of December 31, 2018; ¥2,363 million as of December 31, 2019).

20. Other financial liabilities

The breakdown of other financial liabilities is as follows:

(Million yen)

	As of January 1, 2018 (Date of transition to IFRS)	As of December 31, 2018	As of December 31, 2019
(Current liabilities)			
Financial liabilities measured at amortized cost			
Deposits received	772	697	704
Accounts payable-other and accrued expenses	473	697	65
Financial liabilities measured at fair value through profit or loss			
Contingent consideration (see Note 5)	63	46	303
Total	1,308	1,441	1,073
(Non-current liabilities)			
Financial liabilities measured at amortized cost			
Accounts payable-other and accrued expenses	635	75	22
Written put options held by non-controlling shareholders (see Note 24)	754	833	—
Other	13	13	9
Financial liabilities measured at fair value through profit or loss			
Contingent consideration (see Note 5)	212	773	410
Total	1,616	1,695	442

21. Provisions

(1) Breakdown

The breakdown of provisions is as follows:

(Million yen)

	As of January 1, 2018 (Date of transition to IFRS)	As of December 31, 2018	As of December 31, 2019
Asset retirement obligations	29	35	47
Restructuring provisions	—	218	17
Other	160	208	35
Total	189	463	100
Current liabilities	25	300	53
Non-current liabilities	164	162	47

(Note) Other mainly consists of provision for product warranties.

(2) Changes

Details of changes in provisions are as follows:

(Million yen)

	Asset retirement obligations	Restructuring provisions	Other	Total
As of January 1, 2018 (Date of transition to IFRS)	29	—	160	189
Provision	20	217	79	317
Intended use	(13)	—	(19)	(33)
Reversal	—	—	—	—
Foreign currency translation differences	—	0	(11)	(10)
Other	0	—	—	0
As of December 31, 2018	35	218	208	463
Provision	—	17	35	53
Intended use	—	(214)	(78)	(293)
Reversal	—	—	(122)	(122)
Business combinations (see Note 5)	17	—	—	17
Foreign currency translation differences	—	(3)	(7)	(11)
Other	(6)	—	—	(6)
As of December 31, 2019	47	17	35	100

The amount to be incurred for the restoration obligation of operating bases used by the Group are estimated based on historical experience and recognized as a provision for asset retirement obligations.

These costs are expected to be incurred principally after one year or more, but will be affected by the development of future business plans and other factors.

Restructuring provisions are provided for the restructuring of European production bases of the Group’s consolidated subsidiaries in the Medical Technologies segment. The timing of an outflow of economic benefits is expected to be within one year from the end of the fiscal year, but will be affected by the progress status of restructuring plans.

22. Other liabilities

The breakdown of other current liabilities and other non-current liabilities is as follows:

(Million yen)

	As of January 1, 2018 (Date of transition to IFRS)	As of December 31, 2018	As of December 31, 2019
(Other current liabilities)			
Accrued consumption taxes	383	775	109
Accrued bonuses	1,930	1,949	1,895
Accrued directors' bonuses	60	71	63
Cash-settled share-based payment expenses for directors (see Note 34)	107	190	266
Obligation for paid absences	862	844	950
Advances received (see Note 26)	4,632	1,442	953
Other	0	0	0
Total	7,978	5,272	4,237
(Other non-current liabilities)			
Cash-settled share-based payment expenses for directors (see Note 34)	—	5	10
Other long-term employee benefit obligations	293	288	287
Other	—	—	32
Total	293	293	331

23. Post-employment benefits

(1) Outline of post-employment benefit plans

The Company and certain consolidated subsidiaries have adopted funded and unfunded defined benefit plans and defined contribution plans to provide for retirement benefits to their employees. The funded defined benefit plans are contract-type corporation pension plans under the Defined Benefit Corporation Pension Act, which provide lump-sum payments or pension benefits based on a point system. The contract-type corporation pension plans are implemented under the Constitution for Corporate Pension Plan with Defined Benefits agreed between labor and management by entrusting the administration and management of plan assets to investment managers.

The contract requires recalculation of contributions at least every five years in accordance with the Defined Benefit Corporation Pension Act in order to maintain balanced finance into the future.

The unfunded defined benefit plans are retirement lump-sum payment plans, which provide lump-sum payments based on a point system or based on salary and service period.

The Company and certain consolidated subsidiaries are exposed to actuarial risks, including investment risk, interest rate risk and longevity risk, through the defined benefit plans.

(2) Defined benefit plans

Amounts related to defined benefit plans in the consolidated statements of financial position are as follows:

1) Amounts related to defined benefit plans in the consolidated statements of financial position

(Million yen)

	As of January 1, 2018 (Date of transition to IFRS)	As of December 31, 2018	As of December 31, 2019
Present value of funded defined benefit obligations	2,133	1,982	2,046
Fair value of plan assets	(2,222)	(2,182)	(2,280)
Subtotal	(88)	(199)	(233)
Present value of unfunded defined benefit obligations	4,751	4,522	4,881
Total	4,663	4,322	4,648
Amounts in the consolidated statements of financial position			
Retirement benefit liability	4,775	4,543	4,913
Retirement benefit asset	(111)	(221)	(265)
Net of liability and asset recorded in the consolidated statements of financial position	4,663	4,322	4,648

2) Changes in present value of defined benefit obligations

(Million yen)

	Fiscal year ended December 31, 2018	Fiscal year ended December 31, 2019
Beginning balance of present value of defined benefit obligations	6,885	6,505
Current service cost	521	524
Interest expenses	35	39
Remeasurements		
Actuarial gains and losses arising from changes in demographic assumptions	(26)	(89)
Actuarial gains and losses arising from changes in financial assumptions	32	119
Other	(148)	69
Benefit payments	(603)	(280)
Foreign currency translation differences	(37)	(19)
Reclassification to liabilities directly associated with assets held for sale (see Note 10)	(95)	—
Reclassification to assets held for sale (see Note 10)	(58)	—
Obligations assumed in business combinations (see Note 5)	—	61
Other	0	(2)
Ending balance of present value of defined benefit obligations	6,505	6,928

The weighted average duration of defined benefit obligations as of January 1, 2018, December 31, 2018 and December 31, 2019 was 11.2 years, 10.6 years and 10.5 years, respectively.

3) Changes in fair value of plan assets

(Million yen)

	Fiscal year ended December 31, 2018	Fiscal year ended December 31, 2019
Beginning balance of fair value of plan assets	2,222	2,182
Interest income	13	13
Remeasurements		
Return on plan assets, excluding interest income	(141)	66
Contributions by employers	265	131
Benefit payments	(112)	(112)
Reclassification to assets held for sale (see Note 10)	(65)	—
Other	—	(0)
Ending balance of fair value of plan assets	2,182	2,280

The contributions for the following fiscal year are expected to be ¥106 million.

4) Changes in the effect of the asset ceiling

Not applicable

5) Fair value of plan assets

(Million yen)

	As of January 1, 2018 (Date of transition to IFRS)		As of December 31, 2018		As of December 31, 2019	
	With market prices in active markets	No market prices in active markets	With market prices in active markets	No market prices in active markets	With market prices in active markets	No market prices in active markets
Equity instruments						
Foreign equities	79	—	68	—	77	—
Japanese equities	208	—	114	—	204	—
Debt instruments						
Japanese bonds	486	—	548	—	511	—
Foreign bonds	56	—	51	—	77	—
General accounts of life insurance companies (Note)	—	1,381	—	1,385	—	1,397
Other	8	2	7	5	5	5
Total plan assets	838	1,383	791	1,391	876	1,403

(Note) General accounts of life insurance companies represent the investment of plan assets through general accounts for which the life insurance companies mainly guarantee both principal and interest.

The investment of plan assets is aimed at maximizing total returns in the long-term within acceptable risk levels in order to ensure future payments of benefits. To achieve this investment objective, the return is targeted at the expected rate of return from the plan assets with the asset allocation (the “policy asset mix”) that should be maintained in the long-term. The policy asset mix is set from a medium- to long-term perspective of more than three to five years, reviewed annually, and revised as necessary if there are any changes in the underlying conditions.

The basic policy for risk management of the investment is to diversify the portfolio into asset classes with different risk-return profile and other characteristics. The status of the investment is monitored, including through the quarterly reports from the investment managers on the investment of the plan assets and the quantitative and qualitative assessment of the investment managers.

6) Significant actuarial assumption

The significant actuarial assumption (weighted average value) used to measure the fair value of defined benefit obligations is as follows:

	As of January 1, 2018 (Date of transition to IFRS) (%)	As of December 31, 2018 (%)	As of December 31, 2019 (%)
Discount rate	0.7	0.6	0.4

7) Sensitivity analysis of the significant actuarial assumptions

The sensitivity analysis of the significant actuarial assumptions is as follows:

(Million yen)

	Change in underlying rate	As of January 1, 2018 (Date of transition to IFRS)	As of December 31, 2018	As of December 31, 2019
Discount rate	0.5% increase	(340)	(318)	(330)
	0.5% decrease	390	344	309

This analysis assumes that other variables are constant.

There are correlations between some assumptions, and it is rare for each assumption to change independently. Accordingly, the sensitivity analysis above may not necessarily show the actual change in defined benefit obligations. In addition, in the sensitivity analysis above, the present value of defined benefit obligations is determined as of the end of the reporting period using the projected unit credit method, as is the case with determining retirement benefit liability (asset) recognized in the consolidated statements of financial position.

(3) Defined contribution plans

For contributions to the defined contribution plans, the Company and certain consolidated subsidiaries recognized expenses of ¥2,185 million and ¥2,132 million for the fiscal years ended December 31, 2018 and December 31, 2019, respectively.

The above amounts include contributions to public plans recognized as expenses.

24. Share capital and other equity items

(1) Share capital and capital surplus

1) Number of shares authorized

Class	Number of shares authorized (Shares)
Common stock	180,000,000

(Note) This represents the number of shares authorized as of January 1, 2018, December 31, 2018 and December 31, 2019.

2) Number of shares issued and fully paid

Changes in the number of common shares issued and the balances of share capital and capital surplus are as follows:

	Number of common shares issued (Thousand shares)	Share capital (Million yen)	Capital surplus (Million yen)
Balance at January 1, 2018 (Date of transition to IFRS)	50,810	12,069	15,027
Changes during the period	45	50	44
Balance at December 31, 2018	50,855	12,119	15,071
Changes during the period	—	—	(139)
Balance at December 31, 2019	50,855	12,119	14,931

(Notes) 1. The shares issued by the Company are common shares with no par value that have no restrictions on any rights.
2. Changes during the period for the fiscal year ended December 31, 2018 are mainly due to the issuance of new shares through the exercise of share acquisition rights.
3. Changes in capital surplus during the period for the fiscal year ended December 31, 2019 are mainly due to additions to non-controlling interests (see Note 5) and expiration of written put options held by non-controlling shareholders.

(2) Treasury shares

Changes in the number of treasury shares and balance thereof are as follows:

	Number of shares (Thousand shares)	Amount (Million yen)
Balance at January 1, 2018 (Date of transition to IFRS)	172	239
Changes during the period	770	1,661
Balance at December 31, 2018	943	1,900
Changes during the period	(0)	(1)
Balance at December 31, 2019	942	1,899

(Note) Changes during the period for the fiscal year ended December 31, 2018 are mainly due to the purchase of treasury shares in accordance with a resolution of the meeting of the Board of Directors.

(3) Capital surplus

Capital surplus consists of amounts arising from equity transactions that are not included in share capital. Changes in ownership interest in subsidiaries that do not result in a loss of control are accounted for as equity transactions.

1) Legal capital surplus

Under the Companies Act, more than one-half of the paid-in capital or contributed capital upon issuance of shares shall be credited to share capital, and the remainder shall be credited to legal capital surplus included in capital surplus. Legal capital surplus may be transferred to share capital by resolution of the General Meeting of Shareholders.

2) Written put options held by non-controlling shareholders

For written put options on shares of subsidiaries granted by the Group to owners of non-controlling interests, a financial liability (see Note 20 “Other financial liabilities”) is recognized initially at the present value of the redemption amount and is reclassified from capital surplus, and subsequent changes in fair value are recognized in profit or loss (see Note 30 “Finance income and finance costs”). Since the put options expired in the fiscal year ended December 31, 2019, the book value of the financial liability at expiration has been reclassified to capital surplus.

(4) Retained earnings

Retained earnings consist of earnings recognized in profit or loss for the current and prior fiscal years and earnings reclassified from other comprehensive income.

Under the Companies Act, one-tenth of the amount to be paid as dividends of surplus shall be accumulated as legal capital surplus or legal retained earnings until the total amount of legal capital surplus and legal retained earnings reaches one-fourth of share capital. The accumulated legal retained earnings may be used to eliminate or reduce a deficit, and the legal retained earnings may also be reversed by resolution of the General Meeting of Shareholders.

(5) Other components of equity

1) Net change in fair value of financial assets measured through other comprehensive income

Net change in fair value of financial assets measured through other comprehensive income represents valuation differences in fair value of financial assets measured through other comprehensive income.

2) Remeasurements of defined benefit plans

Remeasurements of defined benefit plans consist mainly of the effect of changes in actuarial assumptions, the effect of adjustment to the actual results, and return on plan assets (excluding the amount included in net interest expenses). These are recognized in other comprehensive income as incurred, and immediately transferred from other components of equity to retained earnings.

3) Exchange differences on translation of foreign operations

Exchange differences on translation of foreign operations are translation differences arising when consolidating the financial statements of foreign operations prepared in foreign currencies.

25. Dividends

Dividends paid are as follows:

The fiscal year ended December 31, 2018 (January 1, 2018 to December 31, 2018)

Resolution	Type of stock	Total amount of dividends (Million yen)	Dividend per share (Yen)	Record date	Effective date
Meeting of the Board of Directors held on February 14, 2018	Common shares	760	15.00	December 31, 2017	March 5, 2018
Meeting of the Board of Directors held on August 7, 2018	Common shares	756	15.00	June 30, 2018	September 3, 2018

(Notes) 1. The total amount of dividends based on a resolution of the meeting of the Board of Directors held on February 14, 2018 includes ¥1 million paid to Trust & Custody Services Bank, Ltd. (Trust E Account) as dividends on Company shares it holds.

2. The total amount of dividends based on a resolution of the meeting of the Board of Directors held on August 7, 2018 includes ¥0 million paid to Trust & Custody Services Bank, Ltd. (Trust E Account) as dividends on Company shares it holds.

The fiscal year ended December 31, 2019 (January 1, 2019 to December 31, 2019)

Resolution	Type of stock	Total amount of dividends (Million yen)	Dividend per share (Yen)	Record date	Effective date
Meeting of the Board of Directors held on February 14, 2019	Common shares	749	15.00	December 31, 2018	March 4, 2019
Meeting of the Board of Directors held on August 6, 2019	Common shares	749	15.00	June 30, 2019	September 2, 2019

(Notes) 1. The total amount of dividends based on a resolution of the meeting of the Board of Directors held on February 14, 2019 includes ¥1 million paid to Trust & Custody Services Bank, Ltd. (Trust E Account) as dividends on Company shares it holds.

2. The total amount of dividends based on a resolution of the meeting of the Board of Directors held on August 6, 2019 includes ¥1 million paid to Trust & Custody Services Bank, Ltd. (Trust E Account) as dividends on Company shares it holds.

Dividends that take effect in the following fiscal year are as follows:

The fiscal year ended December 31, 2018 (January 1, 2018 to December 31, 2018)

Resolution	Type of stock	Dividend resource	Total amount of dividends (Million yen)	Dividend per share (Yen)	Record date	Effective date
Meeting of the Board of Directors held on February 14, 2019	Common shares	Retained earnings	749	15.00	December 31, 2018	March 4, 2019

(Note) The total amount of dividends based on a resolution of the meeting of the Board of Directors held on February 14, 2019 includes ¥1 million paid to Trust & Custody Services Bank, Ltd. (Trust E Account) as dividends on Company shares it holds.

The fiscal year ended December 31, 2019 (January 1, 2019 to December 31, 2019)

Resolution	Type of stock	Dividend resource	Total amount of dividends (Million yen)	Dividend per share (Yen)	Record date	Effective date
Meeting of the Board of Directors held on February 14, 2020	Common shares	Retained earnings	1,006	20.00	December 31, 2019	March 4, 2020

(Notes) 1. The total amount of dividends based on a resolution of the meeting of the Board of Directors held on February 14, 2020 includes ¥8 million paid to Trust & Custody Services Bank, Ltd. (Trust E Account) as dividends on Company shares it holds.

2. The dividend per share based on a resolution of the meeting of the Board of Directors held on February 14, 2020 includes commemorative dividend of ¥5 in recognition of the 90th anniversary of the Company’s foundation.

26. Sales

(1) Disaggregation of sales

As described in Note 4 “Operating segments,” the Group has four reportable segments, which are the Industrial Materials segment, Devices segment, Medical Technologies segment, and Information and Communication segment. Sales are disaggregated by product group. The following table shows how the disaggregated sales ties in with the sales of each reportable segment.

(Million yen)

		Fiscal year ended December 31, 2018	Fiscal year ended December 31, 2019
Industrial Materials	Decoration (mobility (automotive) field)	18,839	18,309
	Decoration (other fields)	12,126	12,375
	Sustainable packaging materials	15,986	15,595
Devices	For smartphones, tablets, etc.	102,759	75,970
	For portable game players, industrial equipment and mobility (automotive); gas sensors, etc.	20,019	20,225
Medical Technologies	Medical devices (contract manufacturing)	10,254	11,842
	Medical devices (own brand)	4,785	4,938
	Business media	7,312	7,295
Information and Communication	Publication field	2,368	1,440
	Commercial field	8,927	5,322
	Others	378	186
Other		452	532
Total		204,210	174,035

1) Industrial Materials

In the Industrial Materials segment, we mainly offer proprietary technologies that enable to create added value on the surfaces of various materials. IMD, IML, and IME, which facilitate simultaneous in-mold decoration, design and function adding of plastic products, are extensively adopted in mobility (automotive) components, home appliances, and smartphones in global markets. Also, our metallized paper, which unites the properties of metallic luster and printing friendliness, has the largest market share in the industry as sustainable packaging materials for beverages and foods on a global basis.

2) Devices

In the Devices segment, we produce devices that pursue precision and functionality. Our main products, film-based Touch Sensors are widely adopted mainly in smartphones, tablets, portable game players, industrial equipment and mobility (automotive) components in global markets. In addition, we offer gas sensors that can detect gas conditions, along with other products.

3) Medical Technologies

The Medical Technologies segment is an operating segment that offers high-quality and value-added products in medical devices and other related markets to contribute to healthy and affluent life. The segment provides contract manufacturing services (a business handling a series of processes ranging from product design and development to manufacture) for major medical device manufacturers on a global basis with products such as surgical instruments for minimal invasive treatments and medical wearable sensor used for a wide range of conditions, primarily heart disease. In addition to this, the segment currently manufactures and sells its own brand products to medical institutions.

4) Information and Communication

In the Information and Communication segment, we focus on the fields such as publication printing and art solution, where we can make the most of our high-definition and high-quality tone reproduction capabilities, and also offer commercial printing and services related to sales promotion.

These are accounted for in accordance with policies stated in Note 3 "Significant accounting policies." The consideration for performance obligations is collected within one year after the performance obligations are satisfied and, therefore, is accounted for as not having a significant financing component. The amount of assets recognized from the costs to obtain or fulfill contracts with customers for the fiscal years ended December 31, 2018 and December 31, 2019 was not material. By applying the practical expedient, the incremental costs of obtaining contracts are recognized as expenses as incurred if the amortization period of the assets that would otherwise have been recognized is one year or less.

(2) Contract balances

The breakdown of contract balances is as follows. Receivables from contracts with customers are notes and accounts receivable-trade included in trade and other receivables (see Note 7). The amount of contract assets is not material. Contract liabilities are advances received from customers in sale transactions of the Group's products before the time when the customers obtain control of the products, such as upon customer acceptance.

(Million yen)

	As of January 1, 2018 (Date of transition to IFRS)	As of December 31, 2018	As of December 31, 2019
Contract liabilities			
Advances received (see Note 22)	4,632	1,442	953

(Notes) 1. Sales recognized for the fiscal year ended December 31, 2018 that was included in the opening balance of contract liability was ¥4,561 million.

2. Sales recognized for the fiscal year ended December 31, 2019 that was included in the opening balance of contract liability was ¥1,283 million.

(3) Transaction price allocated to the remaining performance obligations

The Group applies the practical expedient of omitting the disclosure of information on the remaining performance obligations because it has no significant transaction with individual expected contractual terms exceeding one year. In addition, there is no significant consideration from contracts with customers that is not included in transaction prices.

27. Selling, general and administrative expenses

The breakdown of selling, general and administrative expenses is as follows:

(Million yen)

	Fiscal year ended December 31, 2018	Fiscal year ended December 31, 2019
Personnel expenses	11,446	11,231
Research and development expenses (see Note 12)	3,949	3,659
Packing and transportation costs	3,285	2,734
Depreciation and amortization	2,585	2,615
Other	7,885	7,426
Total	29,152	27,668

28. Employee benefit expenses

Employee benefit expenses were ¥32,895 million for the fiscal year ended December 31, 2018 and ¥32,811 million for the fiscal year ended December 31, 2019.

Employee benefit expenses include salaries, bonuses, retirement benefit expenses, legal welfare expenses and non-legal welfare expenses, and are recorded in cost of sales and selling, general and administrative expenses in the consolidated statements of profit or loss.

The above employee benefit expenses also include remuneration for key management personnel. Remuneration for key management personnel is described in Note 36 “Related parties.”

29. Other income and other expenses

The breakdown of other income and other expenses is as follows:

(Million yen)

	Fiscal year ended December 31, 2018	Fiscal year ended December 31, 2019
(Other income)		
Gain on sale of non-current assets (Note 1)	142	5,041
Foreign exchange gain	—	—
Gain on sale of shares of subsidiaries and associates (Note3)	317	878
Government grants	147	83
Insurance income (Note 4)	644	—
Other	152	196
Total	1,404	6,200
(Other expenses)		
Loss on sale and retirement of non-current assets	680	774
Foreign exchange loss	366	165
Impairment losses (Note 2)	246	15,917
Loss on disaster (Note 4)	478	—
Loss on closing of plants (Note 5)	351	263
Business restructuring expenses (Note 6)	607	47
Business establishment transfer cost (Note 7)	167	25
Loss on liquidation of business (Note 8)	—	1,402
Other	58	322
Total	2,956	18,917

(Notes) 1. Gain on sale of non-current assets

The fiscal year ended December 31, 2019 (January 1, 2019 to December 31, 2019)

This is mainly related to sale of land owned by the Company (Yachiyo City, Chiba Pref.).

2. Impairment losses

The fiscal year ended December 31, 2018 (January 1, 2018 to December 31, 2018)

For assets to be disposed of that were not expected to be used in the future, the book value of those assets was written down to their recoverable amount. The impairment losses incurred of ¥158 million and ¥61 million are included in business restructuring expenses and business establishment transfer cost, respectively. See Note 14 "Impairment of non-financial assets."

The fiscal year ended December 31, 2019 (January 1, 2019 to December 31, 2019)

See Note 14 "Impairment of non-financial assets."

3. Gain on sale of shares of subsidiaries and associates

The fiscal year ended December 31, 2018 (January 1, 2018 to December 31, 2018)

This is related to sale of shares in TPK Film Solutions Limited, an associate of the Company.

The fiscal year ended December 31, 2019 (January 1, 2019 to December 31, 2019)

This is mainly related to sale of shares in NCI Tokyo, Inc. (newly established subsidiary: Kyodo Nissha Printing Co., Ltd.), which was a consolidated subsidiary of the Company. See Note 5 "Business combinations."

4. Insurance income and loss on disaster

The fiscal year ended December 31, 2018 (January 1, 2018 to December 31, 2018)

Loss on disaster is mainly related to disposal of inventories due to typhoon damage.

Insurance income is mainly related to the typhoon damage mentioned above.

5. Loss on closing of plants

The fiscal year ended December 31, 2018 (January 1, 2018 to December 31, 2018)

This is related to European production base integration of the Company’s consolidated subsidiaries in the Medical Technologies segment.

The fiscal year ended December 31, 2019 (January 1, 2019 to December 31, 2019)

This is related to European production base integration of the Company’s consolidated subsidiaries in the Medical Technologies segment.

6. Business restructuring expenses

The fiscal year ended December 31, 2018 (January 1, 2018 to December 31, 2018)

These are related to business restructuring of the Company’s consolidated subsidiaries in the Information and Communication segment. For assets to be disposed of that were not expected to be used in the future, the book value of those assets was written down to their recoverable amount, and the amounts written down were recognized as impairment losses of ¥158 million, as well as additional retirement payment and re-employment support program fees for early retirees of ¥449 million.

The fiscal year ended December 31, 2019 (January 1, 2019 to December 31, 2019)

These are related to business restructuring of the Company’s consolidated subsidiaries in the Information and Communication segment.

7. Business establishment transfer cost

The fiscal year ended December 31, 2018 (January 1, 2018 to December 31, 2018)

This is related to the business establishment transfer of Nissha FIS, Inc. and Nissha Si-Cal Technologies, Inc., consolidated subsidiaries of the Company. For assets to be disposed of that were not expected to be used in the future, the book value of those assets was written down to their recoverable amount, and the amount written down was recognized as impairment losses of ¥61 million.

The fiscal year ended December 31, 2019 (January 1, 2019 to December 31, 2019)

This is related to the business establishment transfer of Nissha GSI Technologies, Inc. (former trade name: Nissha Si-Cal Technologies, Inc.), a consolidated subsidiary of the Company.

8. Loss on liquidation of business

The fiscal year ended December 31, 2019 (January 1, 2019 to December 31, 2019)

This is related to the termination of a joint venture relationship in Nissha and Lens Technologies (Changsha) Company Limited, the Company’s associated company accounted for by the equity method, which was a joint venture company with Lens Technology Co., Ltd., a Chinese glass processing manufacturer, and its subsidiary, Lens International (HK) Limited.

30. Finance income and finance costs

The breakdown of finance income and finance costs is as follows:

(Million yen)

	Fiscal year ended December 31, 2018	Fiscal year ended December 31, 2019
(Finance income)		
Interest income		
Financial assets measured at amortized cost	98	48
Dividend income		
Financial assets measured at fair value through other comprehensive income	288	370
Gain on valuation of financial assets and financial liabilities measured at fair value through profit or loss	95	76
Foreign exchange gain	180	559
Other	0	—
Total	663	1,056
(Finance costs)		
Interest expenses		
Financial liabilities measured at amortized cost	977	1,173
Foreign exchange loss	—	—
Loss on valuation of financial assets and financial liabilities measured at fair value through profit or loss	168	210
Loss due to changes in liability on written put options held by non-controlling shareholders (see Note 24)		
Financial liabilities measured at amortized cost	92	—
Other	11	52
Total	1,249	1,437

31. Other comprehensive income

Amounts arising during the year, reclassification adjustments to profit or loss and tax effects (including non-controlling interests) for each item of other comprehensive income are as follows:

The fiscal year ended December 31, 2018 (January 1, 2018 to December 31, 2018)

(Million yen)

	Amount arising during the year	Reclassification adjustment	Before tax effects	Tax effects	Net of tax effects
(Items that will not be reclassified to profit or loss)					
Net change in fair value of financial assets measured through other comprehensive income	(5,270)	—	(5,270)	1,580	(3,689)
Remeasurements of defined benefit plans	(2)	—	(2)	—	(2)
Share of other comprehensive income of investments accounted for using equity method	—	—	—	—	—
Total of items that will not be reclassified to profit or loss	(5,272)	—	(5,272)	1,580	(3,691)
(Items that may be reclassified to profit or loss)					
Exchange differences on translation of foreign operations	(1,615)	—	(1,615)	—	(1,615)
Share of other comprehensive income of investments accounted for using equity method	(5)	—	(5)	—	(5)
Total of items that may be reclassified to profit or loss	(1,620)	—	(1,620)	—	(1,620)
Total other comprehensive income	(6,893)	—	(6,893)	1,580	(5,312)

The fiscal year ended December 31, 2019 (January 1, 2019 to December 31, 2019)

(Million yen)

	Amount arising during the year	Reclassification adjustment	Before tax effects	Tax effects	Net of tax effects
(Items that will not be reclassified to profit or loss)					
Net change in fair value of financial assets measured through other comprehensive income	4,731	—	4,731	(1,561)	3,170
Remeasurements of defined benefit plans	(72)	—	(72)	—	(72)
Share of other comprehensive income of investments accounted for using equity method	—	—	—	—	—
Total of items that will not be reclassified to profit or loss	4,659	—	4,659	(1,561)	3,098
(Items that may be reclassified to profit or loss)					
Exchange differences on translation of foreign operations	(818)	(21)	(839)	—	(839)
Share of other comprehensive income of investments accounted for using equity method	—	—	—	—	—
Total of items that may be reclassified to profit or loss	(818)	(21)	(839)	—	(839)
Total other comprehensive income	3,841	(21)	3,819	(1,561)	2,258

32. Earnings per share

Basic earnings (loss) per share, diluted earnings (loss) per share and the basis for their calculation are as follows:

	Fiscal year ended December 31, 2018	Fiscal year ended December 31, 2019
Profit (loss) attributable to ordinary shareholders of the parent company (Million yen)	4,523	(17,179)
Adjustment to profit (loss) used to calculate diluted earnings per share (Million yen)	—	—
Profit (loss) used to calculate diluted earnings per share (Million yen)	4,523	(17,179)
Basic weighted average number of common shares outstanding (Thousand shares)	50,384	49,912
Adjustment to number of shares due to convertible bonds (bonds with stock acquisition rights) (Thousand shares)	1,286	—
Weighted average number of common shares outstanding used to calculate diluted earnings (loss) per share (Thousand shares)	51,671	49,912
Basic earnings (loss) per share (Yen)	89.79	(344.19)
Diluted earnings (loss) per share (Yen)	87.55	(344.19)

(Note) For diluted loss per share for the fiscal year ended December 31, 2019, as the conversion of convertible bonds (bonds with stock acquisition rights) would reduce the amount of loss per share, the potential shares did not have dilutive effects.

33. Cash flow information

(1) Significant non-cash transactions

Significant non-cash transactions (investing and financing transactions that do not require the use of cash or cash equivalents) are as follows:

(Million yen)

	Fiscal year ended December 31, 2018	Fiscal year ended December 31, 2019
Acquisition of right-of-use assets by means of a lease (see Note 13)	3,850	1,848

(2) Reconciliation of liabilities arising from financing activities

Changes in main assets and liabilities arising from financing activities are as follows:

(Million yen)

	Short-term borrowings	Long-term borrowings (Note)	Bonds	Lease liabilities
As of January 1, 2018 (Date of transition to IFRS)	10,669	14,870	2,868	7,988
Changes due to cash flows from financing activities	228	863	—	(1,741)
Non-cash changes				
Acquisition of right-of-use assets	—	—	—	3,845
Foreign currency translation differences	(39)	(461)	—	(237)
Other	—	(30)	(74)	(250)
As of December 31, 2018	10,858	15,241	2,794	9,604
Changes due to cash flows from financing activities	9,988	(2,090)	—	(1,766)
Non-cash changes				
Acquisition of right-of-use assets	—	—	—	1,848
Foreign currency translation differences	(45)	(276)	—	(84)
Other	2	(84)	22	(114)
As of December 31, 2019	20,803	12,791	2,817	9,488

(Note) Current portion of long-term borrowings is included.

(3) Payments for acquisition of subsidiaries or other businesses

The breakdown of main assets and liabilities of acquired subsidiaries through purchase of shares or acquired businesses at the time control was obtained, as well as the relationship between consideration paid and payments for the acquisition, are as follows (see Note 5 "Business combinations"):

(Million yen)

	As of December 31, 2018	As of December 31, 2019
Breakdown of assets at the time control was obtained		
Current assets	774	794
Non-current assets	1,804	457
Breakdown of liabilities at the time control was obtained		
Current liabilities	195	262
Non-current liabilities	—	177
Goodwill	899	1,687

(Million yen)

	Fiscal year ended December 31, 2018	Fiscal year ended December 31, 2019
Consideration paid	(3,283)	(2,500)
Contingent consideration included in consideration paid	618	—
Amount payable included in consideration paid	421	—
Cash and cash equivalents that were held by acquired companies at the time of acquisition	26	65
Net payments for acquisition of subsidiaries or other businesses	(2,216)	(2,434)

(4) Proceeds from sale of subsidiaries

The breakdown of main assets and liabilities of subsidiaries for which control was lost through sale of shares, as well as the relationship between consideration received and proceeds from the sale, are as follows (see Note 5 "Business combinations"):

(Million yen)

	As of December 31, 2018	As of December 31, 2019
Breakdown of assets at the time control was lost		
Current assets	—	237
Non-current assets	—	23
Breakdown of liabilities at the time control was lost		
Current liabilities	—	17
Non-current liabilities	—	95

(Million yen)

	Fiscal year ended December 31, 2018	Fiscal year ended December 31, 2019
Consideration received	—	818
Cash and cash equivalents included in the assets at the time control was lost	—	(120)
Net proceeds from sale of subsidiaries	—	698

(5) Payments for sale of subsidiaries

The breakdown of main assets and liabilities of subsidiaries for which control was lost through sale of shares, as well as the relationship between consideration received and payments for the sale, are as follows:

(Million yen)

	As of December 31, 2018	As of December 31, 2019
Breakdown of assets at the time control was lost		
Current assets	—	273
Non-current assets	—	12
Breakdown of liabilities at the time control was lost		
Current liabilities	—	191
Non-current liabilities	—	198

(Million yen)

	Fiscal year ended December 31, 2018	Fiscal year ended December 31, 2019
Consideration received	—	20
Cash and cash equivalents included in the assets at the time control was lost	—	(101)
Net payments for sale of subsidiaries	—	(81)

(6) Payments for loss on liquidation of business

This is due to a portion of costs (including capital investment) incurred to date related to the launch of a manufacturing facility upon the termination of a joint venture relationship in Nissha and Lens Technologies (Changsha) Company Limited, the Company's associated company accounted for by the equity method, which was a joint venture company with Lens Technology Co., Ltd., a Chinese glass processing manufacturer, and its subsidiary, Lens International (HK) Limited.

34. Share-based payment

The Group has introduced a Stock Benefit Trust (BBT: Board Benefit Trust) Plan, a Stock Benefit Trust (J-ESOP) Plan and a stock option plan as share-based payment plans.

The share-based payment plans are accounted for as equity-settled share-based payments or cash-settled share-based payments. Amounts recognized for share-based payment expenses and liabilities arising from share-based payments are as follows:

Share-based payment expenses

(Million yen)

	Fiscal year ended December 31, 2018	Fiscal year ended December 31, 2019
Equity-settled	19	16
Cash-settled	137	85

(Note) Share-based payment expenses are included in selling, general and administrative expenses.

Liabilities arising from share-based payments

(Million yen)

	As of January 1, 2018 (Date of transition to IFRS)	As of December 31, 2018	As of December 31, 2019
Book value of liabilities (see Note 22)	107	195	277
Vested portion thereof	54	184	262

(1) Stock Benefit Trust (BBT) Plan

The Company has adopted a share-based payment plan comprising both an equity-settled plan and a cash-settled plan (the “Plan”) for Directors of the Board (excluding Independent Outside Directors of the Board), Corporate Officers and certain directors of the board of the Company’s subsidiaries (collectively, the “Directors”).

1) Overview of the Plan

The Plan is a share-based payment plan where shares in the Company and cash equivalents of such shares at their fair value (collectively, “Company Shares”) are paid by the Stock Benefit Trust (BBT) to the Directors pursuant to the policy on directors’ stock benefits established by the Company and its subsidiaries. The shares in the Company are acquired by the trust using funds contributed by the Company. For each fiscal year, points are determined according to the policy on directors’ stock benefits and awarded to the Directors. The time when the Directors receive Company Shares shall in principle be the date set out in the policy, that is, on or after the earlier of the date the designated beneficiary confirmation procedures set out in the policy are carried out within the three fiscal years set out in the policy or the date the Directors retire.

2) The Company’s own shares in the trust

The Company’s own shares in the trust are recorded as treasury shares in equity. The number of such treasury shares was 78,400 shares as of December 31, 2019.

3) Changes in the number of points during the period

(Points)

	Fiscal year ended December 31, 2018	Fiscal year ended December 31, 2019
Beginning balance of points	51,450	13,421
Increase due to points awarded	13,421	20,500
Decrease due to points exercised	(51,450)	(1,159)
Decrease due to points expired	—	—
Ending balance of points	13,421	32,762
Ending balance of exercisable points	—	—

4) Fair value of points awarded

The weighted average fair value of points awarded for the fiscal years ended December 31, 2018 and December 31, 2019 was ¥2,326 and ¥1,162, respectively. The fair value of points awarded is determined using the share price at grant date, which approximates the fair value of points granted.

(2) Stock option plan

Certain subsidiaries of the Company have adopted a share-based payment plan for their employees. The plan grants to employees stock options to purchase common shares in the subsidiaries as well as put options for the subsidiaries to purchase the shares issued through the exercise of the stock options. Consequently, the difference between the exercise price of the stock options and the share price at exercise date is paid in cash to the employees. The plan is to grant rights for 4 years from December 2016. The rights granted have a vesting period of 3 years and an exercise period of 10 years as of grant date.

1) Changes in number of rights and weighted average exercise price

	Fiscal year ended December 31, 2018		Fiscal year ended December 31, 2019	
	Number of rights (Shares)	Weighted average exercise price (Yen)	Number of rights (Shares)	Weighted average exercise price (Yen)
Beginning balance	5,502	120,813	7,835	122,347
Granted	2,647	125,286	2,647	116,990
Expired	(314)	120,233	(76)	119,442
Ending balance	7,835	122,347	10,406	119,876
Ending balance of exercisable rights	2,795	121,068	5,226	120,249

(Notes) 1. The weighted average remaining period of the share-based payment plan as of December 31, 2018 and December 31, 2019 was 9 years and 8.5 years, respectively.

2. The weighted average share price at exercise date of stock options exercised during the period cannot be identified because the shares granted were unlisted.

2) Fair value of stock options granted during the period and underlying assumptions

The weighted average fair value at measurement date of stock options granted during the fiscal years ended December 31, 2018 and December 31, 2019 was ¥70,796 and ¥58,298, respectively.

The fair value at measurement date of stock options granted during the period is evaluated using the Black-Scholes model under the following assumptions:

	Fiscal year ended December 31, 2018	Fiscal year ended December 31, 2019
Main underlying variables and estimation method thereof:		
Valuation of shares at measurement date	125,286 yen	116,990 yen
Exercise price	125,286 yen	116,990 yen
Expected volatility (Note)	42.55 %	37.37 %
Expected remaining period	10 years	10 years
Expected dividend yield	0 %	0 %
Risk free rate	2.69 %	1.88 %

(Note) The expected volatility is determined based on historical share prices during the period corresponding to the expected remaining period.

(3) Stock Benefit Trust (J-ESOP) Plan

The Company has adopted an equity-settled share-based payment plan (the “Plan”) for employees of the Company and some of its subsidiaries (“Eligible Employees”) who satisfy the set requirements.

1) Overview of the Plan

The Plan is an incentive plan that grants the Company’s shares to Eligible Employees who satisfy the set requirements pursuant to the policy on stock benefits prescribed in advance by the Company.

The Company awards points to Eligible Employees principally based on their individual degree of contribution, and grants the Company’s shares equivalent to the awarded points when set terms and conditions are met and vested rights are granted. The shares granted to Eligible Employees, including future shares, are acquired using cash funds contributed in advance to the trust E account established at Trust & Custody Services Bank, Ltd., and are managed separately as trust assets.

2) The Company’s own shares in the trust

The Company’s own shares in the trust are recorded as treasury shares in equity. The number of such treasury shares was 120,700 shares as of December 31, 2019.

3) Changes in the number of points during the period and fair value of points awarded

There were no points awarded during the fiscal years ended December 31, 2018 and December 31, 2019.

35. Financial instruments

(1) Capital management

The Group's capital management policy is to establish and maintain a stable financial foundation in order to improve corporate value through sustainable growth.

The Group primarily uses the following indicators for capital management.

The Group is not subject to any significant regulatory capital requirements.

(Million yen)

	As of January 1, 2018 (Date of transition to IFRS)	As of December 31, 2018	As of December 31, 2019
Total liabilities	136,766	123,348	111,198
Cash and cash equivalents	29,291	16,637	17,499
Equity (equity attributable to owners of parent)	95,435	91,564	75,010
Equity ratio (%)	41.1	42.6	40.3

(Note) Equity ratio: Equity (equity attributable to owners of parent)/Total liabilities and equity

(2) Financial risk management

Risk management policy

The Group's business activities are affected by the business and financial market environments. In the course of the business activities, financial instruments held by the Group are exposed to specific risks.

Such risks primarily include 1) market risk ((a) foreign exchange risk, (b) price risk, (c) interest rate risk), 2) credit risk and 3) liquidity risk. In order to mitigate these risks, risk management is conducted.

The Group focuses on highly safe financial assets in its fund management, and procures funds mainly through loans from banks and issuance of bonds. It carries out optimum fund procurements at each time while giving full consideration to the management environment. The Group uses derivative transactions to hedge foreign exchange risk, and does not enter into derivative transactions for speculative purposes. Derivative transactions are executed and managed with approval from the authorized persons in accordance with the internal rules that stipulate transaction authority, limits, and other matters.

1) Market risk

(a) Foreign exchange risk

Trade receivables and payables denominated in foreign currencies, which arise from the Group's global business development, are exposed to the risk of foreign exchange fluctuations. Part of such risk is hedged using forward exchange contracts. These derivative transactions, for which hedge accounting is not applied, are considered to effectively offset the effects of foreign exchange fluctuations.

The exposure of trade receivables and payables, excluding the part substantively fixed in Japanese yen by forward exchange contracts, to the risk of foreign exchange fluctuations in the US dollar was ¥17,200 million as of December 31, 2019 (¥21,495 million as of December 31, 2018). There was no significant exposure to the risk of foreign exchange fluctuations in currencies other than the US dollar.

Sensitivity analysis of foreign exchange rates

With regard to financial instruments held by the Group, the table below shows the impact on profit before tax in the consolidated statements of profit or loss that would result from a 1% appreciation of the functional currency (Japanese yen) against the US dollar, assuming that all other variables remain constant. The impact of financial instruments denominated in the functional currency and the translation of the assets and liabilities of foreign operations into Japanese yen is not included in this analysis.

(Million yen)

	As of December 31, 2018	As of December 31, 2019
Profit before tax	(214)	(172)

(b) Price risk

As the Group owns listed shares in companies with which the Group has business relationships, it is exposed to the risk of price fluctuations in equity instruments. The Group regularly assesses the fair values and financial condition of issuers (business partners) and continually reviews the holding status.

The exposure of listed shares to the risk of price fluctuations was ¥18,476 million as of December 31, 2019 (¥13,544 million as of December 31, 2018).

Sensitivity analysis of equity instruments

The sensitivity analysis of listed shares held by the Group to the risk of price fluctuations is as follows. This analysis shows the impact on other comprehensive income (before tax effects) in the consolidated statements of comprehensive income that would result from a 10% decline in the price of listed shares, assuming that all other variables remain constant.

(Million yen)

	As of December 31, 2018	As of December 31, 2019
Other comprehensive income	(1,354)	(1,847)

(c) Interest rate risk

Of the Group's interest-bearing liabilities, those with floating rates are exposed to the risk of interest rate fluctuations.

To mitigate the risk of interest rate fluctuations, the Group continually monitors interest rate fluctuations for interest-bearing liabilities with floating rates.

The exposure of interest-bearing liabilities to the risk of interest rate fluctuations was ¥33,917 million as of December 31, 2019 (¥29,081 million as of December 31, 2018).

Sensitivity analysis of interest rates

With regard to financial instruments held by the Group, the table below shows the impact on profit before tax in the consolidated statements of profit or loss that would result from a 1% increase in interest rates.

The scope of the analysis is financial instruments subject to interest rate fluctuations, and other factors including the impact of foreign exchange fluctuations are assumed to remain constant.

(Million yen)

	As of December 31, 2018	As of December 31, 2019
Profit before tax	(290)	(339)

2) Credit risk

The Group's trade and other receivables and other financial assets are exposed to credit risk. Credit risk is the risk of financial loss of the Group in the event that a customer or a counterparty (including financial institutions) fails to meet its contractual obligations.

The Group sets up lines of credit in accordance with Credit Management Regulations by business and country or region. In addition, the sales division and the finance division regularly monitor the credit status of counterparties of trade receivables, and manage the due dates and outstanding balances by counterparty to identify at an early stage and mitigate recoverability concerns, such as due to deterioration of a counterparty's financial condition. Derivative transactions are entered into only with highly creditworthy financial institutions in order to mitigate credit risk, and therefore the credit risk is considered to be extremely low.

The allowance for doubtful accounts for trade receivables is always measured at an amount equal to the lifetime expected credit losses. For receivables other than trade receivables and other financial assets, the allowance for doubtful accounts is measured at an amount equal to the 12-month expected credit losses if the credit risk has not increased significantly since initial recognition, and at an amount equal to the lifetime expected credit losses if the credit risk has increased significantly since initial recognition, such as upon a past due event.

When measuring the expected credit losses for trade receivables, in principle, the receivables are grouped depending on the level of credit risk, provision rates are calculated for each group by reflecting forward-looking information in historical credit loss experience, and the expected credit losses for trade receivables are determined by multiplying the outstanding balance of the assets by a corresponding provision rate. For receivables other than trade receivables and other financial assets whose credit risk has not increased significantly since initial recognition, provision rates are calculated for each group of similar assets by reflecting forward-looking information in historical credit loss experience, and the expected credit losses are determined by multiplying the outstanding balance of the assets by a corresponding provision rate. For receivables other than trade receivables and other financial assets whose credit risk has increased significantly since initial recognition as well as credit-impaired assets, the expected credit losses are determined as a difference between the book value and the present value of expected future cash flows to be received from the assets, discounted using the effective interest rate at initial recognition. If all or a portion of trade and other receivables and other financial assets are considered not to be recovered or extremely difficult to be recovered, they are determined to be credit-impaired.

The book value after impairment of financial assets stated in the consolidated statements of financial position represents the Group's maximum exposure to the credit risk of financial assets. Except for trade receivables of ¥11,637 million as of December 31, 2019 (¥15,624 million as of December 31, 2018) from APPLE OPERATIONS and its group companies, which are the Group's major customers, the Group is not exposed to credit risk concentrated excessively in any single counterparty or group to which the party belongs.

Changes in trade and other receivables (before deducting allowance for doubtful accounts) and allowance for doubtful accounts are as follows:

The fiscal year ended December 31, 2018 (January 1, 2018 to December 31, 2018)

(Million yen)

Trade and other receivables (before deducting allowance for doubtful accounts)	Financial assets measured at an amount equal to 12-month expected credit losses	Financial assets always measured at an amount equal to lifetime expected credit losses	Credit-impaired financial assets	Total
Balance at January 1, 2018	592	44,148	212	44,953
Changes during the period	915	(6,572)	8	(5,648)
Reclassification to credit-impaired financial assets	—	(71)	71	—
Business combinations (see Note 5)	—	319	—	319
Foreign currency translation differences	(7)	(365)	(8)	(381)
Balance at December 31, 2018	1,500	37,458	284	39,242

Grouping depending on the level of credit risk is almost the same for receivables measured at an amount equal to 12-month expected credit losses and receivables always measured at an amount equal to lifetime expected credit losses.

(Million yen)

Allowance for doubtful accounts	Financial assets measured at an amount equal to 12-month expected credit losses	Financial assets always measured at an amount equal to lifetime expected credit losses	Credit-impaired financial assets	Total
Balance at January 1, 2018	0	71	211	282
Increase	—	10	25	36
Decrease (intended use)	—	(5)	—	(5)
Decrease (reversal)	(0)	(38)	(0)	(38)
Reclassification to credit-impaired financial assets	—	—	—	—
Business combinations (see Note 5)	—	—	—	—
Foreign currency translation differences	(0)	0	(6)	(6)
Balance at December 31, 2018	0	38	230	268

The fiscal year ended December 31, 2019 (January 1, 2019 to December 31, 2019)

(Million yen)

Trade and other receivables (before deducting allowance for doubtful accounts)	Financial assets measured at an amount equal to 12-month expected credit losses	Financial assets always measured at an amount equal to lifetime expected credit losses	Credit-impaired financial assets	Total
Balance at January 1, 2019	1,500	37,458	284	39,242
Changes during the period	(1,236)	(3,746)	(36)	(5,018)
Reclassification to credit-impaired financial assets	—	(65)	65	—
Business combinations (see Note 5)	75	433	—	509
Foreign currency translation differences	(3)	(202)	12	(193)
Balance at December 31, 2019	336	33,877	325	34,540

Grouping depending on the level of credit risk is almost the same for receivables measured at an amount equal to 12-month expected credit losses and receivables always measured at an amount equal to lifetime expected credit losses.

(Million yen)

Allowance for doubtful accounts	Financial assets measured at an amount equal to 12-month expected credit losses	Financial assets always measured at an amount equal to lifetime expected credit losses	Credit-impaired financial assets	Total
Balance at January 1, 2019	0	38	230	268
Increase	—	17	125	143
Decrease (intended use)	—	—	(35)	(35)
Decrease (reversal)	(0)	(7)	—	(7)
Reclassification to credit-impaired financial assets	—	—	—	—
Business combinations (see Note 5)	—	—	—	—
Foreign currency translation differences	(0)	(0)	(6)	(6)
Balance at December 31, 2019	0	48	314	362

3) Liquidity risk

The Group is exposed to liquidity risk that the Group is unable to fulfill its repayment obligations for financial liabilities.

To manage the liquidity risk, the finance division take measures such as preparing and updating fund management plans in a timely manner, and consolidating fund flows to the Company through the cash management system (CMS) introduced across the Group companies in Japan.

The maturity analysis of financial liabilities (including derivative financial instruments) is as follows. The maturity analysis of lease liabilities is provided in Note 13 "Leases."

(Million yen)

	As of January 1, 2018 (Date of transition to IFRS)				
	Book value	Contractual cash flows	1 year or less	Over 1 year to 5 years	Over 5 years
Non-derivative financial liabilities					
Trade and other payables	72,806	72,806	72,806	—	—
Short-term borrowings	10,669	10,677	10,677	—	—
Long-term-borrowings	14,870	16,867	1,856	14,689	321
Bonds	2,868	2,940	—	2,940	—
Total	101,214	103,290	85,340	17,629	321

(Million yen)

	As of December 31, 2018				
	Book value	Contractual cash flows	1 year or less	Over 1 year to 5 years	Over 5 years
Non-derivative financial liabilities					
Trade and other payables	62,158	62,158	62,158	—	—
Short-term borrowings	10,858	10,867	10,867	—	—
Long-term-borrowings	15,241	17,392	2,397	14,643	351
Bonds	2,794	2,840	—	2,840	—
Total	91,052	93,259	75,423	17,483	351

(Million yen)

	As of December 31, 2019				
	Book value	Contractual cash flows	1 year or less	Over 1 year to 5 years	Over 5 years
Non-derivative financial liabilities					
Trade and other payables	44,538	44,538	44,538	—	—
Short-term borrowings	20,803	20,817	20,817	—	—
Long-term-borrowings	12,791	14,681	1,852	12,691	137
Bonds	2,817	2,840	—	2,840	—
Total	80,950	82,877	67,208	15,531	137

(3) Fair value of financial instruments

Estimation of fair value

1) Measurement of fair value of financial instruments

The Group determines the fair value of major financial assets and financial liabilities as follows. The fair value of financial instruments is estimated using available market prices, or is measured by appropriate valuation techniques when market prices are not available.

(Cash and cash equivalents, trade and other receivables, trade and other payables, short-term borrowings)

Since these are settled within a short period, the fair value approximates the book value. Therefore, the fair value is based on the relevant book value.

(Other financial assets and other financial liabilities)

The fair value of marketable equity instruments (listed shares) is measured based on market prices at the fiscal year-end. The fair value of equity instruments (unlisted shares) with no available market prices and debt instruments (preference shares, etc.) classified as financial assets measured at fair value through profit or loss is measured using valuation techniques, primarily based on discounted future cash flows, market prices of similar companies or net asset values. Since other financial assets and financial liabilities are settled within a short period, the fair value approximates the book value. One of the main unobservable inputs used to measure the fair value of these financial instruments with no available market prices was valuation multiple derived from the comparable peer company analysis. The fair value increases (decreases) as the valuation multiple rises (declines).

(Derivative assets and liabilities)

The fair value of derivative assets and liabilities is measured at the market quotation of derivative transactions under the same terms and conditions as of the fiscal year-end.

(Contingent consideration)

Contingent consideration in a business combination is measured at fair value as of the acquisition date of the business combination. Contingent consideration that meets the definition of a financial liability is remeasured at fair value at each subsequent reporting date. The fair value is determined on the basis of the scenario-based method or Monte Carlo simulation model, where the key assumptions considered are the probability of meeting each performance target, the projected future operating results, and the discount rate. The fair value decreases (increases) as the discount rate rises (declines).

(Long-term borrowings)

The fair value of long-term borrowings is measured by discounting the principal and interest at an interest rate that would be applied to a new similar borrowing.

(Bonds)

The fair value of bonds is measured at the present value of the principal discounted at a rate that reflects the remaining term and credit risk of the bonds.

2) Book value and fair value of financial instruments measured at amortized cost

The book value and fair value of financial instruments measured at amortized cost, which are categorized within Level 2 of the fair value hierarchy, are as follows. Financial instruments whose book value approximates the fair value are not disclosed.

(Million yen)

	As of January 1, 2018 (Date of transition to IFRS)		As of December 31, 2018		As of December 31, 2019	
	Book value	Fair value	Book value	Fair value	Book value	Fair value
Financial liabilities						
Financial liabilities measured at amortized cost						
Long-term borrowings	14,870	14,101	15,241	14,356	12,791	12,404
Bonds	2,868	2,866	2,794	2,790	2,817	2,813

3) Financial instruments measured at fair value and hierarchy thereof

The table below shows an analysis on the hierarchy of financial instruments measured at fair value. Each level of the hierarchy is described in Note 3 “Significant accounting policies.” Transfers between the levels are recognized on the date of the event or change in circumstances that caused the transfer.

(Million yen)

As of January 1, 2018 (Date of transition to IFRS)	Level 1	Level 2	Level 3	Total
Financial assets				
Financial assets measured at fair value through profit or loss				
Derivatives for which hedge accounting is not applied	—	2	—	2
Debt instruments	—	—	1,191	1,191
Financial assets measured at fair value through other comprehensive income				
Equity instruments	18,772	—	414	19,187
Total	18,772	2	1,606	20,381
Financial liabilities				
Financial liabilities measured at fair value through profit or loss				
Derivatives for which hedge accounting is not applied	—	—	—	—
Contingent consideration	—	—	275	275
Total	—	—	275	275

The above financial assets and financial liabilities are included in “Other financial assets (current),” “Other financial assets (non-current),” “Other financial liabilities (current)” and “Other financial liabilities (non-current)” in the consolidated statements of financial position.

(Million yen)

As of December 31, 2018	Level 1	Level 2	Level 3	Total
Financial assets				
Financial assets measured at fair value through profit or loss				
Derivatives for which hedge accounting is not applied	—	0	—	0
Debt instruments	—	—	1,007	1,007
Financial assets measured at fair value through other comprehensive income				
Equity instruments	13,544	—	382	13,926
Total	13,544	0	1,389	14,933
Financial liabilities				
Financial liabilities measured at fair value through profit or loss				
Derivatives for which hedge accounting is not applied	—	—	—	—
Contingent consideration (See Note 5)	—	—	819	819
Total	—	—	819	819

The above financial assets and financial liabilities are included in "Other financial assets (current)," "Other financial assets (non-current)," "Other financial liabilities (current)" and "Other financial liabilities (non-current)" in the consolidated statements of financial position.

(Million yen)

As of December 31, 2019	Level 1	Level 2	Level 3	Total
Financial assets				
Financial assets measured at fair value through profit or loss				
Derivatives for which hedge accounting is not applied	—	0	—	0
Debt instruments	—	—	869	869
Financial assets measured at fair value through other comprehensive income				
Equity instruments	18,476	—	714	19,191
Total	18,476	0	1,583	20,061
Financial liabilities				
Financial liabilities measured at fair value through profit or loss				
Derivatives for which hedge accounting is not applied	—	—	—	—
Contingent consideration	—	—	714	714
Total	—	—	714	714

The above financial assets and financial liabilities are included in "Other financial assets (current)," "Other financial assets (non-current)," "Other financial liabilities (current)" and "Other financial liabilities (non-current)" in the consolidated statements of financial position.

4) Reconciliation of financial instruments categorized within Level 3

Financial instruments categorized within Level 3 are evaluated and the evaluation results are analyzed by the Company's CFO in accordance with the evaluation policies and procedures established by the Group.

The following table shows a reconciliation of the opening balance to the closing balance of financial assets whose fair value measurement is categorized within Level 3.

(Million yen)

	Fiscal year ended December 31, 2018		Fiscal year ended December 31, 2019	
	Equity instruments measured at fair value through other comprehensive income	Financial assets measured at fair value through profit or loss	Equity instruments measured at fair value through other comprehensive income	Financial assets measured at fair value through profit or loss
Beginning balance	414	1,191	382	1,007
Total gain and loss				
Profit or loss (Note 1)	–	(64)	–	(163)
Other comprehensive income (Note 2)	(27)	–	(539)	–
Purchase	–	20	871	121
Sale	–	(7)	–	–
Transfer to Level 1 due to listing	(4)	–	–	–
Other (Note 3)	–	(132)	–	(95)
Ending balance	382	1,007	714	869

(Notes) 1. Profit or loss contained in total gain and loss is included in "Finance income" and "Finance costs." Of profit or loss contained in total gain and loss, the amount attributable to changes in unrealized gain or loss related to financial assets measured at fair value through profit or loss held as of the fiscal year-end was ¥(68) million and ¥(163) million for the fiscal years ended December 31, 2018 and December 31, 2019, respectively.

2. Other comprehensive income contained in total gain and loss is related to financial assets measured at fair value through other comprehensive income as of the fiscal year-end. These gain and loss, net of tax effects, are included in "Net change in fair value of financial assets measured through other comprehensive income."

3. Other consists mainly of redemption and foreign currency translation differences.

The following table shows a reconciliation of the opening balance to the closing balance of financial liabilities whose fair value measurement is categorized within Level 3.

(Million yen)

	Fiscal year ended December 31, 2018	Fiscal year ended December 31, 2019
	Financial liabilities measured at fair value through profit or loss	Financial liabilities measured at fair value through profit or loss
Beginning balance	275	819
Total gain and loss		
Profit or loss (Note 1)	9	(2)
Issuance	618	—
Settlement	(71)	(91)
Other (Note 2)	(13)	(11)
Ending balance	819	714

(Notes) 1. Profit or loss contained in total gain and loss is included in finance costs. Of profit or loss contained in total gain and loss, the amount attributable to changes in unrealized gain or loss related to financial liabilities measured at fair value through profit or loss held as of the fiscal year-end was ¥0 million and ¥(5) million for the fiscal years ended December 31, 2018 and December 31, 2019, respectively.

2. Other consists mainly of foreign currency translation differences.

(4) Equity instruments measured at fair value through other comprehensive income

The Group designates investments in equity instruments held for the purpose of maintaining and strengthening relationships with business partners as equity instruments measured at fair value through other comprehensive income in light of the holding purpose.

1) Fair value by issuer

The fair value by major issuer of investments in equity instruments designated as financial assets measured at fair value through other comprehensive income

As of January 1, 2018 (Date of transition to IFRS)

(Million yen)

Issuer	Amount
Nintendo Co., Ltd.	11,703
NIDEC CORPORATION	1,780
HORIBA, Ltd.	810
Wacoal Holdings Corp.	517
SCREEN Holdings Co., Ltd.	471
HISAMITSU PHARMACEUTICAL CO., INC.	448
Nissin Electric Co., Ltd.	445
The Bank of Kyoto, Ltd.	399
Nippon Shinyaku Co., Ltd.	355
Dainichiseika Color & Chemicals Mfg. Co., Ltd.	278

As of December 31, 2018

(Million yen)

Issuer	Amount
Nintendo Co., Ltd.	8,320
NIDEC CORPORATION	1,404
HORIBA, Ltd.	535
Wacoal Holdings Corp.	413
HISAMITSU PHARMACEUTICAL CO., INC.	401
The Bank of Kyoto, Ltd.	309
Nippon Shinyaku Co., Ltd.	295
Nissin Electric Co., Ltd.	273
SCREEN Holdings Co., Ltd.	235
Mitsubishi UFJ Financial Group, Inc.	179

As of December 31, 2019

(Million yen)

Issuer	Amount
Nintendo Co., Ltd.	12,493
NIDEC CORPORATION	1,689
HORIBA, Ltd.	874
Nissin Electric Co., Ltd.	461
Wacoal Holdings Corp.	427
Nippon Shinyaku Co., Ltd.	400
SCREEN Holdings Co., Ltd.	383
SPARSHA PHARMA USA, INC.	325
The Bank of Kyoto, Ltd.	320
HISAMITSU PHARMACEUTICAL CO., INC.	262

2) Dividend income

(Million yen)

	Fiscal year ended December 31, 2018	Fiscal year ended December 31, 2019
Investments derecognized during the period	0	5
Investments held as of the fiscal year-end	288	364
Total	288	370

3) Equity instruments measured at fair value through other comprehensive income that were derecognized during the period

(Million yen)

	Fiscal year ended December 31, 2018	Fiscal year ended December 31, 2019
Fair value at derecognition	0	422
Accumulated gain (loss) at derecognition	(12)	176

(Note) The Group has disposed of, through sale, and derecognized equity instruments measured at fair value through other comprehensive income mainly for the purpose of reviewing relationships with business partners.

4) Transfer to retained earnings

The Group transfers accumulated gain or loss due to changes in the fair value of equity instruments measured through other comprehensive income to retained earnings in such cases as when the investment is disposed of.

The accumulated gain or loss (net of tax) of other comprehensive income that was transferred to retained earnings was ¥(12) million and ¥176 million for the fiscal years ended December 31, 2018 and December 31, 2019, respectively. This was mainly due to derecognition of securities classified as equity instruments measured at fair value through other comprehensive income by way of sale for the purpose of reviewing business relationships.

(5) Offsetting of financial assets and financial liabilities

Information on offsetting of financial assets and financial liabilities recognized for the same counterparties is as follows:

(Million yen)

	As of January 1, 2018 (Date of transition to IFRS)	As of December 31, 2018	As of December 31, 2019
Financial assets			
Trade and other receivables	20,621	21,416	15,024
Amount offset in accordance with the requirements for offsetting financial assets and financial liabilities	(2,739)	(1,351)	(1,874)
Net amount presented in the consolidated statements of financial position	17,882	20,065	13,149
Financial liabilities			
Trade and other payables	29,340	21,625	15,227
Amount offset in accordance with the requirements for offsetting financial assets and financial liabilities	(2,739)	(1,351)	(1,874)
Net amount presented in the consolidated statements of financial position	26,601	20,273	13,353

(Note) There are no material amounts that are not offset even though they are covered by an enforceable master netting arrangement or similar agreement because they do not meet part or all of the requirements for offsetting financial assets and financial liabilities.

36. Related parties

(1) Related party transactions

Related party transactions are priced, taking into account market prices, on terms and conditions equivalent to those that prevail in arm's length transactions. There are no significant transactions (excluding transactions eliminated in the consolidated financial statements).

(2) Remuneration for key management personnel

Remuneration for key management personnel is as follows:

(Million yen)

	Fiscal year ended December 31, 2018	Fiscal year ended December 31, 2019
Base remuneration and bonuses	271	262
Share-based payment expense	23	25
Total	295	288

37. Significant subsidiaries

There are no subsidiaries that have non-controlling interests that are individually material to the Company.

38. Commitments

Commitments for the acquisition of property, plant and equipment and intangible assets are as follows:

(Million yen)

	As of December 31, 2018	As of December 31, 2019
Acquisition of property, plant and equipment and intangible assets	1,354	588

39. Contingent liabilities

Not applicable

40. Subsequent events

The Company resolved, at its meeting of the Board of Directors held on February 14, 2020, to implement “Measures to Strengthen Profitability.” With this implementation, the Group will implement a call for voluntary retirement, as follows. The details of the call for voluntary retirement were resolved at the meeting of the Board of Directors held on February 21, 2020.

(1) Reason for the call for voluntary retirement

The Group has set the markets of mobility (automotive), medical devices and sustainable packaging materials as its focus markets, in addition to the mainstay consumer electronics (IT), and aims at “completion of balanced management” by reorganizing and optimizing its business portfolio.

Of these focus markets, the Group has achieved significant growth in the markets of mobility (automotive), medical devices and sustainable packaging materials mainly through efforts in the utilization of M&A and also anticipates their sustainable growth in the future. On the other hand, in the IT market, the Group expects market conditions to become severer primarily because of changes in technological trends, in addition to decrease in demand due to slowing growth in the smartphone market and seasonal variations in demand. In anticipation of this harsh market environment, the Group has worked to reduce variable expenses and the burden of investments, and also cut down on fixed expenses. As a result, the Group is now able to control costs flexibly when demand falls, but the Group needs to make further improvements in profitability in order to enhance corporate value.

Based on this awareness, the Company is working on “Measures to Strengthen Profitability” and as part of this, the Company has decided to call for voluntary retirement.

(2) Overview of the call for voluntary retirement

1) Number of applicants: Approximately 250 people, mainly full-time employees in the Company and its domestic subsidiaries

2) Application period: From April 28, 2020 to May 15, 2020 (planned)

3) Retirement date: June 30, 2020

4) Preferential treatment: Additional retirement payment will be added to the prescribed retirement allowance and for those who apply, re-employment support services will be provided through outplacement consulting firms.

(3) Estimated losses due to voluntary retirement

The Group plans to recognize additional retirement payment and re-employment support program fees for voluntary retirement of approximately ¥2.0 billion as losses for the fiscal year ending December 31, 2020.

41. First-time adoption

The Group has adopted IFRS starting from the fiscal year ended December 31, 2019, with the date of transition to IFRS on January 1, 2018. The latest consolidated financial statements prepared in accordance with Japanese GAAP (previous GAAP) are for the fiscal year ended December 31, 2018.

(1) Exemptions under IFRS 1

IFRS 1 requires that, in principle, an entity adopting IFRS for the first time ("first-time adopter") retrospectively applies the requirements of IFRS. However, for certain requirements of IFRS, IFRS 1 provides mandatory exceptions which prohibit retrospective application of IFRS in some areas as well as optional exemptions from retrospective application. Major exemptions applied by the Group upon its transition from Japanese GAAP to IFRS are as follows:

1) Business combinations

A first-time adopter may elect not to apply IFRS 3 "Business Combinations" ("IFRS 3") retrospectively to business combinations that occurred before the date of transition to IFRS. By using this exemption, the Group has not applied IFRS 3 retrospectively for business combinations that occurred before the date of transition. Accordingly, goodwill arising from business combinations before the date of transition is based on the book value determined under Japanese GAAP as of the date of transition. Such goodwill was tested for impairment as of the date of transition, regardless of whether there was any indication of impairment.

2) Exchange differences on translation of foreign operations

The Group has reclassified all cumulative exchange differences on translation of foreign operations as of the date of transition to IFRS to retained earnings.

3) Leases

The Group has assessed whether a contract existing at the date of transition to IFRS contains a lease on the basis of facts and circumstances existing at that date.

Lease liabilities and right-of-use assets have been measured as of the date of transition to IFRS. Right-of-use assets have been measured on a lease-by-lease basis, at either their book value as if IFRS 16 "Leases" had been applied since the commencement date of the lease, or an amount equal to the lease liability for the lease. The Group has determined whether to apply the recognition exemption for leases of low-value assets and short-term leases on the basis of circumstances at the date of transition to IFRS.

4) Designation of financial instruments recognized before the date of transition to IFRS

The Group has made the designation of financial instruments recognized before the date of transition to IFRS in accordance with IFRS 9 "Financial Instruments" on the basis of facts and circumstances existing at the date of transition to IFRS.

5) Share-based payment

The Group has elected not to apply IFRS 2 "Share-based Payment" to share-based payment transactions vested before the date of transition to IFRS.

IFRS 1 prohibits retrospective application of IFRS to estimates, derecognition of financial assets and financial liabilities, non-controlling interests, and classification and measurement of financial assets. The Group has applied IFRS prospectively to these items from the date of transition to IFRS.

(2) Reconciliations for first-time adoption

The reconciliations required to be disclosed under IFRS 1 are as follows. "Reclassifications" include items that do not affect retained earnings and comprehensive income and "Differences in recognition and measurement" include items that affect retained earnings and comprehensive income.

1) Reconciliation of equity

Reconciliation of equity as of the date of transition to IFRS (January 1, 2018)

(Million yen)

Accounts under Japanese GAAP	Japanese GAAP	Reclassifica-tions	Differences in recognition and measurement	IFRS	Notes	Accounts under IFRS
Assets						Assets
Current assets						Current assets
Cash and deposits	29,790	(499)		29,291		Cash and cash equivalents
Notes and accounts receivable-trade	48,140	(2,460)	(1,009)	44,670	A	Trade and other receivables
Securities	33	(33)				
Merchandise and finished goods	10,474	16,152	961	27,588	A	Inventories
Work in process	8,055	(8,055)				
Raw materials and supplies	7,095	(7,095)				
Consumption taxes receivable	4,099	(4,099)				
		3,318		3,318		Other financial assets
Other	4,481	708	106	5,296		Other current assets
Allowance for doubtful accounts	(292)	292				
Total current assets	111,877	(1,770)	58	110,165		Total current assets
Non-current assets						Non-current assets
Property, plant and equipment	52,555		5,907	58,462	B	Property, plant and equipment
Intangible assets						
Goodwill	23,645		(4,076)	19,569	C	Goodwill
Other	13,981		477	14,459		Intangible assets
			7,901	7,901	D	Right-of-use assets
Investments and other assets						
Investment securities	20,299	(20,081)		218		Investments accounted for using equity method
		20,428	265	20,694	I	Other financial assets
			111	111	G	Retirement benefit asset
Deferred tax assets	1,385		(726)	658	K	Deferred tax assets
Other	1,049	(832)	(17)	199		Other non-current assets
Allowance for doubtful accounts	(485)	485				
Total non-current assets	112,432	–	9,842	122,275		Total non-current assets
Total assets	224,310	(1,770)	9,901	232,440		Total assets

(Million yen)

Accounts under Japanese GAAP	Japanese GAAP	Reclassifica-tions	Differences in recognition and measurement	IFRS	Notes	Accounts under IFRS
Liabilities						Liabilities and equity
Current liabilities						Current liabilities
Notes and accounts payable-trade	51,736	20,900	169	72,806		Trade and other payables
Electronically recorded obligations - operating	8,909	(8,909)				
Short-term loans payable	10,669	1,356		12,025		Borrowings
Current portion of long-term loans payable	1,356	(1,356)				
		1,314	(6)	1,308		Other financial liabilities
Lease obligations	268		1,299	1,567	D	Lease liabilities
Accrued expenses	6,918	(6,918)				
Income taxes payable	1,441	125		1,566		Income taxes payable, etc.
		25	0	25		Provisions
Provision for bonuses	1,930	(1,930)				
Provision for directors' bonuses	60	(60)				
Provision for management board benefit trust	138		(138)			
Provision for product warranties	25	(25)				
Other	13,735	(6,337)	580	7,978	E	Other current liabilities
Total current liabilities	97,190	(1,816)	1,904	97,278		Total current liabilities
Non-current liabilities						Non-current liabilities
Bonds payable	2,940	13,514	(71)	16,383	F	Bonds and borrowings
Long-term loans payable	13,514	(13,514)				
		740	876	1,616	L	Other financial liabilities
Lease obligations	1,666		4,754	6,420	D	Lease liabilities
Net defined benefit liability	4,373		401	4,775	G	Retirement benefit liability
		164		164		Provisions
Deferred tax liabilities	8,974		860	9,834	K	Deferred tax liabilities
Other	912	(858)	239	293		Other non-current liabilities
Total non-current liabilities	32,380	46	7,061	39,488		Total non-current liabilities
Total liabilities	129,571	(1,770)	8,966	136,766		Total liabilities
Net assets						Equity
Shareholders' equity						
Capital stock	12,069			12,069		Share capital
Capital surplus	15,460		(433)	15,027	F,L	Capital surplus
Retained earnings	51,337		6,602	57,940	A,B,C, D,E,F, G,H,I, J,K,L, M	Retained earnings
Treasury shares	(327)		88	(239)		Treasury shares
Accumulated other comprehensive income	15,958		(5,320)	10,638	G,H,I, J	Other components of equity
Non-controlling interests	239		(1)	237		Non-controlling interests
Total net assets	94,738	—	935	95,673		Total equity
Total liabilities and net assets	224,310	(1,770)	9,901	232,440		Total liabilities and equity

Reconciliation of equity as of December 31, 2018

(Million yen)

Accounts under Japanese GAAP	Japanese GAAP	Reclassifications	Differences in recognition and measurement	IFRS	Notes	Accounts under IFRS
Assets						Assets
Current assets						Current assets
Cash and deposits	16,762	(5)	(120)	16,637		Cash and cash equivalents
Notes and accounts receivable-trade	40,867	(126)	(1,766)	38,974	A	Trade and other receivables
Merchandise and finished goods	12,337	16,059	1,890	30,287	A	Inventories
Work in process	8,101	(8,101)				
Raw materials and supplies	7,144	(7,144)				
Consumption taxes receivable	3,739	(3,739)				
		4,071		4,071		Other financial assets
Other	7,183	(1,838)	45	5,390		Other current assets
			293	293		Assets held for sale
Allowance for doubtful accounts	(277)	277				
Total current assets	95,859	(546)	341	95,654		Total current assets
Non-current assets						Non-current assets
Property, plant and equipment	54,225		4,742	58,967	B	Property, plant and equipment
Intangible assets						
Goodwill	22,039		(2,168)	19,871	C	Goodwill
Other	14,188		369	14,558		Intangible assets
			9,455	9,455	D	Right-of-use assets
Investments and other assets						
Investment securities	14,797	(14,769)	(28)	0		Investments accounted for using equity method
		15,204	165	15,369	I	Other financial assets
Net defined benefit asset	227		(6)	221	G	Retirement benefit asset
Deferred tax assets	584		(13)	571	K	Deferred tax assets
Other	1,142	(903)	(12)	226		Other non-current assets
Allowance for doubtful accounts	(468)	468				
Total non-current assets	106,737	—	12,503	119,241		Total non-current assets
Total assets	202,596	(546)	12,845	214,895		Total assets

(Million yen)

Accounts under Japanese GAAP	Japanese GAAP	Reclassifications	Differences in recognition and measurement	IFRS	Notes	Accounts under IFRS
Liabilities						Liabilities and equity
Current liabilities						Current liabilities
Notes and accounts payable-trade	44,484	17,583	90	62,158		Trade and other payables
Electronically recorded obligations - operating	6,772	(6,772)				
Short-term loans payable	10,858	1,716		12,574		Borrowings
Current portion of long-term loans payable	1,716	(1,716)				
		1,415	25	1,441		Other financial liabilities
Lease obligations	206		1,407	1,614	D	Lease liabilities
Accrued expenses	7,101	(7,101)				
Income taxes payable	840	86		926		Income taxes payable, etc.
		300		300		Provisions
Provision for bonuses	1,963	(1,963)				
Provision for directors' bonuses	71	(71)				
Provision for product warranties	74	(74)				
Other	8,620	(3,792)	444	5,272	E	Other current liabilities
			112	112		Liabilities directly associated with assets held for sale
Total current liabilities	82,709	(388)	2,080	84,401		Total current liabilities
Non-current liabilities						Non-current liabilities
Bonds payable	2,840	13,525	(45)	16,319	F	Bonds and borrowings
Long-term loans payable	13,525	(13,525)				
		1,059	636	1,695	L	Other financial liabilities
Lease obligations	1,396		6,593	7,990	D	Lease liabilities
Net defined benefit liability	4,305		238	4,543	G	Retirement benefit liability
Provision for management board benefit trust	46	(46)				
		162		162		Provisions
Deferred tax liabilities	6,287		1,654	7,941	K	Deferred tax liabilities
Other	1,159	(1,333)	467	293		Other non-current liabilities
Total non-current liabilities	29,560	(158)	9,544	38,947		Total non-current liabilities
Total liabilities	112,270	(546)	11,625	123,348		Total liabilities
Net assets						Equity
Shareholders' equity						
Capital stock	12,119			12,119		Share capital
Capital surplus	15,514		(443)	15,071	F,L	Capital surplus
Retained earnings	54,138		6,793	60,931	A,B,C,D,E,F,G,H,I,J,K,L,M	Retained earnings
Treasury shares	(1,911)		10	(1,900)		Treasury shares
Accumulated other comprehensive income	10,347		(5,005)	5,341	G,H,I,J	Other components of equity
Non-controlling interests	118		(135)	(17)		Non-controlling interests
Total net assets	90,326	—	1,220	91,546		Total equity
Total liabilities and net assets	202,596	(546)	12,845	214,895		Total liabilities and equity

Reconciliation of profit or loss and comprehensive income for the fiscal year ended December 31, 2018

(Million yen)

Accounts under Japanese GAAP	Japanese GAAP	Reclassifica-tions	Differences in recognition and measurement	IFRS	Notes	Accounts under IFRS
Net sales	207,404		(3,194)	204,210	A	Net sales
Cost of sales	(170,113)	1,500	2,275	(166,337)	A,B,D,E,G	Cost of sales
Gross profit	37,291	1,500	(919)	37,872		Gross profit
Selling, general and administrative expenses	(29,210)	(1,500)	1,558	(29,152)	B,C,D,E,G	Selling, general and administrative expenses
		1,486	(82)	1,404		Other income
		(3,010)	54	(2,956)		Other expenses
		(184)	(28)	(213)		Share of profit (loss) of investments accounted for using equity method
Operating profit	8,080	(1,708)	582	6,954		Operating profit
Non-operating income	607	(36)	92	663	I	Finance income
Non-operating expenses	(1,308)	463	(404)	(1,249)	D,F,I,L	Finance costs
Extraordinary income	1,270	(1,270)				
Extraordinary losses	(2,552)	2,552				
Profit before income taxes	6,097	–	269	6,367		Profit before tax
Total income taxes	(1,911)	–	(201)	(2,113)	K	Income tax expense
Profit	4,186	–	67	4,254		Profit

(Million yen)

Accounts under Japanese GAAP	Japanese GAAP	Reclassifica-tions	Differences in recognition and measurement	IFRS	Notes	Accounts under IFRS
Profit	4,186		67	4,254		Profit
Other comprehensive income						Other comprehensive income
						Items that will not be reclassified to profit or loss
Valuation difference on available-for-sale securities	(3,659)		(30)	(3,689)	I,J	Net change in fair value of financial assets measured through other comprehensive income
Remeasurements of defined benefit plans, net of tax	(57)		55	(2)	G	Remeasurements of defined benefit plans
						Items that may be reclassified to profit or loss
Foreign currency translation adjustment	(1,853)		237	(1,615)		Exchange differences on translation of foreign operations
Share of other comprehensive income of entities accounted for using equity method	(40)		35	(5)		Share of other comprehensive income of investments accounted for using equity method
Total other comprehensive income	(5,611)		298	(5,312)		Total other comprehensive income
Comprehensive income	(1,424)	–	366	(1,058)		Total comprehensive income

(3) Notes on reconciliation of equity and reconciliation of profit or loss and comprehensive income

(Reclassifications)

The following items represent major items that have been reclassified to comply with IFRS.

・Time deposits maturing after three months but within one year, which were included in “Cash and deposits” under Japanese GAAP, are presented as “Other financial assets (current assets)” under IFRS.

・Consumption taxes receivable, which were presented as a separate account under Japanese GAAP, are presented as “Other current assets” under IFRS.

・Allowance for doubtful accounts against current assets, which was presented as a separate account under Japanese GAAP, is included in the associated financial assets, which are “Trade and other receivables” and “Other financial assets (current assets),” under IFRS.

・Merchandise and finished goods, work in process, and raw materials and supplies, which were presented as separate accounts under Japanese GAAP, are presented collectively as “Inventories” under IFRS.

・Accounts receivable-other, which were included in “Other (current assets)” under Japanese GAAP, are included in “Trade and other receivables” under IFRS.

・Investments accounted for using equity method, which were included in “Investment securities” under Japanese GAAP, are presented as “Investments accounted for using equity method” under IFRS.

・Under IFRS, investment securities other than investments accounted for using equity method are included in “Other financial assets (non-current assets).” Financial assets including guarantee deposits, which were included in “Other (investments and other assets)” under Japanese GAAP, are included in “Other financial assets (non-current assets)” under IFRS.

・Allowance for doubtful accounts against non-current assets, which was presented as a separate account under Japanese GAAP, is included in the associated financial assets, which are “Other financial assets (non-current assets),” under IFRS.

・Electronically recorded obligations – operating and accrued expenses, which were presented as separate accounts under Japanese GAAP, are included in “Trade and other payables” under IFRS.

・Accounts payable-other, which were included in “Other (current liabilities)” under Japanese GAAP, are included in “Trade and other payables” under IFRS.

・Financial liabilities, which were included in “Other (current liabilities)” under Japanese GAAP, are included in “Other financial liabilities (current liabilities)” under IFRS.

・“Provision for bonuses,” which was presented as a separate account under Japanese GAAP, is included in “Other current liabilities” under IFRS.

・Repurchase agreements including supply-for-a-fee transactions, for which the cancellation of inventories was recognized at the time of supply under Japanese GAAP, are instead recognized as financial liabilities under IFRS.

・Financial assets and financial liabilities expected to be settled on a net basis, which were presented on a gross basis under Japanese GAAP, are presented on a net basis under IFRS when the Group:

(a) has a legally enforceable right to set off the balances; and

(b) intends either to settle on a net basis, or to realize the assets and settle the liabilities simultaneously.

・Financial liabilities, which were included in “Other (non-current liabilities)” under Japanese GAAP, are included in “Other financial liabilities (non-current liabilities)” under IFRS.

・For items presented as “Non-operating income,” “Non-operating expenses,” “Extraordinary income” and “Extraordinary losses” under Japanese GAAP, finance-related items are reclassified to “Finance income” or “Finance costs,” and the other items are reclassified to “Other income,” “Other expenses,” or “Share of profit (loss) of investments accounted for using equity method” under IFRS.

(Differences in recognition and measurement)

A. Sales recognition

Under Japanese GAAP, net sales were primarily recognized on a shipping basis. Under IFRS, sales are recognized when a performance obligation is satisfied at a point in time, such as at the time of customer acceptance, or over time. This results in a decrease in "Trade and other receivables" and an increase in "Inventories."

Payments to customers relating to goods supplied for a fee, which were included in "Cost of sales" under Japanese GAAP, are offset against sales as consideration paid to customers under IFRS.

B. Property, plant and equipment

Property, plant and equipment, which were depreciated primarily by using the declining-balance method for some period in the past under Japanese GAAP, are depreciated by using the straight-line method from initial recognition under IFRS.

C. Goodwill

Goodwill, which was amortized over a set period under Japanese GAAP, is not amortized under IFRS. Impairment of goodwill, which was assessed only when there was an indication of impairment under Japanese GAAP, is tested in each period under IFRS.

On the basis of the business plan as of the date of transition to IFRS, the Group tested each cash-generating unit (or a group of cash-generating units) for impairment, and identified that the recoverable amount was below the book value including goodwill. As a result, impairment losses of ¥3,022 million on goodwill mainly in association with AR Metallizing N.V. have been recognized in the Industrial Materials segment. The recoverable amount is measured at value in use, which is calculated by discounting future cash flows at a discount rate of 9.0%.

D. Leases

Under Japanese GAAP, a lessee classified each of its leases as either a finance lease or an operating lease and accounted for operating leases in a manner similar to accounting for ordinary rental transactions. Under IFRS, a lessee recognizes lease liabilities and right-of-use assets at the commencement date of the lease. The lease liabilities are measured at the present value of future lease payments at the commencement date, and the right-of-use assets are measured at the amount of lease liabilities adjusted for prepaid lease payments made before the commencement date, initial direct costs and an estimate of costs to fulfill the obligation of restoration.

E. Obligation for paid absences

Obligation for unused paid absences, which was not recognized under Japanese GAAP, is recognized as a liability under IFRS.

F. Bonds

In accounting for convertible bonds (bonds with stock acquisition rights), consideration of bonds and consideration of stock acquisition rights were recognized collectively rather than separately under Japanese GAAP, while the liability component and the equity component are recognized separately as a compound financial instrument under IFRS.

G. Post-employment benefits

Under Japanese GAAP, actuarial gains and losses and past service cost were recognized in other comprehensive income, and subsequently expensed over a certain future period. Under IFRS, actuarial gains and losses are recognized in other comprehensive income (as "Remeasurements of defined benefit plans") as incurred and immediately reclassified to retained earnings. Past service cost is recognized in profit or loss as incurred.

H. Exchange differences on translation of foreign operations

By applying an exemption provided in IFRS 1, the cumulative exchange differences on translation of foreign operations have been deemed to be zero as of the date of transition to IFRS and all reclassified to retained earnings.

I. Financial instruments

Under Japanese GAAP, financial instruments such as shares whose fair value was difficult to determine were basically carried at cost, and impairment losses were recognized when the value in substance declined significantly. Under IFRS, such financial instruments are determined at fair value, and the changes in fair value are basically recognized in profit or loss; provided that the Group may elect to recognize the changes in fair value in other comprehensive income for those classified as equity instruments which are not held for sale.

If shares (preference shares, etc.) for which the valuation differences may be recognized in other comprehensive income under Japanese GAAP do not satisfy the definition of an equity instrument under IFRS, the valuation differences are recognized in profit or loss in accordance with the classification of financial assets required by IFRS 9 "Financial Instruments."

J. Reclassification of net change in fair value of financial assets measured through other comprehensive income to retained earnings

Under Japanese GAAP, items constituting profit that had been included in other comprehensive in the current or prior periods were reclassified to valuation difference on available-for-sale securities. Under IFRS, net change in fair value of financial assets measured through other comprehensive income will not be reclassified subsequently to profit or loss.

K. Tax effect accounting

The recognition of tax effects of changes in temporary differences and reexamination of the recoverability of deferred tax assets upon the application of IFRS have resulted in changes in deferred tax assets and deferred tax liabilities.

L. Written put options held by non-controlling interests

Under Japanese GAAP, written put options on shares of subsidiaries granted to owners of non-controlling interests were accounted for as derivatives. Under IFRS, a financial liability is recognized initially at the present value of the redemption amount, and is reclassified from capital surplus. Subsequently, the changes in fair value are recognized in profit or loss.

M. Retained earnings

Adjustments to retained earnings due to the transition to IFRS are as follows:

(Million yen)

	As of January 1, 2018 (Date of transition to IFRS)	As of December 31, 2018
A. Sales recognition	(53)	(178)
B. Property, plant and equipment	7,656	6,162
C. Goodwill	(4,001)	(2,393)
D. Leases	—	(69)
E. Obligation for paid absences	(767)	(795)
F. Bonds	(232)	(255)
G. Post-employment benefits	(111)	55
H. Exchange differences on translation of foreign operations	3,687	3,687
I. Financial instruments	244	238
J. Reclassification of net change in fair value of financial assets measured through other comprehensive income to retained earnings	1,335	1,324
K. Tax effect accounting	(1,677)	(1,753)
L. Written put options held by non-controlling interests	—	(92)
Other	522	863
Total adjustments to retained earnings	6,602	6,793

(Note) "Tax effect accounting" includes tax effects recognized in relation to other items.

(4) Reconciliation of cash flows

The major difference between the consolidated statements of cash flows disclosed under Japanese GAAP and the consolidated statements of cash flows disclosed under IFRS is that lease payments (excluding the interest component) under operating leases in cash flows from operating activities have been reclassified as repayments of lease liabilities in cash flows from financing activities as a result of applying IFRS 16.

42. Approval of consolidated financial statements

The consolidated financial statements for the fiscal year ended December 31, 2019 were approved on March 24, 2020 by Junya Suzuki, Chairman of the Board, President and CEO of the Company and Hayato Nishihara, Senior Executive Vice President, CFO, Director of the Board of the Company.