

DIC Report 2020

Financial Section Year ended December 31, 2019



• ne of the world's leading diversified chemicals companies, DIC Corporation is also the core of the DIC Group, a multinational organization with operations in more than 60 countries and territories worldwide. Established in 1908 as a manufacturer of printing inks, DIC has capitalized on its extensive technologies, know-how and experience in the years since to build a broad business portfolio of materials and finished products, enabling it to provide innovative solutions to customers in diverse industries and transforming it into a global powerhouse in its key fields of endeavor.

Now in its second century in business, DIC is redoubling its efforts to develop and market innovative, high-performance products that respond to the needs of customers in markets around the world, in line with its "Color & Comfort by Chemistry" vision. A responsible corporate citizen, DIC is also committed to helping realize environmental and social sustainability.

The DIC Way

Mission

We create enhanced value and utilize innovation to introduce socially responsible and sustainable products.

Vision

Color & Comfort by Chemistry

We improve the human condition by safely bringing color and comfort into people's lives.

Core Values

Enterprising

Lead with a passion for excellence that is evident in the solution-focused actions taken each day to drive value through innovation.

Integrity

Be honest, forthright and ethical in all dealings with customers, suppliers, and coworkers.

Dedication & Loyalty

Take responsibility for one's performance in the office, laboratory, and plant, by demonstrating commitment to customers, suppliers, and coworkers.

Diversity

Respect other viewpoints and work collaboratively while valuing collective goals over personal interests to achieve excellence; foster communication and cooperation with people from all backgrounds.

Social Responsibility

Go beyond compliance to promote products and activities that achieve socially responsible and sustainable development that protects the environment.



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(1) Consolidated Five-Year Summary

DIC Corporation and Consolidated Subsidiaries Years ended December 31, 2019 to 2015

Thousands of U.S. dollars, except for per Millions of yen, share information (Note 7)

		(Note /)				
	Dec. 2019	Dec. 2018	Dec. 2017	Dec. 2016	Dec. 2015	Dec. 2019
Net sales	¥768,568	¥805,498	¥789,427	¥751,438	¥819,999	\$7,051,083
Percent increase (decrease)	(4.6)%	2.0%	5.1%	(8.4)%	(1.2)%	(4.6)%
Operating income	41,332	48,385	56,483	54,182	51,068	379,193
Net income attributable to owners of the parent	23,500	32,028	38,603	34,767	37,394	215,596
Equity (Note 3)	312,740	298,896	315,129	278,535	262,467	2,869,174
Total assets (Note 8)	803,083	801,296	831,756	764,828	778,857	7,367,734
Equity per share (Notes 1, 4 and 6)	¥3,304.34	¥3,158.05	¥3,329.60	¥2,938.12	¥2,768.41	\$30.32
Earnings per share (basic) (Notes 2, 4 and 6)	248.29	338.40	407.56	366.72	389.40	2.28
Cash dividends per share applicable to the period (Note 5)	100.00	125.00	120.00	64.00	8.00	0.92
Equity ratio to total assets (Note 8)	38.9%	37.3%	37.9%	36.4%	33.7%	38.9%
ROE (return on equity)	7.7%	10.4%	13.0%	12.9%	14.6%	7.7%
Number of employees	20,513	20,620	20,628	20,481	20,264	20,513

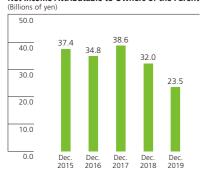
Notes: 1. The computation of equity per share has been based on the number of shares issued as of the balance sheet date.

- 2. The computation of earnings per share has been based on the weighted-average number of shares issued during each fiscal year.
- 3. Equity comprises "Total shareholders' equity" and "Total accumulated other comprehensive income."
- 4. The Company implemented a consolidation of shares of common stock by a factor of 10 to 1 with July 1, 2016, as the effective date. Earnings per share (basic) and equity per share are calculated respectively based on the assumption that the consolidation had been implemented at the beginning of the fiscal year ended December 31, 2015.
- 5. The Company implemented a consolidation of shares of common stock by a factor of 10 to 1 with July 1, 2016, as the effective date. Cash dividends per share applicable to the period for the fiscal year ended December 31, 2016, comprises interim dividends of ¥4.00 (before the consolidation) and year-end dividends of ¥60.00 (after the consolidation). If the consolidation had been taken into consideration, cash dividends per share applicable to the period for the fiscal year ended December 31, 2016, would be ¥100.00.
- 6. From the fiscal year ended December 31, 2017, the Company introduced the Board Benefit Trust (BBT). The shares held by the trust are recorded under net assets as treasury shares. The number of treasury shares excluded from the number of shares issued as of the balance sheet date used for the calculation of equity per share includes the number of shares held by the trust. The number of treasury shares excluded from the weighted-average number of shares issued during the fiscal year used for the calculation of earnings per share includes the number of shares held by the trust.
- 7. Yen amounts have been translated, for readers' convenience only, at the rate of ¥109 to US\$1, the approximate rate of exchange at December 31, 2019.
- 8. The Company has applied "Partial Amendments to Accounting Standard for Tax Effect Accounting" (Accounting Standards Board of Japan (ASBJ) Statement No. 28, issued on February 16, 2018), etc., since the beginning of the fiscal year ended December 31, 2019. The figures as of December 31, 2018, are based on retrospective application.





Net Income Attributable to Owners of the Parent



Operating Income



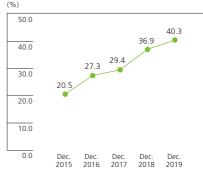
Cash Dividends per Share



* These figures have been adjusted to account for the impact of a consolidation of shares of common stock by a factor of 10 to 1 with July 1, 2016, as the effective date.



Dividend Payout Ratio





This document presents the consolidated results for fiscal year 2019, comprising the accounts for the year ended December 31, 2019, of DIC and its domestic and overseas subsidiaries.

Overview of Operating Results

In fiscal year 2019, consolidated net sales slipped 4.6%, to ¥768.6 billion. On a local currency basis, however, the decrease was only 1.3%. Owing to the impact of slowing global economic growth, shipments sank in a wide range of businesses, centering on materials used in electrical and electronics equipment and in automobiles.

Operating income was down 14.6%, to ¥41.3 billion, or 8.7% on a local currency basis. In addition to falling shipments, particularly of high-value-added products, these results reflected flagging sales prices for some products. A decline in results overseas after translation, a consequence of yen appreciation, also pushed operating income down. Thanks to the impact of raw materials price decreases and of cost reductions achieved through rationalization, the decline narrowed after bottoming out in the first quarter. Of particular note, operating income in the People's Republic of China (PRC) and Southeast Asia turned positive in the second quarter. Ordinary income was down 15.2%, to ¥41.3 billion. Net income attributable to owners of the parent fell 26.6%, to ¥23.5 billion. This reflected an extraordinary loss arising from efforts to improve business efficiency, as well as one-time disaster- and acquisition-related expenses. Earnings before interest, taxes, depreciation and amortization (EBITDA) declined 17.2%, to ¥67.4 billion. Factors behind this included the drop in net income attributable to owners of the parent.

		Billions of yen		Change calculated in
	FY2019	FY2018	Change (%)	local currency (%)
Net sales	¥768.6	¥805.5	(4.6)%	(1.3)%
Operating income	41.3	48.4	(14.6)	(8.7)
Ordinary income	41.3	48.7	(15.2)	_
Net income attributable to owners of the parent	23.5	32.0	(26.6)	_
EBITDA*	67.4	81.4	(17.2)	_

^{*} EBITDA = Net income attributable to owners of the parent + Total income taxes + (Interest expenses – Interest income) + Depreciation and amortization

		1611
	FY2019	FY2018
Average exchange rate (¥/US\$)	¥109.11	¥110.46
Average exchange rate (¥/EUR)	122.13	130.46

Segment Results

Packaging & Graphic

Segment sales slipped 4.2%, to ¥416.4 billion. Although sales edged up 0.6% on a local currency basis, the depreciation of the euro and emerging economy currencies led to a decrease after translation into yen. In the area of materials for food packaging, sales of packaging inks rose, particularly in emerging economies in Asia and South America. In contrast, sales of polystyrene languished, despite an increase in shipments, as raw materials price decreases prompted the reduction of sales prices. Sales of publication inks, which center on publishing inks and news inks, were down, owing to an ebb in overall demand. Sales of jet inks for digital printing rose.

Segment operating income slipped 3.6%, to ¥19.2 billion. On a local currency basis, operating income rose 8.0%, benefiting from the positive impact of an improved product mix and rationalization efforts, as well as from a decrease in raw materials prices, particularly in the PRC and Southeast Asia. As with segment sales, however, this translated into a decline on a yen basis.

	Billions of yen		Change calculated in
	FY2019	Change (%)	local currency (%)
Net sales	¥416.4	(4.2)%	0.6%
Operating income	19.2	(3.6)	8.0

Color & Display

Segment sales, at ¥116.4 billion, were down 6.2%. In the area of color materials, shipments of pigments for cosmetics and general-purpose pigments flagged, hampered by trade friction. In display materials, shipments of pigments for color filters were firm, although sales of thin-film transistor liquid crystals (TFT LCs) sank, hindered by sagging sales prices, a consequence of intensifying competition.

Segment operating income plunged 28.0%, to ¥10.8 billion. Contributing factors included sales price reductions for TFT LCs and waning shipments of general-purpose pigments. Operating income was also constrained by the tightening of environmental regulations in the PRC, as well as by increases in prices for pigments raw materials attributable to trade friction.

	Billions of yen		Change calculated in
	FY2019	Change (%)	local currency (%)
Net sales	¥116.4	(6.2)%	(3.8)%
Operating income	10.8	(28.0)	(25.4)

Functional Products

Segment sales decreased 4.8%, to ¥268.6 billion. While applications for polyphenylene sulfide (PPS) compounds continue to expand thanks to the trend toward lighter and increasingly electrified vehicles, shipments remained low, reflecting a downtrend in automobile production worldwide. Flagging economic conditions pushed down sales of epoxy resins and industrial tapes, the principal applications for which are smartphones and semiconductors. Sales of synthetic resins remained sluggish overall, despite bottoming out in the first quarter.

Segment operating income was down 7.6%, to ¥19.2 billion. Despite this decrease, which stemmed from dwindling shipments overall, the operating margin improved gradually, as shipments of epoxy resins and other high-value-added products picked up after bottoming out in the first quarter and raw materials prices decreased.

	Billions of yen		Change calculated in
	FY2019	Change (%)	local currency (%)
Net sales	¥268.6	(4.8)%	(3.6)%
Operating income	19.2	(7.6)	(6.6)

Analysis of Cash Flows

Cash and cash equivalents as of December 31, 2019, totaled ¥16.7 billion, a decrease of ¥1.9 billion from December 31, 2018.

Operating Activities

Net cash provided by operating activities amounted to ¥50.6 billion, compared with ¥51.0 billion provided by such activities in fiscal year 2018. Income before income taxes and non-controlling interests was ¥34.7 billion, while the adjustment for depreciation and amortization was ¥33.1 billion. Income taxes paid totaled ¥7.1 billion, while working capital increased ¥8.2 billion.

Investing Activities

Net cash used in investing activities came to ¥24.9 billion, down from ¥38.4 billion used in such activities in the previous fiscal year. A net total of ¥1.3 billion was applied to the purchase of shares and investments in capital of subsidiaries resulting in change in scope of consolidation, while proceeds from shares and investments in capital of subsidiaries resulting in change in scope of consolidation amounted to ¥900 million.

Financing Activities

Net cash used in financing activities amounted to ¥26.8 billion, up from ¥11.8 billion used in such activities in fiscal year 2018. A net total of ¥12.6 billion was applied to the repayment of interest-bearing debt, while cash dividends paid came to ¥11.8 billion.

DIC Corporation and Consolidated Subsidiaries December 31, 2019

Assets

	2019	Aillions of yer 2018
Current assets:		
Cash and deposits (Notes 7, 12 and 20)	¥ 16,786	¥ 19,782
Notes and accounts receivable—trade (Notes 12, 20 and 21)	211,232	209,763
Merchandise and finished goods (Note 12)	91,555	94,61
Work in process (Note 12)	9,566	9,403
Raw materials and supplies (Note 12)	58,610	61,937
Other (Note 20)	21,607	23,878
Allowance for doubtful accounts	(9,437)	(9,722
Total current assets (Note 5)	399,919	409,65
Non-current assets:		
roperty, plant and equipment (Notes 10, 11 and 12):		
Buildings and structures	88,540	88,89
Machinery, equipment and vehicles	70,867	70,95
Tools, furniture and fixtures	11,191	11,39
Land	51,961	48,98
Construction in progress	9,616	7,92
Total property, plant and equipment	232,176	228,15
ntangible assets:	7.00	
Goodwill	762	34
Software	2,585	2,88
Customer-related assets	2,674	3,35
Other	5,782	7,50
Total intangible assets	11,804	13,78
nvestments and other assets:		
Investment securities (Notes 8, 9 and 20)	59,313	67,52
Deferred tax assets (Notes 5 and 17)	33,192	33,31
Net defined benefit asset (Note 13)	44,339	25,08
Other (Notes 8 and 20)	23,020	23,94
Allowance for doubtful accounts	(680)	(16
Total investments and other assets (Note 5)	159,184	149,71
Total non-current assets (Note 5)	403,164	391,64
Total assets (Note 5)	¥803,083	¥801,29

See notes to the consolidated financial statements.

Liabilities and Net Assets

	2019	Aillions of yer 2018
Current liabilities:		
Notes and accounts payable—trade (Notes 20 and 21)	¥108,562	¥118,554
Short-term loans payable (Notes 12 and 20)	20,139	29,986
Current portion of long-term loans payable (Notes 12, 20 and 21)	23,456	49,792
Lease obligations (Notes 12 and 20)	1,244	667
Income taxes payable (Notes 17 and 20)	2,556	2,843
Provision for bonuses	5,724	6,28
Other (Note 20)	48,445	47,47
Total current liabilities (Note 5)	210,126	255,60
Non-current liabilities:		
Bonds payable (Notes 12 and 20)	80,000	60,00
Long-term loans payable (Notes 12, 20 and 21)	122,602	119,79
Lease obligations (Notes 12 and 20)	5,191	4,22
Deferred tax liabilities (Notes 5 and 17)	8,768	2,80
Net defined benefit liability (Note 13)	21,377	20,51
Asset retirement obligations	1,696	1,48
Other	9,826	9,53
Total non-current liabilities (Note 5)	249,459	218,36
Total liabilities (Note 5)	459,585	473,962
Net assets:		
Shareholders' equity (Notes 14 and 24):		
Capital stock (Note 15)	96,557	96,55
Capital surplus	94,456	94,44
Retained earnings	218,209	207,42
Treasury shares (Note 16)	(1,823)	(1,823
Total shareholders' equity	407,398	396,60
Accumulated other comprehensive income:		
Valuation difference on available-for-sale securities	1,676	1,40
Deferred gains or losses on hedges	683	1
Foreign currency translation adjustment	(72,671)	(67,617
Remeasurements of defined benefit plans (Note 13)	(24,346)	(31,508
Total accumulated other comprehensive income	(94,658)	(97,704
Non-controlling interests	30,757	28,43
Total net assets	343,497	327,33
Total liabilities and net assets (Note 5)	¥803,083	¥801,296

DIC Corporation and Consolidated Subsidiaries Year ended December 31, 2019

	2019	Aillions of yea
Net sales	¥768,568	¥805,498
Cost of sales	603,199	629,85
Gross profit	165,369	175,64
		. , .
Selling, general and administrative expenses (Note 18)	124,037	127,26
Operating income	41,332	48,38
Non-operating income:		
Interest income	2,420	3,78
Dividends income	414	42
Equity in earnings of affiliates	2,475	3,84
Other	1,692	1,63
Total non-operating income	7,001	9,68
Non-operating expenses:		
Interest expenses	3,724	5,11
Foreign exchange losses	811	82
Other	2,496	3,42
Total non-operating expenses	7,031	9,36
Ordinary income	41,302	48,70
Extraordinary income:		
Gain on sales of subsidiaries and affiliates securities	1,624	67
Insurance income	1,409	23
Gain on sales of non-current assets	1,401	43
Gain on sales of investment securities	_	3,27
Total extraordinary income	4,435	4,61
Extraordinary loss:		
Impairment loss (Note 11)	3,078	_
Loss on disposal of non-current assets	2,399	2,53
Acquisition-related expenses	1,914	_
Loss on disaster	1,520	40
Severance costs	840	1,53
Provision of allowance for doubtful accounts	551	_
Amortization of past service costs	443	_
Loss on sales of subsidiaries' and affiliates' securities	316	_
Total extraordinary loss	11,061	4,48
Income before income taxes and non-controlling interests	34,676	48,83
Income taxes (Note 17):		
Income taxes—current	7,869	11,01
Income taxes—deferred	1,461	4,01
Total income taxes	9,330	15,03
Net income	25,346	33,80
Net income attributable to non-controlling interests	1,846	1,77
Net income attributable to owners of the parent	¥ 23,500	¥ 32,02
Farming and and (Night 2)		Ye
Earnings per share (Note 2): Basic	¥ 248.29	¥ 338.4
Diluted		. 230.1
Weighted-average number of shares issued during the period,	94,646	94,64
excluding treasury shares (in thousands)		
Cash dividends per share applicable to the period (Note 2)	¥ 100.00	¥ 125.0

See notes to the consolidated financial statements.



Consolidated Statement of Comprehensive Income

DIC Corporation and Consolidated Subsidiaries Year ended December 31, 2019

	Millions of		
	2019	2018	
Net income	¥25,346	¥ 33,802	
Other comprehensive income:			
Valuation difference on available-for-sale securities	327	(6,502)	
Deferred gains or losses on hedges	669	17	
Foreign currency translation adjustment	(4,394)	(20,203)	
Remeasurements of defined benefit plans, net of tax (Note 13)	7,269	(9,413)	
Share of other comprehensive income of associates accounted for using equity method	(744)	(1,545)	
Total other comprehensive income (Note 23)	¥ 3,127	¥(37,646)	
Comprehensive income	¥28,473	¥ (3,844)	
Comprehensive income attributable to:			
Comprehensive income attributable to owners of the parent	¥26,546	¥ (4,863)	
Comprehensive income attributable to non-controlling interests	1,927	1,019	

See notes to the consolidated financial statements.



Consolidated Statement of Changes in Net Assets

DIC Corporation and Consolidated Subsidiaries Year ended December 31, 2019

						Millions of yen		
					Share			
	Issued number of common stock (thousands)	Capital stock	Capital surplus	Retained earnings	Treasury shares	Total shareholders' equity		
Balance at January 1, 2018	95,157	¥96,557	¥94,445	¥186,768	¥(1,828)	¥375,942		
Dividends from surplus, ¥120.00 per share (Note 14)				(11,375)		(11,375)		
Net income attributable to owners of the parent				32,028		32,028		
Purchase of treasury shares— 2,642 shares					(10)	(10)		
Disposal of treasury shares— 3,900 shares					15	15		
Net changes of items other than shareholders' equity (Notes 9 and 14)								
Balance at December 31, 2018	95,157	96,557	94,445	207,421	(1,823)	396,600		
Cumulative effects of changes in accounting policies (Note 3)		_	_	(774)	_	(774)		
Restated balance		96,557	94,445	206,647	(1,823)	395,826		
Dividends from surplus, ¥125.00 per share (Note 14)				(11,849)		(11,849)		
Net income attributable to owners of the parent				23,500		23,500		
Purchase of treasury shares— 2,187 shares					(7)	(7)		
Disposal of treasury shares— 1,600 shares					6	6		
Change in scope of consolidation				(90)		(90)		
Change in ownership interest of the parent due to transactions with non-controlling interests			11			11		
Net changes of items other than shareholders' equity (Notes 9 and 14)								
Balance at December 31, 2019	95,157	¥96,557	¥94,456	¥218,209	¥(1,823)	¥407,398		

							Millions of yen
			Accun	nulated other comp	rehensive income		
	Valuation difference on available-for-sale securities	Deferred gains or losses on hedges	Foreign currency translation adjustment	Remeasurements of defined benefit plans	Total accumulated other comprehensive income	Non-controlling interests	Total net assets
Balance at January 1, 2018	¥ 7,874	¥ (3)	¥(46,462)	¥(22,222)	¥(60,813)	¥28,822	¥343,951
Dividends from surplus, ¥120.00 per share (Note 14)							(11,375)
Net income attributable to owners of the parent							32,028
Purchase of treasury shares— 2,642 shares							(10)
Disposal of treasury shares— 3,900 shares							15
Net changes of items other than shareholders' equity (Notes 9 and 14)	(6,467)	17	(21,155)	(9,286)	(36,891)	(384)	(37,275)
Balance at December 31, 2018	1,407	14	(67,617)	(31,508)	(97,704)	28,438	327,334
Cumulative effects of changes in accounting policies (Note 3)	_	_	_	_	_	_	(774)
Restated balance	1,407	14	(67,617)	(31,508)	(97,704)	28,438	326,560
Dividends from surplus, ¥125.00 per share (Note 14)							(11,849)
Net income attributable to owners of the parent							23,500
Purchase of treasury shares— 2,187 shares							(7)
Disposal of treasury shares— 1,600 shares							6
Change in scope of consolidation							(90)
Change in ownership interest of the parent due to transactions with non-controlling interests							11
Net changes of items other than shareholders' equity (Notes 9 and 14)	269	670	(5,055)	7,161	3,046	2,320	5,365
Balance at December 31, 2019	¥ 1,676	¥683	¥(72,671)	¥(24,346)	¥(94,658)	¥30,757	¥343,497

DIC Corporation and Consolidated Subsidiaries Year ended December 31, 2019

	2019	Aillions of yer 2018
Net cash provided by (used in) operating activities:		
Income before income taxes and non-controlling interests	¥ 34,676	¥ 48,836
Adjustments for:		
Depreciation and amortization	33,127	32,825
Amortization of goodwill	99	156
Increase (decrease) in allowance for doubtful accounts	559	(263)
Increase (decrease) in provision for bonuses	(561)	(782
Interest and dividends income	(2,834)	(4,206
Equity in (earnings) losses of affiliates	(2,475)	(3,845
Interest expenses	3,724	5,114
Loss (gain) on sales and retirement of non-current assets	997	2,104
Impairment loss	3,078	_
Loss (gain) on sales of subsidiaries and affiliates securities	(1,308)	(679
Loss (gain) on sales of investment securities	_	(3,270
Decrease (increase) in notes and accounts receivable—trade	(3,054)	6,897
Decrease (increase) in inventories	4,614	(14,516
Increase (decrease) in notes and accounts payable—trade	(9,802)	3,966
Other, net	(3,543)	(9,524
Subtotal	57,298	62,813
Interest and dividends income received	4,335	6,307
Interest expenses paid	(3,865)	(5,050
Income taxes paid	(7,132)	(13,080
Net cash provided by (used in) operating activities	50,637	50,990
Net cash provided by (used in) investing activities:	30,037	30,330
Payments into time deposits	(3,685)	(3,832
Proceeds from withdrawal of time deposits	4,740	2,893
Purchase of property, plant and equipment	(34,042)	(31,343
Proceeds from sales of property, plant and equipment	1,613	1,336
Purchase of intangible assets	(919)	(741
Purchase of intangible assets Purchase of shares and investments in capital of subsidiaries resulting in change in scope of consolidation	(1,558)	(11,524
Proceeds from purchase of shares and investments in capital of subsidiaries resulting in change in scope of consolidation	235	
Proceeds from sales of shares and investments in capital of subsidiaries resulting in change in scope of consolidation	900	679
Purchase of subsidiaries and affiliates securities	_	(157
Proceeds from sales of subsidiaries and affiliates securities	9,508	671
Purchase of investment securities	(350)	(509
Proceeds from sales and redemption of investment securities	134	4,150
Payments for transfer of business	(96)	(690
Other, net	(1,363)	679
Net cash provided by (used in) investing activities	(24,884)	(38,388
Net cash provided by (used in) financing activities:		
Net increase (decrease) in short-term loans payable	(9,383)	(29,689
Proceeds from long-term loans payable	40,250	60,627
Repayment of long-term loans payable	(63,513)	(39,204
Proceeds from issuance of bonds	20,000	10,000
Cash dividends paid	(11,849)	(11,375
Cash dividends paid to non-controlling interests	(767)	(1,348
Net decrease (increase) in treasury shares	(1)	, ,
Purchase of shares and investments in capital of subsidiaries that does not result		,
in change in scope of consolidation	(186)	(62
Other, net	(1,351)	(735
Net cash provided by (used in) financing activities	(26,799)	(11,781
Effect of exchange rate change on cash and cash equivalents	(895)	159
Net increase (decrease) in cash and cash equivalents	(1,941)	980
Cash and cash equivalents at beginning of the period (Note 7)	18,631	17,65
Cash and cash equivalents at end of the period (Note 7)	¥ 16,690	¥ 18,631

See notes to the consolidated financial statements.



Notes to the Consolidated Financial Statements

DIC Corporation and Consolidated Subsidiaries Year ended December 31, 2019

Note 1:

Basis of Presenting Financial Statements The accompanying consolidated financial statements have been prepared in accordance with the provisions set forth in the Japanese Financial Instruments and Exchange Act and its related accounting regulations, and in accordance with accounting principles generally accepted in Japan ("Japanese GAAP"), which are different in certain respects as to application and disclosure requirements of the International Financial Reporting Standards ("IFRS").

In preparing these consolidated financial statements, certain reclassifications and rearrangements have been made to the consolidated financial statements issued domestically in order to present them in a form which is more familiar to readers outside Japan. The consolidated financial statements are stated in Japanese yen, the currency of the country in which DIC Corporation (the "Company") is incorporated.

Note 2:

Summary of Significant Accounting Policies

Consolidated financial statements

Under the control or influence concept, those companies in which the Company, directly or indirectly, is able to exercise control over operations are fully consolidated and those companies over which the Company has the ability to exercise significant influence are accounted for by the equity method.

The consolidated financial statements include the accounts of the Company and its significant subsidiaries: Sun Chemical Group Coöperatief U.A., DIC (China) Co., Ltd., DIC Asia Pacific Pte Ltd, SEIKO PMC CORPORATION, DIC INVESTMENTS JAPAN, LLC., DIC Graphics Corporation and 145 other companies in the fiscal year ended December 31, 2019 (141 other companies in the fiscal year ended December 31, 2018). All significant intercompany balances and transactions have been eliminated in consolidation. All material unrealized profit included in assets resulting from transactions within the Company and its consolidated subsidiaries (the "Group") is eliminated.

Investments in 22 affiliates in the fiscal year ended December 31, 2019 (26 in the fiscal year ended December 31, 2018), are accounted for by the equity method.

Accounting period of consolidated subsidiaries

The closing date of the consolidated subsidiaries is the same as the consolidated closing date.

Cash and cash equivalents

Cash and cash equivalents consist primarily of cash on hand, certificates of deposit and short-term investments with original maturities of three months or less that are readily convertible to known amounts of cash and have insignificant risk of changes in value.

Investment securities

Investment securities are classified and accounted for, depending on management's intent, into available-for-sale securities. Available-for-sale securities are carried at fair value as of the balance sheet date, with unrealized gain and loss, net of applicable taxes, reported in a separate component of net assets. Available-for-sale securities whose fair values are not readily available are carried at cost. The cost of securities sold is calculated by the moving-average method.

Allowance for doubtful accounts

Allowance for doubtful accounts of the Company and its domestic consolidated subsidiaries is provided mainly based on historical experience for normal receivables and on an estimate of collectability of receivables from companies in financial difficulty.

Allowance for doubtful accounts of foreign consolidated subsidiaries is provided mainly based on an estimate of collectability of receivables.

Inventories

Inventories are principally stated at cost, cost being determined by the first-in, first-out (FIFO) method, which evaluates the amount of the inventories shown in the balance sheet by writing them down based on their decrease in profitability.

Property, plant and equipment (excluding leased assets)

Property, plant and equipment are carried at cost. Significant renewals and additions are capitalized; maintenance and repairs, and minor renewals and improvements, are charged to income as incurred.

Depreciation of buildings (other than facilities attached to buildings) of the Company and its domestic consolidated subsidiaries is calculated principally by the straight-line method. Besides, depreciation of facilities

attached to buildings and structures acquired on or after April 1, 2016, is also calculated by the straight-line method. Other property, plant and equipment are calculated by the declining-balance method.

Depreciation of property, plant and equipment of foreign consolidated subsidiaries is calculated principally by the straight-line method. The range of useful lives is principally from 8 to 50 years for buildings and structures and from 3 to 11 years for machinery, equipment and vehicles.

Intangible assets (excluding leased assets)

Intangible assets are carried at cost less accumulated amortization, and are amortized by the straight-line method. Goodwill is amortized by the straight-line method over a reasonable period not exceeding 20 years.

Leased assets

For the Company and its domestic consolidated subsidiaries, leased assets related to finance leases that do not transfer ownership of the leased property to the lessee are depreciated on a straight-line basis, with the lease periods used as their useful lives and no residual value.

Foreign consolidated subsidiaries account for lease transactions in accordance with either the accounting principles generally accepted in the United States of America ("U.S. GAAP") or IFRS.

Retirement and pension plans

Net defined benefit assets/liabilities are recognized for employees' and executive officers' retirement benefits. Pension assets are deducted from retirement benefit obligations and the net amount is recognized based on the estimated amount of payment as of the balance sheet date. In calculating retirement benefit obligations, the Company applies a method of attributing expected retirement benefits to each period on a benefit formula basis. The Company and its domestic consolidated subsidiaries amortize actuarial gains and losses in the succeeding years primarily by the straight-line method over stated years that do not exceed the average remaining service period of the eligible employees (14 to 16 years). Past service costs are amortized in the accounting periods when they accrue.

Foreign consolidated subsidiaries amortize actuarial gains and losses in the succeeding years primarily by the straight-line method over stated years that do not exceed the average remaining service period of the eligible employees (8 to 28 years). Past service costs are amortized over 1 to 28 years.

Unrecognized actuarial gains and losses and unrecognized past service costs are recorded in "Remeasurements of defined benefit plans" in net assets after adjusting income tax effect.

Asset retirement obligations

The asset retirement obligation is recognized as the sum of the discounted cash flows required for the future asset retirement and is recorded in the period in which the obligation is incurred if a reasonable estimate can be made. If a reasonable estimate of the asset retirement obligation cannot be made in the period in which the asset retirement obligation is incurred, the liability should be recognized when a reasonable estimate of the asset retirement obligation can be made. Upon initial recognition of a liability for an asset retirement obligation, an asset retirement cost is capitalized by increasing the carrying amount of the related fixed asset by the amount of the liability. The asset retirement cost is subsequently allocated to expense through depreciation over the remaining useful life of the asset. Over time, the liability is accreted to its present value each period. Any subsequent revisions to the timing or the amount of the original estimate of undiscounted cash flows are reflected as an increase or a decrease in the carrying amount of the liability and the capitalized amount of the related asset retirement cost.

Income taxes

The provision for income taxes is computed based on the pretax income (loss) included in the consolidated statement of income.

Deferred income taxes are recorded to reflect the impact of temporary differences between assets and liabilities recognized for financial reporting purposes and such amounts recognized for tax purposes. These deferred taxes are measured by applying currently enacted tax laws to the temporary differences.

Research and development costs

Research and development costs are charged to income as incurred.

Basis of translation of financial statements of foreign consolidated subsidiaries

The financial statements of foreign consolidated subsidiaries included in the consolidated financial statements are translated into Japanese yen based on the following procedures:

- (1) Assets and liabilities of foreign consolidated subsidiaries are translated into Japanese yen at the exchange rates as of the balance sheet date.
- (2) Income and expenses are translated into Japanese yen at the average rate during the year.

The differences of translation are included in foreign currency translation adjustment and non-controlling interests, which are presented as separate components of net assets.

Translation of foreign currency account

Receivables and payables denominated in foreign currencies are translated into Japanese yen at the exchange rates as of the balance sheet date and any difference arising from the translation is recognized in the consolidated statement of income if hedge accounting is not applied.

Derivatives and hedging activities

To hedge risks associated with the fluctuations of exchange rates, interest rates and commodity prices, the Group uses foreign currency forward contracts, currency swaps, interest rate swaps and commodity swaps. To hedge a part of the risks associated with the fluctuations of exchange rates for investments in foreign entities, the Company uses loans denominated in foreign currencies. The Group does not enter into derivatives for trading or speculative purposes.

Derivative financial instruments and foreign currency transactions are classified and accounted for as follows:

1) all derivatives are recognized as either assets or liabilities and measured at fair value, with gains or losses recognized in the consolidated statement of income and 2) for derivatives used for hedging purposes, if derivatives qualify for hedge accounting because of high correlation and effectiveness between the hedging instruments and the hedged items, gains or losses on derivatives are deferred until maturity of the hedged transactions.

Receivables and payables denominated in foreign currencies are translated at the contracted rates if the forward contracts qualify for hedge accounting. Gains and losses related to qualifying hedges of firm commitments or anticipated transactions are deferred and recognized in income when the hedged transaction occurs. If interest rate swaps qualify for hedge accounting and meet certain specific matching criteria, they will not be measured at market value, rather the differential paid or received under the swaps will be recognized in interest expenses or interest income.

Per share information

Earnings per share (basic) is computed by dividing net income attributable to owners of the parent available to common shareholders by the weighted-average number of shares issued for the period.

Earnings per share (diluted) reflects the potential dilution that could occur if securities were exercised or converted into common stock. Earnings per share (diluted) assumes full conversion of the outstanding convertible notes and bonds at the beginning of the year (or at the time of issuance) with an applicable adjustment for related interest expense, net of tax, and full exercise of outstanding warrants.

Cash dividends per share presented in the accompanying consolidated statement of income are dividends applicable to the respective years, including dividends to be paid after the end of the year.

From the fiscal year ended December 31, 2017, the Company introduced the Board Benefit Trust (BBT). The shares held by the trust are recorded under net assets as treasury shares. The number of treasury shares excluded from the number of shares issued as of the balance sheet date used for the calculation of equity per share includes the number of shares held by the trust. The number of treasury shares excluded from the weighted-average number of shares issued during the fiscal year used for the calculation of earnings per share includes the number of shares held by the trust.

The number of treasury shares held by the trust excluded from the calculation of equity per share as of December 31, 2019 and 2018, is 146,200 shares and 147,800 shares, respectively. The number of treasury shares held by the trust excluded from the calculation of earnings per share as of December 31, 2019 and 2018, is 146,323 shares and 148,377 shares, respectively.



Note 3:

Accounting Changes

IFRS 16 Leases

The consolidated subsidiaries that prepare accounts under IFRS have applied IFRS 16 Leases (issued in January 2016) (IFRS 16) for the fiscal year ended December 31, 2019. In applying IFRS 16, they have adopted a method of recognizing the cumulative effects of applying this standard on the date of initial application, which is accepted as a transitional measure. With regard to leases that the Group as lessee previously classified as operating leases by applying IAS 17, these leases were recognized as right-of-use assets and lease liabilities on the date of initial application.

The impact of this change on consolidated profits and losses for the fiscal year ended December 31, 2019 was immaterial. Furthermore, a description of the impact of this change on per share information was omitted on the grounds of immateriality.

Accounting Standards Update (ASU) 2016-16 Corporate Income Tax "Intra-entity transfers of assets other than inventory"

The consolidated subsidiaries that adopt U.S. GAAP have applied ASU 2016-16 Corporate Income Tax "Intraentity transfers of assets other than inventory" (ASU 2016-16) from the beginning of the fiscal year ended December 31, 2019. ASU 2016-16 requires recognition of the income tax consequences of an intra-entity transfer of assets other than inventory when the transfer occurs. Previously, under U.S. GAAP, the income tax consequences for asset transfers other than inventory could not be recognized until the asset was sold to a third party. ASU 2016-16 is required to be applied on a modified retrospective basis through a cumulative-effect adjustment to retained earnings as of the beginning of the period of adoption.

Accordingly, it resulted in decreasing retained earnings brought forward as of January 1, 2019, by ¥774 million. The impact of this change on consolidated profits and losses for the fiscal year ended December 31, 2019 was immaterial. Furthermore, a description of the impact of this change on per share information was omitted on the grounds of immateriality.

Note 4:

New Accounting Pronouncements

- Practical Solution on Unification of Accounting Policies Applied to Foreign Subsidiaries, etc. for Consolidated Financial Statements (Practical Issues Task Force (PITF) No. 18, revised on June 28, 2019)
- Practical Solution on Unification of Accounting Policies Applied to Associates Accounted for Using the Equity Method (PITF No. 24, revised on September 14, 2018)

(1) Overview

The ASBJ has revised PITF No. 18 "Practical Solution on Unification of Accounting Policies Applied to Foreign Subsidiaries, etc. for Consolidated Financial Statements" and PITF No. 24 "Practical Solution on Unification of Accounting Policies Applied to Associates Accounted for Using the Equity Method."

The major amendments are as follows:

For foreign subsidiaries etc., that elect to present subsequent changes in fair value of investment in equity instruments in other comprehensive income, when investments in the equity instruments are sold, an adjustment shall be made to recognize the difference between the acquisition cost and sales price as gain or loss for the corresponding fiscal year as a consolidation process, in accordance with the Tentative Practical Solution of "Unification of Accounting Policies Applied to Foreign Subsidiaries, etc. for the Consolidation Process."

For foreign subsidiaries etc., that need to recognize any asset impairment, an adjustment shall be made to recognize the valuation difference as loss for the corresponding fiscal year as a consolidation process.

(2) Date of adoption

The Company and its domestic consolidated subsidiaries will adopt these revised PITFs from the beginning of the fiscal year ending December 31, 2020.

(3) Impact of the adoption of the revised PITFs

The Company is in the process of measuring the effects of applying these revised PITFs in future applicable periods.

Accounting Standard for Revenue Recognition

- "Accounting Standard for Revenue Recognition" (ASBJ Statement No. 29, issued on March 30, 2018)
- "Implementation Guidance on Accounting Standard for Revenue Recognition" (ASBJ Guidance No. 30, issued on March 30, 2018)

(1) Overview

The International Accounting Standards Board (IASB) and the Financial Accounting Standards Board (FASB) jointly developed a comprehensive accounting standard for revenue recognition and issued "Revenue from Contracts with Customers" in May 2014 (IFRS 15 by IASB, and ASU 2014-09 by FASB).

IFRS 15 was applied for annual reporting periods beginning on or after January 1, 2018, and ASU 2014-09 was also applied from annual reporting periods beginning after December 15, 2017. Based on such a situation, the ASBJ developed the comprehensive accounting standard for revenue recognition and the implementation guidance and issued them together.

The basic objective of the ASBJ in developing the accounting standard for revenue recognition was to enhance comparability between financial statements, which is one of the points of convenience of interfacing with IFRS 15. Accordingly, the accounting standard fundamentally incorporates the basic policies of IFRS 15. Also, where there are items that should be considered to reflect the business practices in Japan, alternative policies will be added to the extent that comparability is not lost.

(2) Date of adoption

The Company and its domestic consolidated subsidiaries will adopt the issued accounting standard and implementation guidance from the beginning of the fiscal year ending December 31, 2022.

(3) Impact of the adoption of the accounting standard and implementation guidance

The Company is in the process of measuring the effects of applying the accounting standard and implementation guidance in future applicable periods.

Accounting Standard for Fair Value Measurement

- "Accounting Standard for Fair Value Measurement" (ASBJ Statement No. 30, issued on July 4, 2019)
- "Accounting Standard for Measurement of Inventories" (ASBJ Statement No. 9, issued on July 4, 2019)
- "Accounting Standard for Financial Instruments" (ASBJ Statement No. 10, issued on July 4, 2019)
- "Implementation Guidance on Accounting Standard for Fair Value Measurement" (ASBJ Guidance No. 31, issued on July 4, 2019)

(1) Overview

The IASB and the FASB have provided detailed guidance of almost the same contents for fair value measurement (IFRS 13 Fair Value Measurement by IFRS, and ASU 2018-13 Fair Value Measurement (Topic 820) by U.S. GAAP). Based on such a situation, the ASBJ issued "Accounting Standard for Fair Value Measurement," etc., as a result of initiatives mainly concerning promoting the consistency between Japanese and international accounting standards regarding guidance for fair value measurement and required disclosures.

The basic objective of the ASBJ in developing the accounting standard for fair value measurement was to enhance comparability between financial statements of domestic and foreign entities, through a unified measuring method. Accordingly, the accounting standard fundamentally incorporates the basic policies of IFRS 13. Also, where there are items that should be considered to reflect the business practices in Japan, exceptional treatments have been established for certain items to the extent that comparability is not lost significantly.

(2) Date of adoption

The Company and its domestic consolidated subsidiaries will adopt the issued accounting standard and implementation guidance from the beginning of the fiscal year ending December 31, 2022.

(3) Impact of the adoption of the accounting standard and implementation guidance

The Company is in the process of measuring the effects of applying the accounting standard and implementation guidance in future applicable periods.

ASU 2016-02 Leases

ASU 2019-10 Financial Instruments-Credit Losses (Topic 326), Derivatives and Hedging (Topic 815) and Leases (Topic 842): Effective Dates

(1) Overview

These accounting standards require lessees to recognize a right-of-use asset and a lease liability in the statement of financial position. There are no significant changes for lessors in these accounting standards.

The FASB has issued ASU 2019-10, which amends the effective dates for three major accounting standards. The ASU defers the effective dates for the credit losses, derivatives and hedging, and leases standards for certain companies.

(2) Date of adoption

Foreign consolidated subsidiaries will adopt ASU 2016-02 from the beginning of the fiscal year ending December 31, 2021.

(3) Impact of the adoption of the accounting standards

The Company is in the process of measuring the effects of applying the accounting standards in future applicable periods.

Note 5:

Changes in Presentation (Consolidated Balance Sheet)

Changes due to application of "Partial Amendments to Accounting Standard for Tax Effect Accounting"

The Company has been applying "Partial Amendments to Accounting Standard for Tax Effect Accounting" (ASBJ Statement No. 28, issued on February 16, 2018) from the beginning of the fiscal year ended December 31, 2019, and changed the presentation of deferred tax assets and liabilities (that is, classified deferred tax assets and deferred tax liabilities as "Investments and other assets" and "Non-current liabilities," respectively).

As a result, the Company has changed the presentation of the consolidated balance sheet for the fiscal year ended December 31, 2018. More specifically, "Deferred tax assets" classified as "Current assets" decreased ¥8,891 million, and "Deferred tax assets" classified as "Investments and other assets" increased ¥4,701 million. Also, "Deferred tax liabilities" classified as "Current liabilities" decreased ¥325 million, and "Deferred tax liabilities" decreased ¥3,865 million.

In addition, deferred tax assets and liabilities of the same tax-paying entities were offset for presentation purposes. As a result, total assets decreased ¥4,190 million in comparison with the amount before the change.

Furthermore, in Note 17 "Income Taxes," we added the contents described in the annotation (Note 8) (excluding total valuation allowance) and the annotation (Note 9), both for the "Accounting Standard for Tax Effect Accounting," stipulated in Paragraph 3 through Paragraph 5 of "Partial Amendments to Accounting Standard for Tax Effect Accounting." However, information concerning the previous fiscal year is not provided pursuant to the transitional treatment stipulated in Paragraph 7 of "Partial Amendments to Accounting Standard for Tax Effect Accounting."

Note 6:

Additional Information

Board Benefit Trust (BBT)

With regard to the compensation for executive officers, as well as directors who concurrently serve as executive officers (the "Target Officers"), the Company introduced a performance-based stock compensation plan called BBT (the "Plan") from the fiscal year ended December 31, 2017. The purpose of the Plan is to further clarify the linkage between the compensation of the Target Officers, and corporate performance and the value of the Company's shares. The intended result is strengthening the Target Officers' awareness of their contributions to the medium- to long-term improvement of corporate performance and value.

Accounting treatment related to the trust agreement is in accordance with "Practical Solution on Transactions of Delivering the Company's Own Stock to Employees etc. through Trusts" (PITF No. 30, issued on March 26, 2015).

(1) Outline of the transactions

The trust established under the Plan acquires the Company's shares by cash contributed by the Company. The trust provides shares of the Company and the cash equivalent to the market price of the shares of the Company (the "Company's Shares and Cash Benefits") to the Target Officers, in accordance with the Rules of Officer Share Benefit established by the Company. The Target Officers shall in principle receive the Company's Shares and Cash Benefits upon their retirement.

(2) The Company's shares remaining in the trust

The shares remaining in the trust are recorded under net assets as treasury shares at the book value in the trust (excluding incidental costs). The book value and the number of such treasury shares are ¥577 million and 146 thousand as of December 31, 2019, and ¥584 million and 148 thousand as of December 31, 2018, respectively.

Acquisition of the shares and assets of a pigments business from BASF SE and transformation of the business into a subsidiary

On August 29, 2019, the Company resolved to acquire the shares and assets of the Colors & Effects business of BASF SE, Europe's largest chemicals manufacturer, and entered into the master sale and purchase agreement. This transaction is subject to regulatory approval by pertinent U.S., European and other authorities as well as other customary conditions.

(1) Objectives of the acquisition of shares and assets

To hasten the qualitative transformation of its Color & Display business, the Company is working to expand its functional pigments business with the aim of driving growth as a leading global manufacturer of high-growth, high-value specialty pigments, including those for displays, cosmetics and automobiles. The annual global pigments market is estimated at approximately ¥2.3 trillion. The Company is a leader in organic pigments and a valued manufacturer of aluminum effect pigments. The target business, which is based in Europe and has sites around the world, has established itself as a prominent global manufacturer of effect pigments (for pearl pigments) and for specialty inorganic pigments. Accordingly, the product portfolios of the Company and the target business are highly complementary, with little product overlap. Through this acquisition, the Company will add a functional pigments product portfolio which is highly regarded by customers. The Company has committed itself to achieving sustainable growth for its color materials business by expanding its functional pigments business, recognizing this as crucial to bolstering its corporate value.

(2) Name of the seller of the target business BASF SE

(3) Profile of the target business

This acquisition involves obtaining the pigments business-related assets—including technologies, patents and other intellectual property, as well as goodwill not included in the share purchase—and the shares of 18 individual companies.

(4) Schedule of the acquisition of the target business By the end of 2020

(Notes)

- 1. This transaction is subject to regulatory approval by pertinent U.S., European and other authorities—including under the antitrust laws of the relevant countries—as well as other customary conditions.
- 2. Owing to regulatory review timing and other closing conditions, the effective date of the transfer of shares and assets may change.

(5) Cost of acquisition (Reference) €985 million (¥116.2 billion) (Notes)

- 1. The figure above is derived from adjusting cash and debt as of December 31, 2018, from the enterprise value (€1,150 million) of the target business. The actual cost of acquisition may vary depending on actual net cash/debt and differences in working capital, among others, at closing.
- 2. Advisory and other fees will depend on fees related to procedures to determine compliance with the antitrust laws of the United States and Europe, as well as of other relevant countries. Accordingly, such expenses are not included.
- 3. The exchange rate used is ¥118.00/€1.00. This figure has been rounded.

(6) Plans for raising funds

With regard to the method of procuring funds for this acquisition, the Company planned to choose an approach that would avoid a decline in capital efficiency due to stock dilution and enable it to maintain financial soundness. Having since explored hybrid financing, the Company made the decision to use a subordinated term loan. In addition, the Company currently has no plans to raise funds through the issue of new shares (equity financing). Please see Note 24 "Subsequent Events" for more information regarding financing through a subordinated term loan.

Note 7:

Cash and Cash Equivalents

Cash and cash equivalents as of December 31, 2019 and 2018, include the following:

	IV	dillions of year
	2019	2018
Cash and deposits	¥16,786	¥19,782
Less: time deposits and short-term investments which mature over three months after the date of acquisition	(95)	(1,151)
Cash and cash equivalents	¥16,690	¥18,631

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Note 8:

Investments in Unconsolidated Subsidiaries and Affiliates

Investments in unconsolidated subsidiaries and affiliates as of December 31, 2019 and 2018, include the following:

	IV	ivillions of yen	
	2019	2018	
Investments in stock of unconsolidated subsidiaries and affiliates	¥44,505	¥53,498	
Investments in equity of unconsolidated subsidiaries and affiliates	653	1,053	
Total	¥45,158	¥54,551	

Note 9:

Investment Securities

The carrying amounts and aggregate fair values of available-for-sale securities as of December 31, 2019 and 2018, are as follows:

	IVIIIIOTIS OF YELL			
				2019
	Cost	Unrealized gains	Unrealized losses	Fair value
Available-for-sale securities:				
Stocks	¥8,330	¥3,147	¥(501)	¥10,976
Total	¥8,330	¥3,147	¥(501)	¥10,976

			N	Aillions of yen
				2018
	Cost	Unrealized gains	Unrealized losses	Fair value
Available-for-sale securities:				
Stocks	¥8,338	¥2,865	¥(718)	¥10,485
Total	¥8,338	¥2,865	¥(718)	¥10,485

Note 10:

Property, Plant and Equipment

Accumulated depreciation on property, plant and equipment as of December 31, 2019 and 2018, is ¥563,939 million and ¥555,347 million, respectively.

Note 11:

Impairment of Long-Lived Assets

Impairment losses on long-lived assets for the fiscal year ended December 31, 2019, for each asset group are as follows:

			Millions of yen
			2019
Used status	Category of assets	Location	Allocated impairment loss
Factory assets in use	Buildings and structures and Land	Hirakata, Japan	¥1,463
Factory assets in use	Buildings and structures, Machinery, equipment and vehicles, Land, and Other	Kawaguchi, Japan	925
Factory assets in use	Buildings and structures, Machinery, equipment and vehicles, Land, and Other	China	690
Total			¥3,078

In reviewing the impairment of long-lived assets, the Group categorizes its operating assets mainly by each consolidated company or product group.

The carrying amount of factory assets in use was reduced to its recoverable amount because the recoverable amount is less than the carrying amount.

For domestic consolidated subsidiaries, the recoverable amount was measured as value in use. Value in use of relevant assets was calculated by discounting future cash flows at a rate of 6.0%. For foreign consolidated subsidiaries, the recoverable amount was measured as value in use and was evaluated as zero.

Note 12:

Short-Term Loans Payable and Long-Term Loans Payable Information with respect to short-term loans payable as of December 31, 2019 and 2018, is as follows:

The average interest rate for the fiscal years ended December 31, 2019 and 2018, is 2.26% and 1.92%, respectively, for short-term loans payable, and -0.01% and -0.01%, respectively, for commercial papers.

Bonds payable, long-term loans payable and lease obligations as of December 31, 2019 and 2018, comprise the following:

	Millions of yen	
	2019	2018
0.53% Japanese yen notes due 2022	¥ 10,000	¥ 10,000
1.00% Japanese yen notes due 2025	10,000	10,000
0.95% Japanese yen notes due 2036	5,000	5,000
0.36% Japanese yen notes due 2026	5,000	5,000
0.42% Japanese yen notes due 2027	10,000	10,000
0.15% Japanese yen notes due 2022	10,000	10,000
0.15% Japanese yen notes due 2023	10,000	10,000
0.19% Japanese yen notes due 2024	10,000	_
0.28% Japanese yen notes due 2029	10,000	_
Loans due 2020–2031, with an average interest rate of 1.30%	146,058	169,583
Lease obligations	6,435	4,896
Subtotal	232,493	234,479
Less: current portion of long-term loans payable	(23,456)	(49,792)
Less: current portion of bonds	_	_
Less: lease obligations—current	(1,244)	(667)
Total	¥207,793	¥184,020

The annual maturities of bonds payable, long-term loans payable and lease obligations for the fiscal years subsequent to December 31, 2019, are as follows:

	Millions of yen
2020	¥ 24,700
2021	27,881
2022	61,791
2023	18,280
2024	24,648
Thereafter	75,193
Total	¥232,493

The amounts of assets pledged as collateral and secured borrowings and loans as of December 31, 2019, comprise the following:

	Millions of yen
Assets pledged as collateral:	
Cash and deposits	¥ 14
Notes and accounts receivable—trade	3,141
Inventories	1,505
Property, plant and equipment	2,702
Total	¥7,362
Secured borrowings and loans:	
Short-term loans payable	¥ 79
Current portion of long-term loans payable	74
Long-term loans payable	686
Total	¥838

Note 13:

Retirement and Pension Plans

(1) Overview of adopted retirement and pension plans

The Company and a number of domestic consolidated subsidiaries have defined benefit pension plans such as a cash balance–style pension plan and retirement plans, and defined contribution pension plans. Some foreign consolidated subsidiaries maintain defined benefit pension plans and defined contribution pension plans. The Company contributes certain available-for-sale securities to the employee retirement benefit trust.

(2) Defined benefit pension plans (including multi-employer plan)

Changes in defined benefit obligations

		Millions of yen
	Domestic plans	Foreign plans
As of January 1, 2019	¥91,678	¥135,066
Service cost	2,184	549
Interest cost	729	4,082
Actuarial gains and losses	(405)	16,658
Benefits paid	(4,691)	(6,805)
Past service cost	306	153
Exchange translation differences	_	549
Other	(102)	729
As of December 31, 2019	¥89,699	¥150,981

Note: Some of the domestic consolidated subsidiaries have adopted a simplified method for the calculation of retirement benefits.

		Millions of yen
	Domestic plans	Foreign plans
As of January 1, 2018	¥93,561	¥153,835
Service cost	2,211	693
Interest cost	739	3,918
Actuarial gains and losses	(106)	(9,072)
Benefits paid	(4,727)	(6,148)
Past service cost	_	(69)
Exchange translation differences	_	(8,386)
Other	_	295
As of December 31, 2018	¥91,678	¥135,066

Note: Some of the domestic consolidated subsidiaries have adopted a simplified method for the calculation of retirement benefits.

Changes in plan assets

		Millions of yen
	Domestic plans	Foreign plans
As of January 1, 2019	¥114,309	¥117,005
Expected return on plan assets	3,086	5,800
Actuarial gains and losses	12,834	12,995
Contributions by the employer	4,333	3,719
Benefits paid	(4,593)	(6,782)
Exchange translation differences	_	951
Other	_	(15)
As of December 31, 2019	¥129,969	¥133,673

		Millions of yen
	Domestic plans	Foreign plans
As of January 1, 2018	¥ 125,464	¥ 132,566
Expected return on plan assets	3,206	6,163
Actuarial gains and losses	(11,247)	(12,992)
Contributions by the employer	1,537	4,703
Benefits paid	(4,651)	(5,964)
Exchange translation differences	_	(7,515)
Other	_	44
As of December 31, 2018	¥ 114,309	¥ 117,005

Reconciliation of defined benefit obligations and plan assets on retirement benefits recognized in the consolidated balance sheet

		Millions of yen
		2019
	Domestic plans	Foreign plans
Funded defined benefit obligations	¥ 88,562	¥ 149,637
Plan assets	(129,969)	(133,673)
Subtotal	(41,407)	15,964
Unfunded defined benefit obligations	1,137	1,344
Net amount of liabilities and assets recognized in consolidated balance sheet	¥ (40,270)	¥ 17,308
Liabilities (net defined benefit liability)	¥ 1,193	¥ 20,184
Assets (net defined benefit asset)	(41,463)	(2,876)
Net amount of liabilities and assets recognized in consolidated balance sheet	¥ (40,270)	¥ 17,308

		Millions of yen
		2018
	Domestic plans	Foreign plans
Funded defined benefit obligations	¥ 90,473	¥ 134,098
Plan assets	(114,309)	(117,005)
Subtotal	(23,836)	17,093
Unfunded defined benefit obligations	1,205	968
Net amount of liabilities and assets recognized in consolidated balance sheet	¥ (22,631)	¥ 18,061
Liabilities (net defined benefit liability)	¥ 1,630	¥ 18,889
Assets (net defined benefit asset)	(24,261)	(828)
Net amount of liabilities and assets recognized in consolidated balance sheet	¥ (22,631)	¥ 18,061

Retirement benefit expenses and its breakdowns

		Millions of yen
		2019
	Domestic plans	Foreign plans
Service cost	¥ 2,184	¥ 549
Interest cost	729	4,082
Expected return on plan assets	(3,086)	(5,800)
Recognition of actuarial gains and losses	431	1,408
Amortization of past service cost	306	153
Total	¥ 563	¥ 392

Notes: 1. Other than these retirement benefit expenses, severance costs in the consolidated statement of income include retiree premium benefit.

2. ¥443 million of losses from amortization of past service cost has been recognized in extraordinary loss as a result of the amendment to the retirement benefit plans of the Company and a number of consolidated subsidiaries during the fiscal year ended December 31, 2019.

		Millions of yen
		2018
	Domestic plans	Foreign plans
Service cost	¥ 2,211	¥ 693
Interest cost	739	3,918
Expected return on plan assets	(3,206)	(6,163)
Recognition of actuarial gains and losses	(678)	1,303
Amortization of past service cost	_	(69)
Total	¥ (934)	¥ (318)

Note: Other than these retirement benefit expenses, severance costs in the consolidated statement of income include retiree premium benefit.

Past service cost and actuarial gains and losses

The past service cost and actuarial gains and losses recognized in accumulated other comprehensive income as remeasurements of defined benefit plans (amount before income tax effect) for the fiscal years ended December 31, 2019 and 2018, are as follows:

		Millions of yen
		2019
	Domestic plans	Foreign plans
Past service cost	¥ —	¥ 10
Actuarial gains and losses	13,669	(2,919)
Total	¥13,669	¥(2,909)

		Millions of yen
		2018
	Domestic plans	Foreign plans
Past service cost	¥ —	¥ (876)
Actuarial gains and losses	(11,819)	(278)
Total	¥(11,819)	¥(1,154)

Unrecognized past service cost and unrecognized actuarial gains and losses

The unrecognized past service cost and unrecognized actuarial gains and losses recognized in accumulated other comprehensive income as remeasurements of defined benefit plans (amount before income tax effect) for the fiscal years ended December 31, 2019 and 2018, are as follows:

		Millions of yen
		2019
	Domestic plans	Foreign plans
Unrecognized past service cost	¥ —	¥ (737)
Unrecognized actuarial gains and losses	11,874	(47,746)
Total	¥11,874	¥(48,483)

		Millions of yen
		2018
	Domestic plans	Foreign plans
Unrecognized past service cost	¥ —	¥ (747)
Unrecognized actuarial gains and losses	(1,795)	(44,827)
Total	¥(1,795)	¥(45,574)

Major breakdown of plan assets

		2019
	Domestic plans	Foreign plans
Equity securities	55.9%	21.2%
Debt securities	22.5%	63.0%
Other	21.6%	15.8%
Total	100.0%	100.0%

Note: 29.7% of the assets of the domestic plans is available-for-sale securities contributed to the employee retirement benefit trust.

		2018
	Domestic plans	Foreign plans
Equity securities	49.6%	24.8%
Debt securities	24.9%	56.3%
Other	25.5%	18.9%
Total	100.0%	100.0%

Note: 23.5% of the assets of the domestic plans is available-for-sale securities contributed to the employee retirement benefit trust.

Actuarial assumptions

		2019
	Domestic plans	Foreign plans
Discount rate	0.8%	0.4%-3.2%
Expected return rate on plan assets	3.0%	4.6%-5.5%
Expected rate of increase in salary	3.1%	1.7%-3.5%

Note: Expected return rate on plan assets is determined by considering the current and anticipated future portfolio of plan assets and current and anticipated future long-term performance of individual asset classes that comprise the funds' asset mix.

		2018
	Domestic plans	Foreign plans
Discount rate	0.8%	1.3%-4.4%
Expected return rate on plan assets	3.0%	4.9%-6.0%
Expected rate of increase in salary	3.1%	2.0%-3.5%

Note: Expected return rate on plan assets is determined by considering the current and anticipated future portfolio of plan assets and current and anticipated future long-term performance of individual asset classes that comprise the funds' asset mix.

(3) Defined contribution pension plans

The required contributions borne by the Company and a number of consolidated subsidiaries in relation to the defined contribution pension plans for the fiscal years ended December 31, 2019 and 2018, are ¥2,001 million and ¥1,940 million, respectively.

Note 14:

Net Assets

Japanese companies are subject to the Companies Act of Japan (the "Companies Act"). The significant provisions in the Companies Act that affect financial and accounting matters are summarized below:

(1) Dividends

Under the Companies Act, companies can pay dividends at any time during the fiscal year in addition to the year-end dividend upon resolution at the shareholders' meeting. For companies that meet certain criteria such as: (a) having a board of directors, (b) having independent auditors, (c) having a board of corporate auditors and (d) the term of service of the directors being prescribed as one year rather than the two years of a normal term by its articles of incorporation, the board of directors may declare dividends (except for dividends in kind) at any time during the fiscal year if the company has prescribed so in its articles of incorporation. The Company meets all the above criteria.

The Companies Act permits companies to distribute dividends in kind (non-cash assets) to shareholders subject to a certain limitation and additional requirements.

Semiannual interim dividends may also be paid once a year upon resolution by the board of directors if the articles of incorporation of the company so stipulate. The Companies Act provides certain limitations on the amounts available for dividends or the purchase of treasury shares. The limitation is defined as the amount available for distribution to the shareholders, but the amount of net assets after dividends must be maintained at no less than ¥3 million.

(2) Increases/decreases and transfer of common stocks, reserve and surplus

The Companies Act requires that an amount equal to 10% of dividends must be appropriated as a legal reserve (a component of retained earnings) or as additional paid-in capital (a component of capital surplus) depending on the equity account charged upon the payment of such dividends until the total of the aggregate amount of legal reserve and additional paid-in capital equals 25% of the common stock. Under the Companies Act, the total amount of additional paid-in capital and legal reserve may be reversed without limitation. The Companies Act also provides that common stock, legal reserve, additional paid-in capital, other capital surplus and retained earnings can be transferred among the accounts under certain conditions upon resolution of the shareholders.

(3) Treasury shares and treasury stock acquisition rights

The Companies Act also provides for companies to purchase treasury shares and dispose of such treasury shares by resolution of the board of directors. The amount of treasury shares purchased cannot exceed the amount available for distribution to the shareholders which is determined by a specific formula.

Under the Companies Act, stock acquisition rights, which were previously presented as a liability, are now presented as a separate component of equity.

The Companies Act also provides that companies can purchase both treasury stock acquisition rights and treasury shares. Such treasury stock acquisition rights are presented as a separate component of equity or deducted directly from stock acquisition rights.

Note 15:

Capital Stock

The total amount of capital stock authorized as of December 31, 2019 and 2018, is 150,000,000 shares. The total amount of capital stock issued as of December 31, 2019 and 2018, is 95,156,904 shares.

Note 16:

Treasury Shares

The number of treasury shares as of December 31, 2019 and 2018, is follows:

				Shares
				2019
	As of January 1,	Increase in	Decrease in	As of December 31,
	2019	FY2019	FY2019	2019
Treasury shares:				
Common stock	511,035	2,187	1,600	511,622
Total	511,035	2,187	1,600	511,622

- Notes: 1. The shares held by the BBT (146,200 shares) are included in the number of treasury shares.
 - 2. The increase of treasury shares of common stock (2,187 shares) was due to the purchase of odd-lot shares.
 - 3. The decrease of treasury shares of common stock (1,600 shares) was due to the benefit of the Company's shares by the BBT.

				Shares
				2018
	As of January 1, 2018	Increase in FY2018	Decrease in FY2018	As of December 31, 2018
Treasury shares:				
Common stock	512,293	2,642	3,900	511,035
Total	512,293	2,642	3,900	511,035

- Notes: 1. The shares held by the BBT (147,800 shares) are included in the number of treasury shares.
 - 2. The increase of treasury shares of common stock (2,642 shares) was due to the purchase of odd-lot shares.
 - 3. The decrease of treasury shares of common stock (3,900 shares) was due to the benefit of the Company's shares by the BBT.

Note 17:

Income Taxes

The differences between the normal effective statutory tax rate in Japan and the actual effective tax rate for the fiscal years ended December 31, 2019 and 2018, are as follows:

	2019	2018
Normal effective statutory tax rate in Japan	30.6%	30.9%
Adjustments:		
Valuation allowance change	2.5%	(0.6)%
Tax rate differences	(6.4)%	(4.6)%
Equity in earnings of affiliates	(2.1)%	(2.4)%
Entertainment and other non-deductible expenses	3.0%	2.4%
Elimination of intercompany dividends income	9.7%	12.0%
Dividends income and other non-taxable income	(15.2)%	(9.8)%
State, provincial, municipal and local taxes	0.8%	0.8%
Tax credit for research and development and others	(1.3)%	(1.7)%
Tax credit for the Special Tax Law for the March 11 Earthquake	(0.1)%	(0.8)%
Other	5.4%	4.6%
Actual effective tax rate	26.9%	30.8%

The tax effects of significant temporary differences and loss carryforwards, which resulted in deferred tax assets and liabilities, as of December 31, 2019 and 2018, are as follows:

	N	Aillions of yer
	2019	2018
eferred tax assets:		
Inventories	¥ 3,381	¥ 3,407
Property, plant and equipment	4,777	4,155
Intangible assets	4,863	4,470
Research and development costs	4,693	4,736
Allowance for doubtful accounts	1,685	1,788
Provision for bonuses	1,717	1,917
Net defined benefit liability	5,733	5,464
Unrealized gain	799	900
Net operating loss carryforwards (Note)	18,198	18,97
Other	8,481	9,176
Subtotal	54,326	54,987
Less: valuation allowance for tax loss carryforwards	(8,315)	_
Less: valuation allowance for temporary differences	(4,023)	_
Valuation allowance	(12,338)	(12,084
Total	41,989	42,903
eferred tax liabilities:		
Property, plant and equipment	(2,475)	(3,120
Net defined benefit asset	(6,852)	(1,728
Contribution of securities to employee retirement benefit trust	(1,277)	(1,277
Deferred income taxes related to gains from property, plant and equipment	(2,683)	(2,791
Valuation difference on available-for-sale securities	(812)	(665
Other	(3,466)	(2,816
Total	(17,565)	(12,397
et deferred tax assets	¥ 24,424	¥ 30,506

Note: The expiration of tax loss carryforwards, the related valuation allowances and the resulting net deferred tax assets as of December 31, 2019, were as follows:

	2020	2021	2022	2023	2024	Thereafter	Total
Tax loss carryforward (*a)	¥ 191	¥ 746	¥1,260	¥1,476	¥ 182	¥14,344	¥18,198
Valuation allowance	(179)	(123)	(252)	(171)	(153)	(7,437)	(8,315)
Net deferred tax assets	11	623	1,008	1,305	29	6,907	(*b) 9,883

^{(*}a) Tax loss carryforward shown in the above table is after multiplying by the statutory tax rate.

Note 18:

Research and Development Costs

Research and development costs charged to income for the fiscal years ended December 31, 2019 and 2018, are \pm 12,505 million and \pm 12,923 million, respectively.

^{(*}b) Deferred tax assets of ¥9,883 million was recognized for tax loss carryforward of ¥18,198 million. No valuation allowance is recognized for tax loss carryforward since the amount was determined to be recoverable based on expected future taxable income.

Note 19:

Leases

Operating leases

Future minimum rental payments under non-cancellable operating leases as of December 31, 2019 and 2018, are as follows:

	Millions of ye	
	2019	2018
Due within one year	¥1,932	¥ 2,570
Due after one year	6,379	7,663
Total	¥8,311	¥10,233

Note: The consolidated subsidiaries that adopt IFRS began applying IFRS 16 Leases from the fiscal year ended December 31, 2019. With regard to leases of the consolidated subsidiaries as lessee previously classified as operating leases, was included only in the figures as of December 31, 2018.

Note 20:

Financial Instruments

Group policy for financial instruments

The Group manages funds with safe and secure financial assets. Means of financings include direct financing such as the issuance of bonds and commercial papers and liquidation of receivables, as well as indirect financing such as short- and long-term bank borrowings, the terms of which are determined based on financial market conditions and account balances at the time.

Nature and extent of risks arising from financial instruments

Receivables such as trade notes and accounts receivable are exposed to customer credit risk. In addition, some of such receivables are denominated in foreign currencies and are exposed to the market risk of fluctuation in foreign currency exchange rates. Investment securities, mainly the stocks of customers and suppliers, are exposed to the risk of market price fluctuations.

Payment terms of payables, such as trade notes and accounts payable, are less than one year. In addition, some of such payables are denominated in foreign currencies and are exposed to the market risk of fluctuation in foreign currency exchange rates.

Funds needed for operations are mainly procured as short-term loans payable, whereas funds needed for capital expenditure and investment are mainly procured as long-term loans payable, bonds payable and lease obligations with regard to finance lease transactions. A part of such bank loans, bonds and lease obligations are exposed to market risks from changes in variable interest rates. Trade accounts payable and loans payable of the Company are also exposed to liquidity risk that the Company cannot meet its contractual obligations in full on maturity dates.

Risk management for financial instruments

The Company manages its credit risk from trade notes and accounts receivable on the basis of internal guide-lines, which include the monitoring of payment terms and balances of customers by the sales and business administration departments to identify the default risk of customers at an early stage. The consolidated subsidiaries of the Company manage the exposure to credit risk on their own in accordance with their internal guide-lines. Investment securities are managed by monitoring market values, the financial position of issuers and considering the relationship with customers and suppliers on a regular basis. The Group also tries to mitigate liquidity risk by arranging lines of credit with financial institutions, along with adequate financial planning.

Fair values of financial instruments

The following tables present the carrying amounts and the fair values of financial instruments as of December 31, 2019 and 2018. Financial instruments whose fair values are not reliably measured are excluded from the tables below.

			Millions of yen
			2019
	Carrying amount	Fair value	Difference
Assets:			
Cash and deposits	¥ 16,786	¥ 16,786	¥ —
Notes and accounts receivable—trade	211,232	211,232	_
Investment securities			
Stocks of subsidiaries and affiliates	26,723	31,574	4,851
Other	10,976	10,976	_
Total	¥265,717	¥270,568	¥4,851
Liabilities:			
Notes and accounts payable—trade	¥108,562	¥108,562	¥ —
Short-term loans payable	20,139	20,139	
Current portion of long-term loans payable	23,456	23,645	189
Lease obligations (current)	1,244	1,244	_
Income taxes payable	2,556	2,556	_
Bonds payable	80,000	80,640	640
Long-term loans payable	122,602	123,014	412
Lease obligations (non-current)	5,191	5,514	323
Total	¥363,750	¥365,314	¥1,564
Derivative financial instruments: (Note)			
Hedge accounting—not applied	¥ (106)	¥ (106)	¥ —
Hedge accounting—applied	985	985	_
Total	¥ 879	¥ 879	¥ —

Note: Figures are net of debts and credits that arise from derivative financial instruments. Net debt amounts are indicated in parentheses.

			Millions of yen
			2018
	Carrying amount	Fair value	Difference
Assets:			
Cash and deposits	¥ 19,782	¥ 19,782	¥ —
Notes and accounts receivable—trade	209,763	209,763	_
Investment securities			
Stocks of subsidiaries and affiliates	27,497	25,120	(2,377)
Other	10,485	10,485	_
Total	¥267,527	¥265,150	¥(2,377)
Liabilities:			
Notes and accounts payable—trade	¥118,554	¥118,554	¥ —
Short-term loans payable	29,986	29,986	_
Current portion of long-term loans payable	49,792	49,817	25
Lease obligations (current)	667	667	_
Income taxes payable	2,843	2,843	_
Bonds payable	60,000	60,648	648
Long-term loans payable	119,791	120,091	300
Lease obligations (non-current)	4,229	4,565	336
Total	¥385,862	¥387,171	¥ 1,309
Derivative financial instruments: (Note)			
Hedge accounting—not applied	¥ 152	¥ 152	¥ —
Hedge accounting—applied	19	19	_
Total	¥ 171	¥ 171	¥ —

Note: Figures are net of debts and credits that arise from derivative financial instruments. Net debt amounts are indicated in parentheses.

The valuation techniques used to estimate the fair values of financial instruments and information on the marketable securities and derivative financial instruments are as follows:

Assets

Cash and deposits and notes and accounts receivable-trade

The fair values of cash and deposits and notes and accounts receivable—trade approximate their carrying amounts as these amounts are settled in a short period of time.

Investment securities

The fair values of investment securities are measured at the quoted market price on the stock exchange.

Liabilitie

Notes and accounts payable-trade, short-term loans payable and income taxes payable

The fair values of these accounts approximate their carrying amounts as these amounts are settled in a short period of time.

Current portion of long-term loans payable and long-term loans payable

For long-term loans payable bearing a floating interest rate, the fair values of those subject to special treatment of interest rate swaps are based on present value by totaling the amount of principal and interest, together with related interest rate swaps, discounted by the interest rate that would apply if equivalent long-term loans were newly entered into. The fair values of other long-term loans payable for which a floating interest rate is applied approximate their carrying amounts, due to the fact that the market rate of interest is quickly factored in while credit status of the Company remains unchanged.

On the other hand, the fair values of long-term loans payable for which a fixed interest rate is applied are determined by discounting the cash flows related to the long-term loans payable. The discount rate applied for the calculation above is the interest rate that may be currently available to the Group for loans payable with similar terms and conditions.

Lease obligations (current) and lease obligations (non-current)

The fair values of these accounts are determined by discounting the cash flows related to the lease obligations. The discount rate applied for the calculation above is the interest rate that may be currently available to the Group for lease obligations with similar terms and conditions.

Bonds payable

The fair values are measured at the quoted market prices.

Derivative financial instruments

Please see Note 21 "Derivative Financial Instruments" for more information.

Financial instruments whose fair value is not reliably measured

There are no market prices for non-listed stocks and others (carrying amounts as of December 31, 2019 and 2018, are ¥21,614 million and ¥29,541 million, respectively) whose future cash flows cannot be estimated. The fair values of such non-listed stocks and others are not reliably determinable and thus excluded from investment securities.

Redemption schedule for financial assets and securities

The redemption schedules for financial assets and securities with contractual maturities as of December 31, 2019 and 2018, are summarized as follows:

				Millions of yen
				2019
	Due in 1 year	Due after 1 year	Due after 5 years	Due after
	or less	through 5 years	through 10 years	10 years
Notes and accounts receivable—trade	¥211,232	¥—	¥—	¥—
Total	¥211,232	¥—	¥—	¥—
				Millions of yen
				2018
	Due in 1 year	Due after 1 year	Due after 5 years	Due after
	or less	through 5 years	through 10 years	10 years
Notes and accounts receivable—trade	¥209,763	¥—	¥—	¥—
Total	¥209,763	¥—	¥—	

Repayment schedule for bonds payable, long-term loans payable and other interest-bearing debt

The repayment schedules for bonds payable, long-term loans payable and other interest-bearing debt with contractual maturities as of December 31, 2019 and 2018, are summarized as follows:

Millions of you

				willions of yen
_				2019
-	Due in 1 year	Due after 1 year	Due after 5 years	Due after
	or less	through 5 years	through 10 years	10 years
Short-term loans payable	¥20,139	¥ —	¥ —	¥ —
Current portion of long-term loans payable	23,456	_	_	
Lease obligations (current)	1,244	_	_	_
Bonds payable	_	40,000	35,000	5,000
Long-term loans payable	_	90,039	32,495	68
Lease obligations (non-current)	_	2,561	2,062	568
Total	¥44,839	¥132,600	¥69,557	¥5,636

				Millions of yen
				2018
	Due in 1 year	Due after 1 year	Due after 5 years	Due after
	or less	through 5 years	through 10 years	10 years
Short-term loans payable	¥29,986	¥ —	¥ —	¥ —
Current portion of long-term loans payable	49,792	_	_	_
Lease obligations (current)	667	_	_	_
Bonds payable	_	30,000	25,000	5,000
Long-term loans payable	_	94,823	24,968	_
Lease obligations (non-current)	_	2,431	1,798	_
Total	¥80,445	¥127,254	¥51,766	¥5,000

Note 21:

Derivative Financial Instruments

The Group has entered into various foreign currency forward contracts, currency options and swaps, interest rate swaps and commodity swaps.

Foreign currency forward contracts and currency options and swaps are entered into to hedge the effects of exchange rate changes on receivables and payables or anticipated transactions denominated in foreign currencies. Interest rate swaps are entered into to hedge the effects of interest rate changes and to reduce financing cost. Commodity swaps are entered into to hedge the effects of commodity price changes of fuel. Loans denominated in foreign currencies are entered into to hedge a part of risks associated with the fluctuations of exchange rates for investments in foreign entities.

The Group does not use derivative instruments for trading or speculative purposes. Derivative transactions performed by the Group have risks due to fluctuations of exchange rates, interest rates and other factors.

Because these transactions are executed with creditworthy financial institutions, the Group does not anticipate the likelihood of any losses resulting from default by the counterparties to these agreements.

Internal regulation for managing derivative transactions has been established for the purpose of risk control in the Company, and all derivative transactions are performed under this regulation.

The execution of derivative transactions is carried out by the Company's finance department, and the management of risk is monitored by the Company's accounting department. Transactions are periodically reported to the board of directors by the officer in charge of the Finance and Accounting Division.

Consolidated subsidiaries execute transactions in accordance with their regulations for derivative management and periodically report the results of those transactions to the Company.

Derivative transactions to which hedge accounting is not applied as of December 31, 2019 and 2018 (1) Currency related

				Millions of yen
				2019
	Contract/notional amount	Contract/notional amount due after one year	Fair value	Unrealized gain/loss
Currency swaps: (Note 1)		,		
(Payment in Australian \$ and receipt in U.S.\$)	¥ 1,067	¥—	¥ (24)	¥ (24)
Other	315	<u> </u>	(5)	(5)
Foreign currency forward contracts: (Note 2)				
Selling				
Russian ruble	3,272	_	(21)	(21)
U.S.\$	3,172	_	3	3
Colombian peso	1,512	_	(18)	(18)
Canadian \$	1,322	_	(14)	(14)
Other	550	_	(2)	(2)
Buying				
U.S.\$	1,829	_	(27)	(27)
Other	779	_	1	1
Total	¥13,817	¥—	¥(106)	¥(106)

Notes: 1. The fair values of currency swap contracts are measured using the quoted price obtained from financial institutions.

^{2.} The fair values of foreign currency forward contracts are measured using the forward quotation.

				Millions of yen
				2018
	Contract/notional amount	Contract/notional amount due after one year	Fair value	Unrealized gain/loss
Currency options: (Note 1)		,		
Selling				
Euro	¥ 1,205	¥—	¥(14)	¥(14)
Buying				
U.S.\$	1,252	_	37	37
Euro	865	_	4	4
Foreign currency forward contracts: (Note 2)				
Selling				
Russian ruble	2,736	_	106	106
Colombian peso	1,549	_	18	18
Canadian \$	1,273	<u>—</u>	20	20
Other	380	<u> </u>	(8)	(8)
Buying				
U.S.\$	3,878	_	(14)	(14)
Other	394	_	3	3
Total	¥13,532	¥—	¥152	¥152

Notes: 1. The fair values of currency options are measured using the quoted price obtained from financial institutions. Currency options used are called collar options, which effectively limit the risk arising from the changes in exchange rate by the combination of buying call options and selling put options, or selling call options and buying put options.

^{2.} The fair values of foreign currency forward contracts are measured using the forward quotation.

Derivative transactions to which hedge accounting is applied as of December 31, 2019 and 2018 (1) Currency related

				Millions of yen
				2019
	Hedged item	Contract/notional amount	Contract/notional amount due after one year	Fair value
Foreign currency forward contracts: (Note 1))		,	
Selling				
U.S.\$	Forecast	¥ 359	¥—	¥ (1)
Other	transaction	168	_	(2)
Buying				
Euro	Forecast transaction	23,553	_	994
Other	and Accounts payable—trade	92	_	0
Foreign currency forward contracts: (Notes 1 and 2)				
Selling				
U.S.\$	Accounts	2,593	_	
Other	receivable—trade	275	_	
Currency swaps: (Notes 1 and 3)				
(Payment in Japanese yen and receipt in U.S.\$)	Loans payable	10,871	_	
Total		¥37,909	¥—	¥991

Notes: 1. The fair values of foreign currency forward contracts are measured using the quoted price obtained from financial institutions.

- 2. Exchange contracts appropriated to specific debts and credits are settled together with either accounts receivable—trade or accounts payable—trade subject to hedged transaction. Accordingly, the fair values of such exchange contracts are reflected in accounts receivable—trade or accounts payable—trade.
- 3. Currency swaps appropriated to specific credits are settled together with loans payable subject to hedged transaction. Accordingly, the fair values of such currency swaps are reflected in loans payable.

				Millions of yen
				2018
	Hedged item	Contract/notional amount	Contract/notional amount due after one year	Fair value
Foreign currency forward contracts: (Note	1)			
Selling				
U.S.\$	Forecast	¥ 391	¥—	¥ 9
Other	transaction	338	_	7
Buying				
U.S.\$	Accounts payable—trade	78	_	(1)
Foreign currency forward contracts: (Notes 1 and 2)				
Selling				
U.S.\$	Accounts	2,552	_	
Other	receivable—trade	540	_	
Total		¥3,899	¥—	¥15

Notes: 1. The fair values of foreign currency forward contracts are measured using the quoted price obtained from financial institutions.

2. Exchange contracts appropriated to specific debts and credits are settled together with either accounts receivable—trade, loans payable or accounts payable—trade subject to hedged transaction. Accordingly, the fair values of such exchange contracts are reflected in accounts receivable—trade, loans payable or accounts payable—trade.

(2) Interest related

				Millions of yen
				2019
	Hedged item		Contract/notional	
		Contract/notional	amount due after	
		amount	one year	Fair value
Interest rate swaps: (Note)	Loans payable			
(Fixed rate payment, floating rate receipt)		¥66,306	¥66,306	
Total		¥66,306	¥66,306	¥—

Note: If interest rate swaps qualify for hedge accounting and meet certain specific criteria, they are settled together with loans payable subject to hedged transaction. Accordingly, the fair values of such interest rate swaps is reflected in loans payable.

				Millions of yen
				2018
	Hedged item	Control to a time al	Contract/notional	
			amount due after	
		amount	one year	Fair value
Interest rate swaps: (Note)	Loans payable			
(Fixed rate payment, floating rate receipt)		¥62,596	¥46,559	
Total		¥62,596	¥46,559	¥—

Note: If interest rate swaps qualify for hedge accounting and meet certain specific criteria, they are settled together with loans payable subject to hedged transaction. Accordingly, the fair values of such interest rate swap is reflected in loans payable.

(3) Commodity related

				Millions of yen
				2019
	Hedged item		Contract/notional	
	ricagea item	Contract/notional	amount due after	
		amount	one year	Fair value
Commodity swaps: (Note)	Fuel	V/12	V	V/C)
(Fixed price payment, floating price receipt)	Fuel	¥42	¥—	¥(6)
Total		¥42	¥—	¥(6)

Note: The fair values of commodity swap is measured using the quoted price obtained from the exchange.

				Millions of yen
				2018
	Hedged item	Contract/notional	Contract/notional amount due after	
		amount	one year	Fair value
Commodity swaps: (Note) (Fixed price payment, floating price receipt)	Fuel	¥153	¥42	¥4
Total		¥153	¥42	¥4

Note: The fair values of commodity swap is measured using the quoted price obtained from the exchange.

Note 22:

Commitments and Contingent Liabilities

Contingent liabilities as of December 31, 2019 and 2018, are as follows:

		Millions of yen
	2019	2018
Trade notes discounted with banks	¥ —	¥ 9
Liabilities for guarantee and other	583	637
Total	¥583	¥646

In the opinion of management, the eventual settlement of pending lawsuits in which any of the companies in the Group is the defendant will not have a material effect on the consolidated financial position or consolidated results of operations of the Group.

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Note 23:

Other Comprehensive Income

Each component of other comprehensive income and related tax effects (including those on non-controlling interests) for the fiscal years ended December 31, 2019 and 2018, comprises the following:

		Millions of yen
	2019	2018
Valuation difference on available-for-sale securities:		
Gains (losses) arising during the year	¥ 564	¥ (6,160)
Reclassification adjustments to profit (loss)	(73)	(3,118)
Amount before income tax effect	491	(9,278)
Income tax effect	(164)	2,776
Total	327	(6,502)
Deferred gains or losses on hedges:		
Gains (losses) arising during the year	1,008	6
Reclassification adjustments to profit (loss)	(42)	17
Amount before income tax effect	966	23
Income tax effect	(297)	(6)
Total	669	17
Foreign currency translation adjustment:		
Adjustments arising during the year	(4,394)	(20,112)
Reclassification adjustments to profit (loss)	_	(91)
Amount before income tax effect	(4,394)	(20,203)
Total	(4,394)	(20,203)
Remeasurements of defined benefit plans:		
Adjustments arising during the year	8,892	(13,529)
Reclassification adjustments to profit (loss)	1,868	556
Amount before income tax effect	10,760	(12,973)
Income tax effect	(3,491)	3,560
Total	7,269	(9,413)
Share of other comprehensive income of associates accounted for using equity method:		
Gains (losses) arising during the year	(1,298)	(1,547)
Reclassification adjustments to profit (loss)	554	2
Total	(744)	(1,545)
Total other comprehensive income	¥ 3,127	¥(37,646)

Note 24:

Subsequent Events

(Dividends)

At the Company's annual general meeting of shareholders held on March 26, 2020, the shareholders approved the following appropriations of retained earnings:

	ivillions of yen
Cash dividends, ¥40.00 per share	¥3,792
Total	¥3,792

Note: The total amount of dividends resolved at the annual general meeting of shareholders held on March 26, 2020, includes dividends of ¥6 million for the Company's shares held by the BBT.

(Financing through a Subordinated Term Loan)

Procurement of a total of ¥60 billion through a subordinated term loan ("the subordinated loan") was approved at a meeting of the Company's Board of Directors held on March 24, 2020.

1. Purpose and significance of the subordinated loan

The Company had resolved to acquire the shares and assets of the Colors & Effects business of German firm BASF SE on August 29, 2019.

With regard to the method of procuring funds for this acquisition, the Company planned to choose an approach that would avoid a decline in capital efficiency due to stock dilution and enable it to maintain financial soundness. Having since explored hybrid financing, the Company made the decision to use a subordinated loan. Also, the Company currently has no plans to raise funds through the issue of new shares (equity financing).

2. Characteristics of the subordinated loan

A subordinated loan is a type of hybrid financing midway between equity and debt. Accordingly, while classified as debt, it has characteristics similar to equity. As a result, the subordinated loan will be eligible for recognition by credit rating agencies as having equity credit attributes to a certain extent, enabling the Company to strengthen its financial base without causing stock dilution. Specifically, the Company expects 50% of the total amount procured to be assessed as having equity credit attributes by the Japan Credit Rating Agency, Ltd.

3. Summary of the subordinated loan

Total amount procured	¥60 billion
Contract date (scheduled)	March 31, 2020
Drawdown date	Any date within one year of the contract date
Use of funds procured	Business acquisition
Due date	60 years from the drawdown date
Early repayment*	The Company may repay before the due date all or part of the principal on each interest payment date five years from the drawdown date or later, or in certain other specified circumstances.
	From drawdown date up to the 10th year, at base floating interest rate plus the initial spread.
Applicable interest rate	From the 10th year up to the 25th year, at base floating interest rate plus a 0.25% step-up from the initial spread.
	From the 25th year on, at base floating interest rate plus a 1.00% step-up from the initial spread.
Interest deferral clause	The Company may defer payment of interest.
Subordination clause	The creditors of the subordinated loan shall have a claim subordinated to that of other senior debt creditors in the event of the Company's liquidation, bank-ruptcy, corporate reorganization or civil rehabilitation proceedings under Japanese law or any equivalent proceedings under any laws other than Japanese law. Any provisions stipulated in the subordinated loan agreement shall not be amended in any manner detrimental to any of the Company's creditors other than the creditors of the subordinated loan.
Lenders	MUFG Bank, Ltd., Mizuho Bank, Ltd., etc.
Assessment of equity credit attributes (expected)	Japan Credit Rating Agency: Medium / 50%

^{*} In the case of early repayment of the subordinated loan, the Company anticipates procuring funds through the issue of common stock or debt (refinancing securities) approved by rating agencies as having equity credit attributes equivalent to or higher than the subordinated loan. However, if the Company satisfies certain financial requirements when early repayment is made five years after the drawdown date or later, it may defer the procurement of funds through refinancing securities.

Note 25:

Segment Information

(1) Segment information

New corporate organization introduced

Effective from January 1, 2019, the Company revised its segmentation to coincide with the launch of its medium-term management plan, DIC111. Accordingly, figures for the fiscal year ended December 31, 2018, have been restated.

Description of reportable segments

The reportable segments of the Group are components for which discrete financial information is available and whose operating results are regularly reviewed by the board of directors to evaluate their performance and determine the allocation of management resources.

The Group has six product divisions, namely "Printing Materials," "Packaging Materials," "Color Materials," "Display Materials," "Performance Materials" and "Composite Materials," and each product division conducts its business.

The product divisions are aggregated into three reportable segments, namely "Packaging & Graphic," "Color & Display" and "Functional Products," based on the similarity of the products and services.

"Packaging & Graphic" mainly consists of gravure inks, flexo inks, offset inks, news inks, jet inks and polystyrene. "Color & Display" mainly consists of organic pigments, liquid crystal materials and health foods. "Functional Products" mainly consists of synthetic resins, such as acrylic, polyurethane, epoxy resins, PPS compounds and industrial adhesive tapes.

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

The accounting policies of each reportable segment are consistent with those disclosed in Note 2 "Summary of Significant Accounting Policies."

Segment profits are based on operating income.

Intersegment sales are mainly based on market price or cost of goods manufactured.

Information about sales, profit (loss), assets, liabilities and other items

	Millions of yen								
						2019			
		Reportable Segments							
	Packaging & Graphic	Color & Display	Functional Products	Total	Others	Total			
Sales:									
Sales to customers	¥416,377	¥ 86,500	¥265,248	¥768,125	¥ 443	¥768,568			
Intersegment sales	_	29,912	3,342	33,253	_	33,253			
Total sales	416,377	116,411	268,590	801,378	443	801,821			
Segment profit	19,178	10,784	19,234	49,196	433	49,629			
Segment assets	¥358,108	¥ 93,475	¥320,720	¥772,303	¥31,367	¥803,670			
Others:									
Depreciation and amortization	12,910	5,099	13,515	31,524	552	32,076			
Amortization of goodwill	21	_	78	99	_	99			
Investments in affiliates	5,379	652	35,169	41,200	3,958	45,158			
Increase in property, plant and equipment and intangible assets	12,384	5,840	15,345	33,569	413	33,982			

	Millions of yen							
						2018		
			Reporta	ble Segments				
	Packaging & Graphic	Color & Display	Functional Products	Total	Others	Total		
Sales:								
Sales to customers	¥434,679	¥ 91,440	¥278,779	¥804,898	¥ 600	¥805,498		
Intersegment sales	_	32,673	3,337	36,010	_	36,010		
Total sales	434,679	124,113	282,116	840,908	600	841,508		
Segment profit	19,887	14,977	20,809	55,673	417	56,090		
Segment assets	¥355,044	¥ 95,079	¥320,453	¥770,576	¥33,884	¥804,460		
Others:								
Depreciation and amortization	13,334	4,662	13,381	31,377	343	31,720		
Amortization of goodwill	22	1	103	126	30	156		
Investments in affiliates	5,231	1,184	44,557	50,972	3,579	54,551		
Increase in property, plant and equipment and intangible assets	11,551	6,616	13,503	31,670	243	31,913		

Reconciliation between reportable segment total and amounts disclosed in consolidated financial statements

	N	Millions of yen		
	2019	2018		
Sales:				
Reportable segment total	¥801,378	¥840,908		
Sales in "Others"	443	600		
Elimination of intersegment transactions	(33,253)	(36,010)		
Sales in consolidated financial statements	¥768,568	¥805,498		

	N	Aillions of yen
	2019	2018
Profit:		
Reportable segment total	¥49,196	¥55,673
Profit in "Others"	433	417
Corporate expenses	(8,297)	(7,705)
Operating income in consolidated financial statements	¥41,332	¥48,385

Note: Corporate expenses consist substantially of R&D expenses incurred by the DIC Central Research Laboratories to develop new products, which are not included in any reportable segment.

	N	Millions of yer		
	2019	2018		
Assets:				
Reportable segment total	¥772,303	¥770,576		
Assets in "Others"	31,367	33,884		
Elimination between segments	(45,235)	(40,964)		
Corporate assets	44,648	37,800		
Assets in consolidated financial statements	¥803,083	¥801,296		

Note: Corporate assets consist of deferred tax assets and assets of the DIC Central Research Laboratories and Kawamura Memorial DIC Museum of Art, which are not included in any reportable segment.

Other items are as follows:

	Millions of ye								
		2019 201							
	Reportable				Reportable				
	Segments	Others	Adjustments	Consolidated	Segments	Others	Adjustments	Consolidated	
Depreciation and amortization	¥31,524	¥ 552	¥1,051	¥33,127	¥31,377	¥ 343	¥1,105	¥32,825	
Amortization of goodwill	99	_	- –	99	126	30	_	156	
Investments in affiliates	41,200	3,958	-	45,158	50,972	3,579	_	54,551	
Increase in property, plant and equipment and									
intangible assets	33,569	413	980	34,962	31,670	243	171	32,084	

Notes: 1. The adjustments for depreciation and amortization are mainly depreciation and amortization related to the DIC Central Research Laboratories that cannot be allocated to any reportable segment.

(2) Related information

Information about geographical areas

				Millions of yen
				2019
	Japan	USA	Others	Total
Net sales (Note)	¥280,147	¥96,654	¥391,767	¥768,568
Property, plant and equipment	125,932	28,685	77,559	232,176

Note: Net sales is based on customer location and is classified by country.

^{2.} The adjustments for increase in property, plant and equipment and intangible assets are mainly capital investments of the DIC Central Research Laboratories that cannot be allocated to any reportable segment.

				Millions of yen
				2018
	Japan	USA	Others	Total
Net sales (Note)	¥292,857	¥97,682	¥414,959	¥805,498
Property, plant and equipment	127,257	28,898	71,996	228,151

Note: Net sales is based on customer location and is classified by country.

Information about major customers

Not applicable for the fiscal years ended December 31, 2019 and 2018, because there is no single customer which accounts for more than 10% of net sales shown on the consolidated statement of income.

(3) Impairment loss of assets by reportable segment

						Millions of yen
						2019
	Packaging &	Color &	Functional		Corporate and	
	Graphic	Display	Products	Others	eliminations	Consolidated
Impairment loss	¥2,388	¥690	¥—	¥—	¥—	¥3,078

There was no impairment loss of assets for the fiscal year ended December 31, 2018.

(4) Amortization and unamortized balances of goodwill by reportable segment

						Millions of yen
						2019
	Packaging &	Color &	Functional		Corporate and	
	Graphic	Display	Products	Others	eliminations	Consolidated
Amortization	¥21	¥—	¥ 78	¥—	¥—	¥ 99
Unamortized balances	7		755	_	_	762

						Millions of yen
						2018
	Packaging &	Color &	Functional		Corporate and	
	Graphic	Display	Products	Others	eliminations	Consolidated
Amortization	¥22	¥ 1	¥103	¥30	¥—	¥156
Unamortized balances	34	_	_	_	_	34

Note 26:

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Related-Party Transactions

(1) Related-party transactions with the Company

Related-party transactions with directors, corporate auditors, major individual shareholders and others of the Company for the fiscal years ended December 31, 2019 and 2018, are as follows:

									Millio	ns of yen 2019
Type of related party	Name	Location	Capital or invest- ment	Principal business	Ownership of voting rights	Relation with related parties	Contents of transaction	Amount of trans- action (Note 1)	Account	Balance at year- end (Note 2)
Companies where directors	Nissei Real-Estate Co., Ltd.	Chiyoda- ku, Tokyo	10	Rental of properties and others	_	Rental of buildings and others	Payment of rent for buildings and others (Note 4)	2,232	Security deposit	1,832
and their close relatives owned a majority of the voting rights (Note 3)	Dainichi Can Co., Ltd.	Dainichi Can Chiyoda- Co., Ltd. ku, Tokyo	10	Manufacture and sale of metallic containers	_	Purchase of metallic containers and others	Purchase of metallic containers and others (Note 5)	459	Electronically recorded obligations, accounts payable—trade, and accounts payable—other	192
							Sales of merchandise and finished goods, and offering of service (Note 6)	67	Trade notes and accounts receivable	16
		ding ku, Tokyo	20	Sale, import and export of petrochemical- related products	_	Purchase of raw materials and others	Purchase of raw materials and others (Note 7)	6,936	Electronically recorded obligations, accounts payable—trade, and accounts payable—other	1,720
							Sales of merchandise and finished goods, and offering of service (Note 6)	3,803	Accounts receivable— trade and accounts receivable— other	1,480

Notes: 1. Excluding consumption taxes.

- 2. Including consumption taxes.
- 3. Yoshihisa Kawamura, a director of the Company, and his close relatives substantially own a majority of the voting rights of Nissei Real-Estate Co., Ltd.
 - Dainichi Can Co., Ltd. and Nissin Trading Co., Ltd. are fully owned by Nissei Real-Estate Co., Ltd.
- 4. "Rental of buildings and others" are determined based on an arms-length transaction in the neighboring area.
- 5. "Purchase of metallic containers and others" are determined based on an arms-length transaction.
- 6. "Sales of merchandise and finished goods, and offering of service" are determined based on an arms-length transaction.
 7. "Purchase of raw materials and others" are determined based on an arms-length transaction.

									Millio	ns of yen 2018
Type of related party	Name	Location	Capital or invest- ment	Principal business	Ownership of voting rights	Relation with related parties	Contents of transaction	Amount of trans- action (Note 1)	Account	Balance at year- end (Note 2)
Companies where directors	Nissei Real-Estate Co., Ltd.	Chiyoda- ku, Tokyo	10	Rental of properties and others	_	Rental of buildings and others	Payment of rent for buildings and others (Note 4)	2,206	Security deposit	1,833
and their close relatives owned a majority of the voting rights (Note 3)	Dainichi Can Chiyu Co., Ltd. ku, T)	Manufacture and sale of metallic containers	_	Purchase of metallic containers and others	Purchase of metallic containers and others (Note 5)	525	Trade notes, accounts payable and other accounts payable	217
							Sales of merchandise and finished goods, and offering of service (Note 6)	61	Trade notes and accounts receivable	31
	Nissin Chiyoda- Trading ku, Tokyo Co., Ltd.	ku, Tokyo ar pe	Sale, import and export of petrochemical- related products	_	Purchase of raw materials and others	Purchase of raw materials and others (Note 7)	6,038	Trade notes, accounts payable and other accounts payable	1,665	
								Sales of merchandise and finished goods, and offering of service (Note 6)	4,435	Trade accounts receivable and other accounts receivable

Notes: 1. Excluding consumption taxes.

- 2. Including consumption taxes.
- 3. Yoshihisa Kawamura, a director of the Company, and his close relatives substantially own a majority of the voting rights of Nissei Real-Estate Co., Ltd.
 - Dainichi Can Co., Ltd. and Nissin Trading Co., Ltd. are fully owned by Nissei Real-Estate Co., Ltd.

 Nissei Real-Estate Co., Ltd., Dainichi Can Co., Ltd. and Nissin Trading Co., Ltd. transferred all the Company's shares to SHOEI INC. and do not own voting rights of the Company as of the balance sheet date.
- 4. "Rental of buildings and others" are determined based on an arms-length transaction in the neighboring area.
- 5. "Purchase of metallic containers and others" are determined based on an arms-length transaction.
- 6. "Sales of merchandise and finished goods, and offering of service" are determined based on an arms-length transaction.
- 7. "Purchase of raw materials and others" are determined based on an arms-length transaction.

(2) Related-party transactions with the consolidated subsidiaries

Related-party transactions with directors, corporate auditors, major individual shareholders and others of the Company for the fiscal years ended December 31, 2019 and 2018, are as follows:

									Millio	ns of yen 2019
Type of related party	Name	Location	Capital or invest- ment	Principal business	Ownership of voting rights	Relation with related parties	Contents of transaction	Amount of trans- action (Note 1)	Account	Balance at year- end (Note 2)
Companies where directors and their close relatives owned a majority of the voting rights (Note 3)	Nissei Real-Estate Co., Ltd.	Chiyoda- ku, Tokyo	10	Rental of properties and others	_	Rental of buildings and others	Payment of rent for buildings and others (Note 4)	15	Security deposit	8
	Dainichi Can Co., Ltd.	Dainichi Can Chiyoda- Co., Ltd. ku, Tokyo		Manufacture and sale of metallic containers	-	Purchase Purchase of metallic of metallic containers and others others (Note 5)			Electronically recorded obligations, accounts payable—trade, and accounts payable—other	333
							Sales of merchandise and finished goods, and offering of service (Note 6)	59	Trade notes and accounts receivable	25
	Nissin Chiyoda- Trading ku, Tokyo Co., Ltd.	Chiyoda- 20 ku, Tokyo	20	20 Sale, import and export of petrochemical- related products	-	Purchase of raw materials and others	Purchase of raw materials and others (Note 7)	1,381	Electronically recorded obligations, accounts payable—trade, and accounts payable—other	238
							Sales of merchandise and finished goods, and offering of service (Note 6)	638	Accounts receivable— trade and accounts receivable— other	223

Notes: 1. Excluding consumption taxes.

- 2. Including consumption taxes.
- 3. Yoshihisa Kawamura, a director of the Company, and his close relatives substantially own a majority of the voting rights of Nissei Real-Estate Co., Ltd.

Dainichi Can Co., Ltd. and Nissin Trading Co., Ltd. are fully owned by Nissei Real-Estate Co., Ltd.

- 4. "Rental of buildings and others" are determined based on an arms-length transaction in the neighboring area.
- 5. "Purchase of metallic containers and others" are determined based on an arms-length transaction.
- 6. "Sales of merchandise and finished goods, and offering of service" are determined based on an arms-length transaction.
- 7. "Purchase of raw materials and others" are determined based on an arms-length transaction.

									Millio	ns of yen 2018
Type of related party	Name	Location	Capital or invest- ment	Principal business	Ownership of voting rights	Relation with related parties	Contents of transaction	Amount of trans- action (Note 1)	Account	Balance at year- end (Note 2)
Companies where directors and their close relatives owned a majority of the voting rights (Note 3)	Nissei Real-Estate Co., Ltd.	Chiyoda- ku, Tokyo	10	Rental of properties and others	_	Rental of buildings and others	Payment of rent for buildings and others (Note 4)	15	Security deposit	8
	Dainichi Can Chiyoda Co., Ltd. ku, Tok	Chiyoda- ku, Tokyo	10	Manufacture and sale of metallic containers	_		. a. c. asc	754	Trade notes, accounts payable and other accounts payable	339
							Sales of merchandise and finished goods, and offering of service (Note 6)	57	Trade notes and accounts receivable	24
	Co., Ltd. petrochemica	Sale, import and export of petrochemical- related products	_	_	Purchase of raw materials and others	Purchase of raw materials and others (Note 7)	1,485	Trade notes, accounts payable and other accounts payable	267	
								Sales of merchandise and finished goods, and offering of service (Note 6)	539	Trade accounts receivable and other accounts receivable

Notes: 1. Excluding consumption taxes.

- 2. Including consumption taxes.
- 3. Yoshihisa Kawamura, a director of the Company, and his close relatives substantially own a majority of the voting rights of Nissei Real-Estate Co., Ltd.
 - Dainichi Can Co., Ltd. and Nissin Trading Co., Ltd. are fully owned by Nissei Real-Estate Co., Ltd.

 Nissei Real-Estate Co., Ltd., Dainichi Can Co., Ltd. and Nissin Trading Co., Ltd. transferred all the Company's shares to SHOEI INC. and do not own voting rights of the Company as of the balance sheet date.
- 4. "Rental of buildings and others" are determined based on an arms-length transaction in the neighboring area.
- 5. "Purchase of metallic containers and others" are determined based on an arms-length transaction.
- 6. "Sales of merchandise and finished goods, and offering of service" are determined based on an arms-length transaction.
- 7. "Purchase of raw materials and others" are determined based on an arms-length transaction.

1. Basic framework for internal control over financial reporting

Kaoru Ino, Representative Director, President and CEO, and Shuji Furuta, Head of Finance and Accounting Unit and CFO of DIC Corporation (the "Company"), are responsible for designing and operating internal control over the Company's financial reporting and have designed and operated internal control over financial reporting in accordance with the basic framework for internal control set forth in "On the Revision of the Standards and Practice Standards for Management Assessment and Audit concerning Internal Control Over Financial Reporting (Council Opinions)," issued by the Business Accounting Council of the Financial Services Agency of Japan.

Internal control aims to achieve its objectives to a reasonable extent with the organized and integrated function of basic individual elements of internal control as a whole. Accordingly, due to the inherent limitations, there is a possibility that misstatements may not be completely prevented or detected by internal controls over financial reporting.

2. Scope of assessment, the basis date of assessment and assessment procedures

The assessment of internal control over financial reporting for fiscal year 2019 was conducted as of December 31, 2019, which is the end of this fiscal year. The assessment was performed in accordance with relevant assessment standards generally accepted in Japan for internal control over financial reporting.

In conducting this assessment, we began by evaluating internal control which may have a material impact on overall consolidated financial reporting ("company-level controls") and, based on the results of this assessment, business processes to be assessed were selected. We then analyzed these selected business processes to identify key controls therein that may have a material impact on the reliability of the Company's financial reporting, after which we examined the design and operation of these controls. These procedures thus allowed us to accurately evaluate the effectiveness of the Company's internal control.

We determined the required scope of assessment of internal control over financial reporting for the Company and its consolidated subsidiaries and equity-method affiliates from the perspective of materiality or the degree to which it may affect the reliability of financial reporting. Materiality of the impact which may affect the reliability of financial reporting is determined based on potential quantitative and qualitative impact on financial reporting. In light of the results of assessment of company-level controls, we reasonably determined the scope of assessment of process-level controls. Consolidated subsidiaries and equity-method affiliates which were concluded as immaterial taking into account the degree of quantitative and qualitative impact are not included in the scope for assessment of company-level controls.

With regard to the process-level controls, significant locations and business units to be tested were selected based on the changes in the scope of consolidation during the year, as well as on net sales for the previous year, with locations and business units the combined sales volume of which reached approximately two-thirds of consolidated net sales being defined as "significant." The scope of assessment at these locations and business units encompassed business processes relevant to net sales, accounts receivable-trade, accounts payable-trade, inventories and manufacturing facilities included in property, plant and equipment as significant accounts that may have a material impact on the business objectives of the Company. In addition, business processes relating to (i) greater likelihood of material misstatements, and/or (ii) significant accounts involving estimates and management's judgment, were also identified as business processes having greater materiality, taking into account their impact on financial reporting, and were included in the scope.

3. Results of the assessment

Based on the results of the assessment, we concluded that as of the end of the fiscal year ended December 31, 2019, the Company's internal control over financial reporting was effectively maintained.

Kaoru Ino

Representative Director, President and CEO

DIC Corporation

Deloitte.

Deloitte Touche Tohmatsu LLC Marunouchi Nijubashi Building 3-2-3 Marunouchi, Chiyoda-ku Tokyo 100-8360

Tel: +81 (3) 6213 1000 Fax: +81 (3) 6213 1005 www.deloitte.com/jp/en

INDEPENDENT AUDITOR'S REPORT

To the Board of Directors of DIC Corporation:

Report on the Consolidated Financial Statements

We have audited the accompanying consolidated balance sheet of DIC Corporation and its subsidiaries as of December 31, 2019, and the related consolidated statements of income, comprehensive income, changes in net assets, and cash flows for the year then ended, and a summary of significant accounting policies and other explanatory information.

Management's Responsibility for the Consolidated Financial Statements

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

Auditor's Responsibility

Our responsibility is to express an opinion on these consolidated financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in Japan. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the consolidated financial position of DIC Corporation and its subsidiaries as of December 31, 2019, and the consolidated results of their operations and their cash flows for the year then ended in accordance with accounting principles generally accepted in Japan.

Report on Internal Control

We have audited management's report on internal control over financial reporting of the consolidated financial statements of DIC Corporation as of December 31, 2019.

Management's Responsibility for Report on Internal Control

Management is responsible for designing and operating effective internal control over financial reporting and for the preparation and fair presentation of its report on internal control in accordance with assessment standards for internal control over financial reporting generally accepted in Japan. There is a possibility that misstatements may not be completely prevented or detected by internal control over financial reporting.

Auditor's Responsibility

Our responsibility is to express an opinion on management's report on internal control based on our audit. We conducted our internal control audit in accordance with auditing standards for internal control over financial reporting generally accepted in Japan. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether management's report on internal control is free from material misstatement.

An internal control audit involves performing procedures to obtain audit evidence about the results of the assessment of internal control over financial reporting in management's report on internal control. The procedures selected depend on the auditor's judgment, including the significance of effects on reliability of financial reporting. An internal control audit includes examining representations on the scope, procedures and results of the assessment of internal control over financial reporting made by management, as well as evaluating the overall presentation of management's report on internal control.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, management's report on internal control referred to above, which represents that the internal control over financial reporting of the consolidated financial statements of DIC Corporation as of December 31, 2019 is effectively maintained, presents fairly, in all material respects, the results of the assessment of internal control over financial reporting in accordance with assessment standards for internal control over financial reporting generally accepted in Japan.

March 26, 2020

Deloitle Touche Tolmaton LLC

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46) Investor Information and Corporate Data

(As of December 31, 2019)

Investor Information

Common Stock

DIC common stock is listed and traded on the Tokyo Stock Exchange. There were 38,885 shareholders of record on December 31, 2019. On the Tokyo Stock Exchange, the high and low prices for each quarter of the years 2019 and 2018 were as follows:

	20	19	2018		
	High	Low	High	Low	
Jan.–Mar.	¥3,635	¥3,170	¥4,525	¥3,360	
AprJun.	3,545	2,587	4,020	3,380	
JulSept.	3,130	2,534	4,135	3,340	
OctDec.	3,290	2,894	4,125	3,150	

¥96,556,692,787 (95,156,904 shares)					
Japanese individual investors and others					
13.3%					

		Number of Shares Owned (Thousands)	Percentage of Total				
Major Shareholders	SHOEI INC.	12,694	13.39%				
.,	The Master Trust Bank of Japan, Ltd. (Trust Account)	6,893	7.27				
	Japan Trustee Services Bank, Ltd. (Trust Account)	5,009	5.28				
	The Dai-ichi Life Insurance Company, Limited	3,500	3.69				
	JP MORGAN CHASE BANK 385632	2,851	3.01				
	Japan Trustee Services Bank, Ltd. (Trust Account 4)	2,619	2.76				
	SMBC Nikko Securities Inc.	2,258	2.38				
	Aioi Nissay Dowa Insurance Co., Ltd.	2,020	2.13				
	NIPPON LIFE INSURANCE COMPANY	1,900	2.00				
	Japan Trustee Services Bank, Ltd. (Trust Account 7)	1,733	1.83				
		41,477	43.74%				
Transfer Agent	Mitsubishi UFJ Trust and Banking C	orporation					
	10-11, Higashisuna 7-chome, Koto-ku, Tokyo						
	137-8081, Japan						
Meeting of Shareholders	Our annual meeting of shareholder	s is held in N	/larch.				

For Further Information, Contact: Corporate Communications Dept.

DIC Corporation

Tokyo 103-8233, Japan Tel.: (03) 6733-3033 E-mail: prir@ma.dic.co.jp

DIC Building, 7-20, Nihonbashi 3-chome, Chuo-ku,

Corporate Data

Registered Address

35-58, Sakashita 3-chome, Itabashi-ku, Tokyo 174-8520, Japan

Corporate Headquarters

DIC Building, 7-20, Nihonbashi 3-chome, Chuo-ku, Tokyo 103-8233, Japan Tel.: (03) 6733-3000 http://www.dic-global.com/

Principal Domestic Offices, Plants and Laboratories (Nonconsolidated)

Number of Branch Offices: 2 Number of Plants: 9 Number of Laboratories: 1

Number of Employees

20,513

Date of Foundation

February 15, 1908

Date of Incorporation

March 15, 1937

