

FINANCIAL SECTION

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Ten-Year Summary of Selected Financial Data

Toray Industries, Inc. and Consolidated Subsidiaries
Years ended March 31

	2010	2011	2012
Net sales	¥ 1,359,631	¥ 1,539,693	¥ 1,588,604
Fibers & Textiles	525,204	584,115	638,375
Performance Chemicals	—	—	—
Carbon Fiber Composite Materials	50,676	67,018	69,914
Environment & Engineering	159,787	178,183	170,247
Life Science	46,656	52,430	55,554
Others	14,140	13,621	13,295
Plastics & Chemicals	332,735	382,299	397,815
IT-related Products	230,433	262,027	243,404
Operating income	40,107	100,087	107,721
Income (loss) before income taxes	(2,415)	82,893	101,091
Net income (loss) attributable to owners of parent	(14,158)	57,925	64,218
Net cash provided by operating activities	166,215	129,214	104,410
Depreciation and amortization	74,904	70,479	67,443
Capital expenditures	57,073	55,942	98,384
Total assets	1,556,796	1,567,470	1,581,501
Property, plant and equipment, net	580,344	531,595	561,923
Interest-bearing liabilities	632,160	493,509	481,906
Net assets	518,216	640,970	674,149

Per share of common stock:

Net income (loss) attributable to owners of parent:

Basic	¥ (10.12)	¥ 36.41	¥ 39.41
Diluted	—	34.43	37.46
Cash dividends	5.00	7.50	10.00
Net assets	336.65	363.90	384.90

Ratios:

Operating income to net sales	2.95	6.50	6.78
Net income (loss) attributable to owners of parent to net sales	(1.04)	3.76	4.04
Equity ratio	30.3	37.8	39.7
Return on equity	(3.0)	10.9	10.5
Debt/equity ratio (times)	1.34	0.83	0.77

Common stock price range:

High	¥ 591	¥ 643	¥ 631
Low	390	420	511

Number of employees	37,936	38,740	40,227
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*1 Certain overseas subsidiaries adopted IAS 19 "Employee Benefits" (revised on June 16, 2011) effective from the year ended March 31, 2014. The related figures for the year ended March 31, 2013 are retrospectively restated accordingly.

*2 Toray Group changed the reportable segments effective from the year ended March 31, 2018. The related figures for the year ended March 31, 2017 are retrospectively restated accordingly.

*3 "Partial Amendments to Accounting Standard for Tax Effect Accounting" (Accounting Standards Board of Japan (ASBJ) Statement No. 28, February 16, 2018) is applied from the year ended March 31, 2019 and onward. The related figures for the year ended March 31, 2018 are retrospectively restated accordingly.

Millions of yen

2013 ^{*1}	2014	2015	2016	2017 ^{*2}	2018 ^{*3}	2019
¥ 1,592,279	¥ 1,837,778	¥ 2,010,734	¥ 2,104,430	¥ 2,026,470	¥ 2,204,858	¥ 2,388,848
632,150	755,474	856,676	892,039	856,124	913,610	974,265
—	—	—	—	724,648	803,310	868,847
77,620	113,342	158,365	186,196	161,608	177,949	215,913
178,355	180,197	179,988	183,324	212,548	238,256	257,673
56,599	58,205	57,039	55,841	54,150	53,803	53,653
14,127	14,277	14,321	14,720	17,392	17,930	18,497
395,835	470,542	496,370	521,238	—	—	—
237,593	245,741	247,975	251,072	—	—	—
83,436	105,253	123,481	154,480	146,893	156,464	141,469
77,828	97,760	114,469	137,808	139,012	136,612	127,419
48,477	59,608	71,021	90,132	99,418	95,915	79,373
100,815	161,455	141,282	196,142	173,958	129,180	176,239
67,588	78,743	81,480	91,168	89,073	95,815	101,711
99,135	118,207	124,929	136,556	152,039	153,324	172,696
1,731,933	2,119,683	2,357,925	2,278,386	2,396,785	2,575,910	2,788,351
627,240	781,235	855,593	830,612	881,434	927,029	996,876
532,002	654,163	700,258	704,253	716,399	816,325	976,251
778,626	944,625	1,080,757	1,024,909	1,100,176	1,169,188	1,213,944
						Yen
¥ 29.75	¥ 36.59	¥ 44.33	¥ 56.38	¥ 62.17	¥ 59.97	¥ 49.61
28.90	35.70	44.28	56.31	62.10	59.90	49.56
10.00	10.00	11.00	13.00	14.00	15.00	16.00
444.45	527.32	616.70	591.50	638.64	681.92	706.95
						%
5.24	5.73	6.14	7.34	7.25	7.10	5.92
3.04	3.24	3.53	4.28	4.91	4.35	3.32
41.8	40.5	41.8	41.5	42.6	42.3	40.6
7.2	7.5	7.7	9.3	10.1	9.1	7.1
0.73	0.76	0.71	0.74	0.70	0.75	0.86
						Yen
¥ 654	¥ 786	¥ 1,057.5	¥ 1,146.0	¥ 1,027.5	¥ 1,208.0	¥ 1,035.5
421	584	626	871.7	854.0	903.1	705.1
42,584	45,881	45,789	45,839	46,248	45,762	48,320

Management's Discussion and Analysis

OVERVIEW

For the year ended March 31, 2019, the global economy as a whole continued to recover gradually, underpinned by the strong U.S. economy amid prolonged pressure from the uncertain future weighing on the economy, but the pace of growth slowed in the second half of the fiscal year due to intensified trade frictions and the notable deceleration in the Chinese economy. The Japanese economy continued on its gradual recovery track, as both the corporate and household sectors remained steady in general, although there were some weaknesses in exports and production towards the end of the fiscal year.

At the same time, however, the rise in raw material and fuel prices had a negative impact on Toray Group's profit.

Under such circumstances, Toray Group, since April, 2017, has been working on the medium-term management program "Project AP-G 2019" that spans over three years through fiscal year 2019 and has been implementing the growth strategy with focus on taking advantage of growth business fields, pursuing business expansion in growth countries and regions as well as further bolstering its cost competitiveness.

INCOME ANALYSIS

Net Sales

Net sales for the year ended March 31, 2019 were in ¥2,388.8 billion, up by ¥184.0 billion (8.3%) from the previous year. Regarding the sales by business segment, net sales in the Fibers & Textiles, Performance Chemicals, Carbon Fiber Composite Materials, Environment & Engineering and Others segments increased, while those in the Life Science segment decreased.

Costs and Expenses

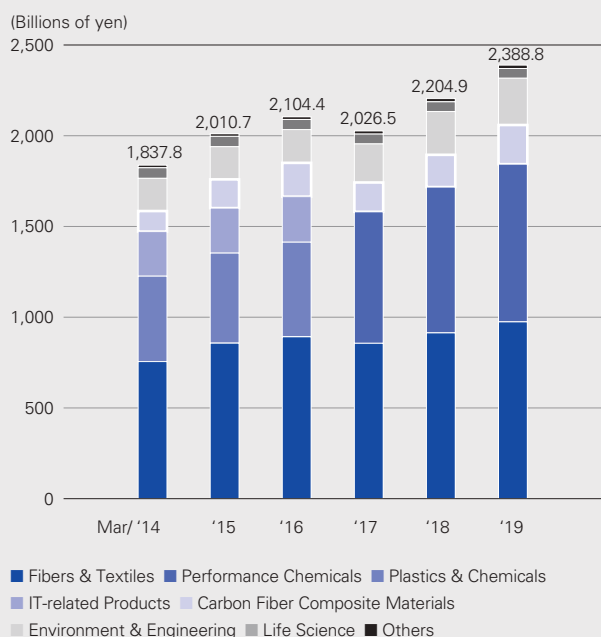
The ratio of total costs and expenses to net sales for the year ended March 31, 2019 was 94.1%, up 1.2 percentage points year on year.

Net sales and the cost of sales increased from the previous year by 8.3% and 10.7%, respectively. As a result, the cost of sales ratio rose by 1.7 percentage points to 81.0%.

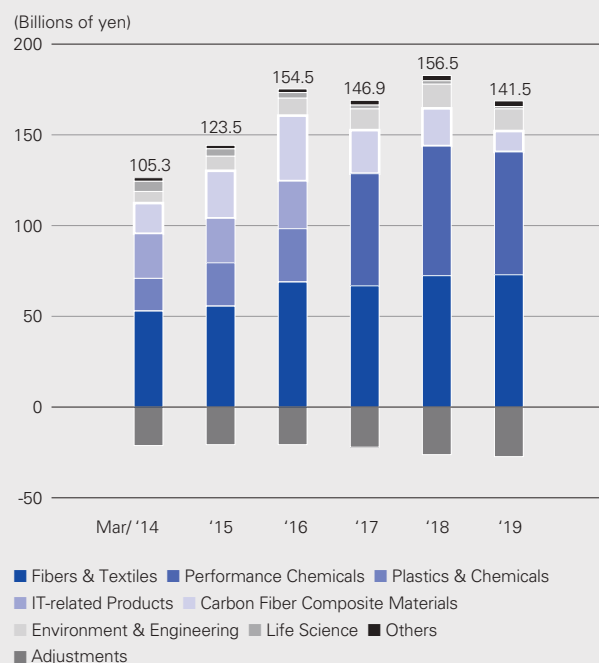
Selling, general and administrative expenses increased by ¥11.5 billion (3.8%) to ¥311.9 billion. The ratio of selling, general and administrative expenses to net sales declined by 0.6 percentage points to 13.1%.

R&D expenses increased by ¥0.1 billion (0.2%) to ¥66.4 billion.

Net Sales by Segment



Operating Income by Segment



*1 Toray Group changed the reportable segments effective from the year ended March 31, 2018. The related figures for the year ended March 31, 2017 are retrospectively restated accordingly.

*2 Operating income by segment that is not attributable to any segment is included in "Adjustments."

Operating Income and Net Income

Operating income fell by ¥15.0 billion (9.6%) year on year to ¥141.5 billion. The ratio of operating income to net sales declined by 1.2 percentage points to 5.9%. Operating income by business segment increased in the Fibers & Textiles and Others segments while decreasing in the Performance Chemicals, Carbon Fiber Composite Materials, Environment & Engineering, and Life Science segments.

In net other income (expenses), Toray Group reported net expenses of ¥14.1 billion in the year ended March 31, 2019, down by ¥5.8 billion (29.2%) from the previous year. Interest and dividend income increased by ¥1.7 billion (31.8%) to ¥6.9 billion, and interest expenses also climbed by ¥2.1 billion (40.7%). As a result, net financial expense of ¥0.3 billion was recorded in the year ended March 31, 2019, down ¥0.4 billion compared with the previous year. Equity in earnings of unconsolidated subsidiaries and affiliated companies rose by ¥0.4 billion (4.3%) year on year to ¥9.6 billion. Net gain on sales and disposal of property, plant and equipment came to ¥9.8 billion, a turnaround of ¥16.8 billion from the loss recorded in the previous year. Loss on impairment of fixed assets increased by ¥14.5 billion (366.9%) to ¥18.4 billion. Net loss on sales and loss on write-down of investment securities deteriorated by ¥4.1 billion year on year to ¥0.7 billion. In the year ended March 31, 2019, the Group posted a gain on return of assets from retirement benefit trust of ¥2.5 billion.

As a result of the aforementioned, income before income taxes declined by ¥9.2 billion (6.7%) year on year to ¥127.4 billion. After deductions for income taxes and net income attributable to non-controlling interests, net income attributable to owners of parent amounted to ¥79.4 billion, down ¥16.5 billion (17.2%) year on year.

Net income per share was ¥49.61, a decrease of ¥10.4. In light of profit conditions for the year ended March 31, 2019 and outlook for the next year, the total annual dividend for the year ended March 31, 2019 was set at ¥16.00 per share. This comprised an interim cash dividend of ¥8.00 per share and a year-end cash dividend of ¥8.00 per share.

Business Performance by Segment

Fibers & Textiles

In Japan, demand for industrial applications such as automobiles was strong in general, while shipment of apparel applications remained weak partly due to the unseasonable weather. Against this background, Toray Group not only strived to expand sales in each application but also worked to expand the business format that integrates fibers to textiles to final products while focusing on strengthening cost competitiveness.

Overseas, business performance of some subsidiaries in Southeast Asia remained slow, and was affected by a slowdown in demand for materials for automotive and other applications from the second half of the fiscal year, reflecting the deceleration of the Chinese economy. The Group expanded the integrated business for apparel applications.

The segment's business both in Japan and abroad was generally affected by the increase in raw material prices.

As a result, overall sales of Fibers & Textiles segment increased 6.6% to ¥974.3 billion from the previous year and operating income rose 0.6% to ¥72.9 billion.

Performance Chemicals

In the resins business, Toray Group expanded sales of automotive applications while passing on the rise in raw material prices to the sales price, but the business was affected by the economic slowdown in China. The chemicals business saw an improvement in the basic chemicals market and sales of fine chemical products also increased. In the films business, shipment of battery separator films for lithium-ion secondary batteries increased reflecting demand growth, while polyester films and other products were broadly affected by the increase in raw material prices. The electronic & information materials business was affected by the slowing demand in the smartphone market.

As a result, overall sales of Performance Chemicals segment increased 8.2% to ¥868.8 billion from the previous year. Operating income declined 5.1% to ¥67.7 billion.

Carbon Fiber Composite Materials

In the Carbon Fiber Composite Materials segment, demand for aircraft applications was mostly strong given the completion of the inventory adjustment in the supply chain. Demand for industrial applications showed a recovery trend for the most part, primarily in the environment and energy-related fields led by compressed natural gas tank applications and wind turbine blade applications.

However, the segment was affected by rising raw material prices and intensifying competition. The cost of starting a new project at a composite subsidiary overseas increased and the segment also incurred fees related to the acquisition of the entire stake in TenCate Advanced Composites Holding B.V.

As a result, overall sales of Carbon Fiber Composite Materials segment increased 21.3% to ¥215.9 billion from the previous year while operating income fell 44.4% to ¥11.5 billion.

Environment & Engineering

In the water treatment business, demand for reverse osmosis membranes and other products grew strongly on the whole in Japan and abroad. Among domestic subsidiaries in the segment, the trading volume of a trading subsidiary increased, while an engineering subsidiary outside Japan was affected by the conclusion of a large-scale plant construction project.

As a result, overall sales of Environment & Engineering segment increased 8.1% to ¥257.7 billion from the previous year while operating income declined 7.9% to ¥12.2 billion.

Life Science

In the pharmaceutical business, while sales volume of orally active prostacyclin derivative DORNER® increased in the overseas markets, the sales were affected by its generic versions and the revision of National Health Insurance drug price standards in Japan. Sales of pruritus treatment REMITCH®* were influenced by the market entry of its generic versions.

The medical devices business was affected by the reduction of the insurance reimbursement amount in Japan and the increase in raw material prices, while shipment of dialyzers grew strongly in Japan and overseas and sales volume of dialysis machines also expanded.

As a result, overall sales of Life Science segment declined 0.3% to ¥53.7 billion from the previous year and operating income fell 33.0% to ¥1.3 billion.

*REMITCH® is a registered trademark of Torii Pharmaceutical Co., Ltd.

Others

Net sales increased by ¥0.6 billion (3.2%) from the previous year to ¥18.5 billion, and operating income as well increased by ¥0.2 billion (6.5%) to ¥3.1 billion.

FINANCIAL POSITION

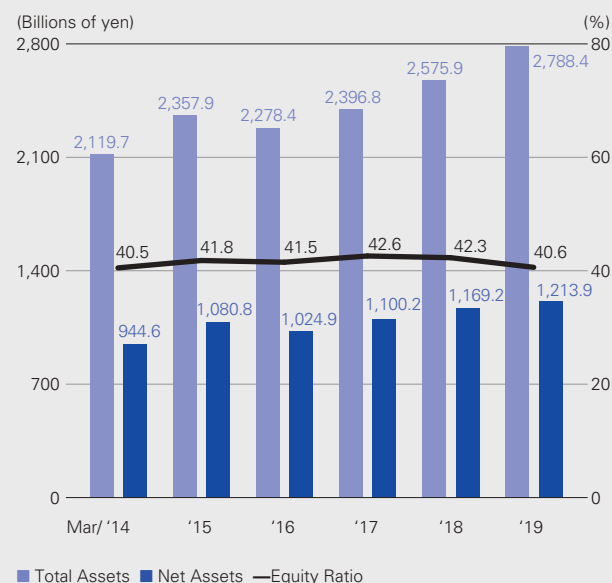
Toray Group adopted "Partial Amendments to Accounting Standard for Tax Effect Accounting" (ASBJ Statement No. 28, February 16, 2018) effective from the year ended March 31, 2019. The following analysis of financial position bases on the accordingly restated figures for the year ended March 31, 2018.

Analysis of Assets, Liabilities and Net Assets

As of March 31, 2019, Toray Group's total assets stood at ¥2,788.4 billion, up ¥212.4 billion from the end of the previous year. Current assets rose ¥64.3 billion as trade notes and accounts receivable increased, while noncurrent assets expanded ¥148.1 billion due to increases in property, plant and equipment and intangible assets.

Total liabilities rose ¥167.7 billion from the end of the previous year to ¥1,574.4 billion, due primarily to an increase in interest-bearing debts.

Total Assets and Net Assets



* "Partial Amendments to Accounting Standard for Tax Effect Accounting" (ASBJ Statement No. 28, February 16, 2018) is applied from the year ended March 31, 2019 and onward. The related figures for the year ended March 31, 2018 are retrospectively restated accordingly.

Net assets expanded by ¥44.8 billion compared with the end of the previous year to ¥1,213.9 billion, reflecting an increase in retained earnings due to recognition of net income for the year. Net assets less non-controlling interests and stock acquisition rights stood at ¥1,131.0 billion. The equity ratio at the end of the year came to 40.6%, a 1.8 percentage-point decrease compared with the level at the end of the previous year.

CASH FLOWS

For the year ended March 31, 2019, net cash used in investing activities exceeded net cash provided by operating activities by ¥84.0 billion. Meanwhile, net cash provided by financing activities came to ¥118.9 billion owing mainly to the increase in interest-bearing liabilities. As a result, after counting exchange rate changes and cash and cash equivalents at subsidiaries not previously included in consolidation, cash and cash equivalents as of March 31, 2019 amounted to ¥173.1 billion, up by ¥38.8 billion (28.9%) compared with the end of the previous year on a consolidated basis.

Cash Flows from Operating Activities

Net cash provided by operating activities increased by ¥47.1 billion (36.4%) compared with the previous year to ¥176.2 billion.

Looking at major movements, the increase in trade receivables was held to ¥33.6 billion compared with ¥62.0 billion in the previous year. In the year ended March 31, 2019, the Group reported a decrease in inventories of ¥28.4 billion compared with an increase of ¥31.5 billion for the previous year and a decrease in trade payables of ¥11.8 billion compared with an increase of ¥11.6 billion in the previous year.

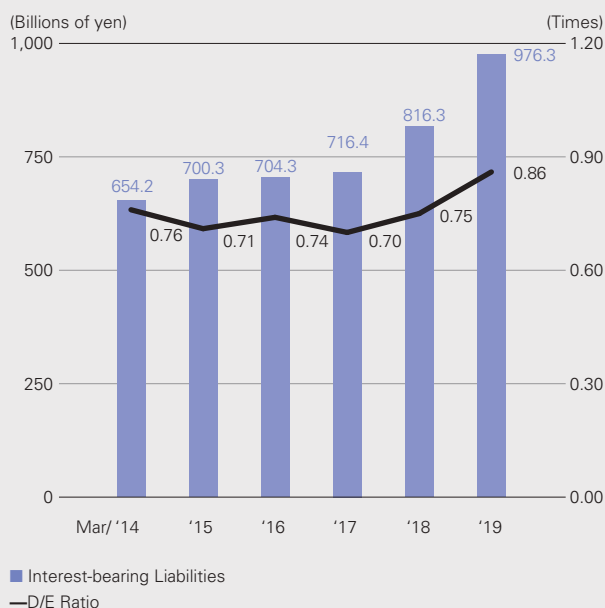
Cash Flows from Investing Activities

Net cash used in investing activities totaled ¥260.2 billion, up ¥73.6 billion (39.4%) compared with the previous year. This largely reflected payments for the purchase of shares in subsidiary companies that resulted in a change in the scope of consolidation of ¥114.6 billion compared with ¥2.7 billion for the previous year.

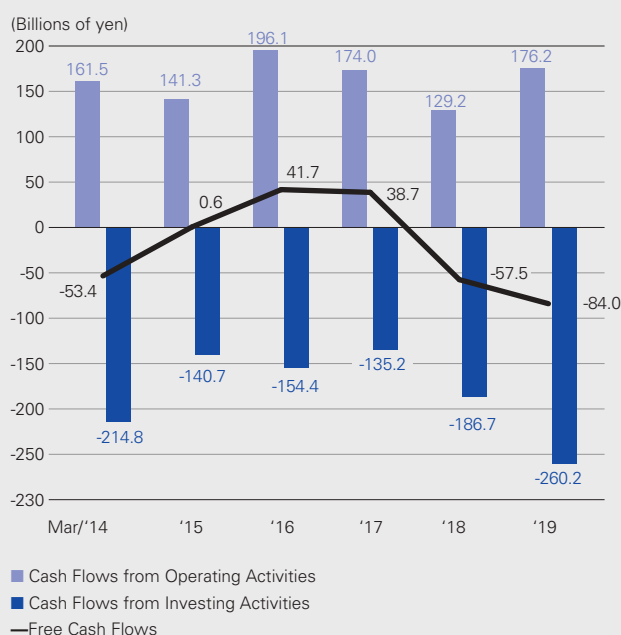
Cash Flows from Financing Activities

Net cash provided by financing activities came to ¥118.9 billion, up by ¥57.1 billion compared with the previous year. Major cash-decreasing factors included a net decrease in short-term debt of ¥18.6 billion compared with a net increase of ¥30.5 billion for the previous year and repayment of long-term debt of ¥66.8 billion, down by ¥44.6 billion from the previous year. The major cash-increasing factor, on the other hand, was proceeds from long-term debt of ¥234.5 billion, up by ¥55.6 billion year on year.

Interest-bearing Liabilities and D/E Ratio



Cash Flows



Consolidated Balance Sheets

Toray Industries, Inc. and Consolidated Subsidiaries
March 31, 2019 and 2018

	Millions of yen		Thousands of U.S. dollars (Note 2)
Assets	2019	2018	2019
Current assets:			
Cash (Note 5)	¥ 140,701	¥ 108,379	\$ 1,267,577
Time deposits (Notes 4 and 5)	27,806	32,722	250,505
Trade receivables (Notes 5 and 7):			
Notes receivable	56,346	55,499	507,622
Accounts receivable	474,712	434,050	4,276,685
Inventories (Note 3)	419,527	439,673	3,779,523
Prepaid expenses and other current assets (Notes 5 and 6)	74,517	58,739	671,324
Allowance for doubtful accounts	(2,280)	(2,037)	(20,541)
Total current assets	1,191,329	1,127,025	10,732,694
Property, plant and equipment (Notes 4 and 13):			
Land	77,687	78,370	699,883
Buildings	651,084	631,681	5,865,622
Machinery and equipment	1,989,553	1,902,003	17,923,901
Construction in progress	143,847	120,514	1,295,919
Other	121,512	115,121	1,094,703
	2,983,683	2,847,689	26,880,027
Accumulated depreciation	(1,986,807)	(1,920,660)	(17,899,162)
Property, plant and equipment, net	996,876	927,029	8,980,865
Intangible assets (Note 13):			
Goodwill	85,712	40,146	772,180
Other	85,537	28,501	770,604
Total intangible assets	171,249	68,647	1,542,784
Investments and other assets:			
Investments in unconsolidated subsidiaries and affiliated companies (Note 5)	163,052	172,315	1,468,937
Investment securities (Notes 4, 5 and 6)	188,000	201,314	1,693,694
Long-term loans receivable	2,477	1,447	22,315
Deferred tax assets (Note 10)	21,978	21,539	198,000
Other (Notes 4 and 8)	56,171	59,555	506,045
Allowance for doubtful accounts	(2,781)	(2,961)	(25,054)
Total investments and other assets	428,897	453,209	3,863,937
Total assets	¥ 2,788,351	¥ 2,575,910	\$ 25,120,279

See accompanying notes to consolidated financial statements.

Liabilities and Net Assets	Millions of yen		Thousands of U.S. dollars (Note 2)
	2019	2018	2019
Current liabilities:			
Short-term bank loans (Notes 4 and 5)	¥ 175,567	¥ 135,936	\$ 1,581,685
Current portion of long-term debt (Notes 4, 5 and 7)	94,094	63,203	847,694
Commercial paper (Note 5)	—	46,000	—
Trade payables (Notes 5 and 7):			
Notes payable	38,824	38,433	349,766
Accounts payable	201,730	207,117	1,817,387
Income taxes payable (Note 10)	13,578	13,966	122,324
Accrued liabilities	64,850	62,363	584,234
Other current liabilities (Note 4)	107,850	109,478	971,622
Total current liabilities	696,493	676,496	6,274,712
Non-current liabilities:			
Long-term debt (Notes 4, 5 and 7)	702,761	567,657	6,331,180
Deferred tax liabilities (Note 10)	48,758	31,387	439,261
Net defined benefit liability (Note 8)	100,730	101,786	907,477
Other non-current liabilities (Note 4)	25,665	29,396	231,216
Total non-current liabilities	877,914	730,226	7,909,135
Total liabilities	1,574,407	1,406,722	14,183,847
Net assets (Note 11):			
Stockholders' equity:			
Common stock:			
Authorized—4,000,000,000 shares	147,873	147,873	1,332,189
Issued—1,631,481,403 shares			
Capital surplus	117,760	117,572	1,060,901
Retained earnings	817,263	763,504	7,362,730
Treasury stock, at cost	(20,358)	(20,631)	(183,405)
Total stockholders' equity	1,062,538	1,008,318	9,572,414
Accumulated other comprehensive income:			
Net unrealized gains (losses) on securities	64,662	74,290	582,541
Net deferred gains (losses) on hedges	75	(901)	676
Foreign currency translation adjustments	896	4,830	8,072
Remeasurements of defined benefit plans	2,862	4,158	25,784
Total accumulated other comprehensive income	68,495	82,377	617,072
Stock acquisition rights (Note 9)	1,338	1,334	12,054
Non-controlling interests	81,573	77,159	734,892
Total net assets	1,213,944	1,169,188	10,936,432
Total liabilities and net assets	¥ 2,788,351	¥ 2,575,910	\$ 25,120,279

Consolidated Statements of Income

Toray Industries, Inc. and Consolidated Subsidiaries
Years ended March 31, 2019 and 2018

	Millions of yen		Thousands of U.S. dollars (Note 2)
	2019	2018	2019
Net sales	¥ 2,388,848	¥ 2,204,858	\$ 21,521,153
Costs and expenses:			
Cost of sales (Notes 3, 8, 13 and 14)	1,935,486	1,748,017	17,436,811
Selling, general and administrative expenses (Notes 8, 9, 13 and 14)	311,893	300,377	2,809,847
	2,247,379	2,048,394	20,246,658
Operating income	141,469	156,464	1,274,495
Other income (expenses):			
Interest expenses	(7,161)	(5,091)	(64,514)
Interest and dividend income	6,883	5,222	62,009
Equity in earnings of unconsolidated subsidiaries and affiliated companies	9,619	9,221	86,658
Gain (loss) on sales and disposal of property, plant and equipment, net	9,751	(7,084)	87,847
Loss on impairment of fixed assets (Note 15)	(18,414)	(3,944)	(165,892)
Gain (loss) on sales and loss on write-down of investment securities, net	(625)	3,445	(5,631)
Loss on liquidation and devaluation of subsidiaries and affiliated companies	(673)	(3,591)	(6,063)
Gain on return of assets from retirement benefits trust	2,532	—	22,811
Environmental expenses	—	(2,597)	—
Settlement package	(864)	—	(7,784)
Other, net	(15,098)	(15,433)	(136,018)
	(14,050)	(19,852)	(126,577)
Income before income taxes	127,419	136,612	1,147,919
Income taxes (Note 10):			
Current	37,293	34,851	335,973
Deferred	2,338	(1,419)	21,063
	39,631	33,432	357,036
Net income	87,788	103,180	790,883
Net income attributable to non-controlling interests	8,415	7,265	75,811
Net income attributable to owners of parent	¥ 79,373	¥ 95,915	\$ 715,072

See accompanying notes to consolidated financial statements.

Consolidated Statements of Comprehensive Income

Toray Industries, Inc. and Consolidated Subsidiaries
Years ended March 31, 2019 and 2018

	Millions of yen		Thousands of U.S. dollars (Note 2)
	2019	2018	2019
Net income	¥ 87,788	¥ 103,180	\$ 790,883
Other comprehensive income (Note 16)			
Net unrealized gains (losses) on securities	(9,579)	8,100	(86,297)
Net deferred gains (losses) on hedges	1,064	(997)	9,586
Foreign currency translation adjustments	(4,767)	(5,820)	(42,946)
Remeasurements of defined benefit plans	(1,325)	2,635	(11,937)
Share of other comprehensive income of unconsolidated subsidiaries and affiliated companies accounted for by the equity method	(605)	(1,770)	(5,450)
Total other comprehensive income	(15,212)	2,148	(137,045)
Comprehensive income	¥ 72,576	¥ 105,328	\$ 653,838
Total comprehensive income attributable to:			
Owners of parent	¥ 65,491	¥ 96,452	\$ 590,009
Non-controlling interests	7,085	8,876	63,829

See accompanying notes to consolidated financial statements.

Consolidated Statements of Changes in Net Assets

Toray Industries, Inc. and Consolidated Subsidiaries
Years ended March 31, 2019 and 2018

	Millions of yen												
	Stockholders' equity					Accumulated other comprehensive income							
	Common stock	Capital surplus	Retained earnings	Treasury stock, at cost	Total stockholders' equity	Net unrealized gains (losses) on securities	Net deferred gains (losses) on hedges	Foreign currency translation adjustments	Remeasurements of defined benefit plans	Total accumulated other comprehensive income	Stock acquisition rights	Non-controlling interests	Total net assets
Balance as of April 1, 2017	¥ 147,873	¥ 121,091	¥ 691,290	¥ (20,822)	¥ 939,432	¥ 66,513	¥ 21	¥ 13,764	¥ 1,542	¥ 81,840	¥ 1,205	¥ 77,699	¥ 1,100,176
Changes in:													
Dividends			(22,402)		(22,402)								(22,402)
Net income attributable to owners of parent			95,915		95,915								95,915
Purchase of treasury stock				(3)	(3)								(3)
Disposition of treasury stock		2		194	196								196
Change in equity attributable to parent arising from transaction with non-controlling shareholders		(3,521)			(3,521)								(3,521)
Other			(1,299)		(1,299)								(1,299)
Items other than stockholders' equity, net						7,777	(922)	(8,934)	2,616	537	129	(540)	126
Total changes	—	(3,519)	72,214	191	68,886	7,777	(922)	(8,934)	2,616	537	129	(540)	69,012
Balance as of March 31, 2018	¥ 147,873	¥ 117,572	¥ 763,504	¥ (20,631)	¥ 1,008,318	¥ 74,290	¥ (901)	¥ 4,830	¥ 4,158	¥ 82,377	¥ 1,334	¥ 77,159	¥ 1,169,188
Balance as of April 1, 2018	¥ 147,873	¥ 117,572	¥ 763,504	¥ (20,631)	¥ 1,008,318	¥ 74,290	¥ (901)	¥ 4,830	¥ 4,158	¥ 82,377	¥ 1,334	¥ 77,159	¥ 1,169,188
Changes in:													
Dividends			(25,608)		(25,608)								(25,608)
Net income attributable to owners of parent			79,373		79,373								79,373
Purchase of treasury stock				(2)	(2)								(2)
Disposition of treasury stock		14		273	287								287
Change in equity attributable to parent arising from transaction with non-controlling shareholders		174			174								174
Other			(6)	2	(4)								(4)
Items other than stockholders' equity, net						(9,628)	976	(3,934)	(1,296)	(13,882)	4	4,414	(9,464)
Total changes	—	188	53,759	273	54,220	(9,628)	976	(3,934)	(1,296)	(13,882)	4	4,414	44,756
Balance as of March 31, 2019	¥ 147,873	¥ 117,760	¥ 817,263	¥ (20,358)	¥ 1,062,538	¥ 64,662	¥ 75	¥ 896	¥ 2,862	¥ 68,495	¥ 1,338	¥ 81,573	¥ 1,213,944

	Thousands of U.S. dollars (Note 2)												
	Stockholders' equity					Accumulated other comprehensive income							
	Common stock	Capital surplus	Retained earnings	Treasury stock, at cost	Total stockholders' equity	Net unrealized gains (losses) on securities	Net deferred gains (losses) on hedges	Foreign currency translation adjustments	Remeasurements of defined benefit plans	Total accumulated other comprehensive income	Stock acquisition rights	Non-controlling interests	Total net assets
Balance as of April 1, 2018	\$ 1,332,189	\$ 1,059,207	\$ 6,878,414	\$ (185,865)	\$ 9,083,946	\$ 669,279	\$ (8,117)	\$ 43,514	\$ 37,459	\$ 742,135	\$ 12,018	\$ 695,126	\$ 10,533,225
Changes in:													
Dividends			(230,703)		(230,703)								(230,703)
Net income attributable to owners of parent			715,072		715,072								715,072
Purchase of treasury stock				(18)	(18)								(18)
Disposition of treasury stock		126		2,459	2,586								2,586
Change in equity attributable to parent arising from transaction with non-controlling shareholders		1,568			1,568								1,568
Other			(54)	18	(36)								(36)
Items other than stockholders' equity, net						(86,739)	8,793	(35,441)	(11,676)	(125,063)	36	39,766	(85,261)
Total changes	—	1,694	484,315	2,459	488,468	(86,739)	8,793	(35,441)	(11,676)	(125,063)	36	39,766	403,207
Balance as of March 31, 2019	\$ 1,332,189	\$ 1,060,901	\$ 7,362,730	\$ (183,405)	\$ 9,572,414	\$ 582,541	\$ 676	\$ 8,072	\$ 25,784	\$ 617,072	\$ 12,054	\$ 734,892	\$ 10,936,432

See accompanying notes to consolidated financial statements.

DATA

Consolidated Statements of Cash Flows

Toray Industries, Inc. and Consolidated Subsidiaries
Years ended March 31, 2019 and 2018

	Millions of yen		Thousands of U.S. dollars (Note 2)
	2019	2018	2019
Cash flows from operating activities:			
Income before income taxes	¥ 127,419	¥ 136,612	\$ 1,147,919
Adjustments to reconcile income before income taxes to net cash provided by operating activities:			
Depreciation and amortization	101,711	95,815	916,315
Loss on impairment of fixed assets	18,414	3,944	165,892
Interest and dividend income	(6,883)	(5,222)	(62,009)
Equity in earnings of unconsolidated subsidiaries and affiliated companies	(9,619)	(9,221)	(86,658)
Interest expenses	7,161	5,091	64,514
Loss (gain) on sales and disposal of property, plant and equipment, net	(9,751)	7,084	(87,847)
Loss (gain) on sales and write-down of investment securities, net	666	(3,239)	6,000
Increase (decrease) in net defined benefit liability	(1,451)	193	(13,072)
Decrease (increase) in trade receivables	(33,582)	(61,969)	(302,541)
Decrease (increase) in inventories	28,427	(31,492)	256,099
Increase (decrease) in trade payables	(11,843)	11,594	(106,694)
Other, net	(464)	3,271	(4,180)
Subtotal	210,205	152,461	1,893,739
Interest and dividends received	15,704	16,111	141,477
Interest paid	(7,098)	(5,052)	(63,946)
Income taxes paid	(42,572)	(34,340)	(383,532)
Net cash provided by operating activities	176,239	129,180	1,587,739
Cash flows from investing activities:			
Capital expenditures	(169,630)	(147,925)	(1,528,198)
Purchase of investment securities	(4,131)	(67,274)	(37,216)
Proceeds from sales of property, plant and equipment	19,254	2,996	173,459
Proceeds from sales of investment securities	8,387	13,421	75,559
Acquisition of shares of consolidated subsidiaries resulting in change in scope of consolidation (Note 18)	(114,564)	(2,654)	(1,032,108)
Other, net	437	14,751	3,937
Net cash used in investing activities	(260,247)	(186,685)	(2,344,568)
Cash flows from financing activities:			
Net increase (decrease) in short-term debt	(18,596)	30,520	(167,532)
Proceeds from long-term debt	234,530	178,912	2,112,883
Repayment of long-term debt	(66,843)	(111,446)	(602,189)
Cash dividends paid	(29,875)	(24,439)	(269,144)
Payments from changes in ownership interests in subsidiaries that do not result in change in scope of consolidation	(344)	(10,480)	(3,099)
Other, net	19	(1,294)	171
Net cash provided by (used in) financing activities	118,891	61,773	1,071,090
Effect of exchange rate changes on cash and cash equivalents	(327)	(1,924)	(2,946)
Net increase (decrease) in cash and cash equivalents	34,556	2,344	311,315
Cash and cash equivalents at beginning of year	134,315	131,405	1,210,045
Beginning balance of cash and cash equivalents at subsidiaries not previously included in consolidation	4,207	566	37,901
Cash and cash equivalents at end of year	¥ 173,078	¥ 134,315	\$ 1,559,261

See accompanying notes to consolidated financial statements.

Notes to Consolidated Financial Statements

Toray Industries, Inc. and Consolidated Subsidiaries
Years ended March 31, 2019 and 2018

1. SIGNIFICANT ACCOUNTING POLICIES

a) Basis of Presenting Consolidated Financial Statements

The accompanying consolidated financial statements of Toray Industries, Inc. (the Company) and its consolidated subsidiaries have been prepared in accordance with the provisions set forth in the Financial Instruments and Exchange Act of Japan and its related accounting regulations, and in conformity with accounting principles and practices generally accepted in Japan, which are different in certain respects as to application and disclosure requirements of International Financial Reporting Standards.

For the preparation of consolidated financial statements, the accounting policies and procedures applied to a parent company and its subsidiaries for similar transactions and events under similar circumstances should be unified, in principle. However, financial statements prepared by overseas subsidiaries in accordance with International Financial Reporting Standards or the generally accepted accounting principles in the United States tentatively may be used for the consolidation process. In addition, some items should be adjusted in the consolidation process so that net income is accurately accounted for, unless they are not material.

Certain items presented in the original consolidated financial statements in Japanese have been reclassified for the convenience of readers outside Japan.

b) Principles of Consolidation

The accompanying consolidated financial statements include the accounts of the Company and substantially all of its subsidiaries.

Assets and liabilities of the consolidated subsidiaries are revalued to fair market value when the Company acquires control over the subsidiaries.

Investments in unconsolidated subsidiaries and affiliated companies are accounted for by the equity method.

All intercompany accounts and transactions have been eliminated in consolidation. The difference between the acquisition cost and the underlying net assets of the subsidiaries is recognized as goodwill and amortized principally over its estimated useful life not exceeding twenty years on a straight-line method.

c) Cash and Cash Equivalents

Cash and cash equivalents at March 31, 2019 and 2018 include cash, short-term time deposits which may be withdrawn on demand without diminution of principal and highly liquid investments with original maturities of three months or less.

Cash and cash equivalents consisted of:

	Millions of yen		Thousands of U.S. dollars
	2019	2018	2019
Cash	¥140,701	¥108,379	\$1,267,577
Time deposits	27,806	32,722	250,505
Less—Time deposits with maturities of over 3 months	(2,841)	(6,786)	(25,595)
Marketable securities with original maturities of 3 months or less	7,412	—	66,775
Cash and cash equivalents	¥173,078	¥134,315	\$1,559,261

d) Financial Instruments

Derivatives:

All derivatives are stated at fair value, with changes in fair value included in net income or loss for the period in which they arise, except for derivatives that are designated as “hedging instruments” (see Hedge Accounting below).

Securities:

Held-to-maturity debt securities that the Company and its consolidated subsidiaries have the intent to hold to maturity, are stated at cost after accounting for premium or discount on acquisition, which are amortized over the period to maturity.

Other securities for which market quotations are available are stated at fair value. Net unrealized gains or losses on these securities are reported as a separate item in net assets at a net-of-tax amount.

Other securities for which market quotations are unavailable are stated at cost, except as stated in the paragraph below.

In cases where the fair value of held-to-maturity debt securities or other securities has declined significantly and such impairment of the value is not deemed temporary, those securities are written down to fair value and the resulting losses are included in net income or loss for the period.

Hedge Accounting:

Gains or losses arising from changes in fair value of derivatives designated as “hedging instruments” are deferred as a separate item of net assets at a net-of-tax amount and included in net income or loss in the same period during which the gains and losses on the hedged items or transactions are recognized.

The derivatives designated as hedging instruments by the Company and its consolidated subsidiaries are principally interest rate swaps and forward foreign exchange contracts. The related hedged items are trade accounts receivable and payable, long-term bank loans and debt securities issued by the Company and its consolidated subsidiaries.

The Company and its consolidated subsidiaries have a policy to utilize the above hedging instruments in order to reduce their exposure to the risk of interest rate and foreign currency fluctuations. Thus, their purchase of the hedging instruments are limited to, at maximum, the amounts of the hedged items.

The Company and its consolidated subsidiaries evaluate the effectiveness of hedging activities by reference to the accumulated gains or losses on the hedging instruments and the related hedged items from the commencement of the hedges.

e) Allowance for Doubtful Accounts

In the Company and its domestic consolidated subsidiaries, an allowance for doubtful accounts, including receivables and loans, is determined from the amounts considered unlikely to be recovered, estimated from past actual bad debt ratio records for general receivables and from studying the probability of recovery in individual cases where there is concern over claims.

f) Inventories

Inventories are stated at the lower of acquisition cost, principally determined by the moving average method, or net selling value to reflect any decreased profitability of inventories.

g) Property, Plant and Equipment

Property, plant and equipment are stated at cost.

Depreciation for property, plant and equipment (except leased assets) is principally computed by the straight-line method at rates based on estimated useful lives that are as follows:

Buildings	3–60 years
Machinery and equipment	3–15 years

Principally, a depreciation method of leased assets is identical to the method applicable to its own fixed assets.

h) Income Taxes

Income taxes of the Company and its domestic consolidated subsidiaries consist of corporate income taxes, local inhabitants taxes and enterprise taxes. Deferred income taxes are determined using the asset and liability approach, where deferred tax assets and liabilities are recognized for temporary differences between the tax basis of assets and liabilities and their reported amount in the financial statements. The Company also provides for the anticipated tax effect of future remittances of retained earnings from subsidiaries and affiliated companies.

The Company and some of its consolidated subsidiaries file consolidated tax returns in their respective countries.

i) Consumption Taxes

Transactions subject to consumption taxes are recorded at amounts exclusive of consumption taxes.

j) Retirement Benefits

The Company and some of its consolidated subsidiaries have unfunded lump-sum benefit plans, funded contributory pension plans and/or defined contribution pension plans covering eligible employees.

Under the terms of the unfunded lump-sum benefit plans, eligible employees are entitled under most circumstances, upon mandatory retirement or earlier voluntary severance, to indemnities based on compensation at the time of severance and years of service.

The funded contributory pension plans and the defined contribution pension plans provide, in general, pension payments for life commencing from age 60.

To provide for the payment of retirement benefits to employees, net defined benefit liability is recognized at an amount equal to the expected retirement benefit obligations net of the fair value of pension assets at the end of the period.

Past service cost is amortized as incurred using the straight-line method over a certain period within the employees' average remaining years of service (primarily 12 years).

Actuarial gains and losses are amortized from the following fiscal year after recognition using the straight-line method over a certain period within the employees' average remaining years of service (primarily 12 years).

Unrecognized actuarial gains and losses and unrecognized past service cost are recognized in remeasurements of defined benefit plans in accumulated other comprehensive income under the net assets section, net of deferred taxes.

An allowance is separately provided against retirement benefits for the members of the boards of some consolidated subsidiaries and is included in "other non-current liabilities" on the consolidated balance sheets. The amount is calculated based on the internal company policies as the estimated amount that would be payable if all such board members were to retire at the balance sheet date.

k) Appropriation of Retained Earnings

Cash dividends are recorded in the fiscal year when the proposed appropriation of retained earnings is approved by the Board of Directors and/or stockholders.

l) Foreign Currency Transactions

All monetary assets and liabilities denominated in foreign currencies, whether long-term or short-term, are translated into Japanese yen at the exchange rates prevailing at the balance sheet date. Resulting gains and losses are included in net income or loss for the period.

m) Translation of Foreign Currency Financial Statements

Translation of foreign currency financial statements of overseas subsidiaries into Japanese yen for consolidation purposes is made by using the current exchange rates prevailing at their balance sheet dates, with the exception that the translation of stockholders' equity is made by using historical rates. Revenue and expense accounts are principally translated at the average exchange rates during the year. Differences in yen amounts arising from the use of different rates are presented as "foreign currency translation adjustments" in net assets except for the portion belonging to non-controlling shareholders, which is included in "non-controlling interests" in net assets.

n) Standards Issued but Not Yet Adopted

Accounting Standard and Implementation Guidance on Revenue Recognition

On March 30, 2018, the Accounting Standards Board of Japan (ASBJ) issued "Accounting Standard for Revenue Recognition" (ASBJ Statement No. 29) and "Implementation Guidance on Accounting Standard for Revenue Recognition" (ASBJ Guidance No. 30).

(1) Overview

This is a comprehensive accounting standard for revenue recognition. The standard establishes the following five-step model that an entity applies when recognizing revenue from customers:

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

(2) Scheduled Date of Adoption

The Company is currently deciding the date of adopting this accounting standard and implementation guidance.

(3) Impact of Adoption

The Company is currently evaluating the effect of adopting this accounting standard and implementation guidance on its consolidated financial statements.

Leases (IFRS 16)

(1) Overview

This accounting standard primarily requires that lessees recognize right-of-use assets and lease liabilities for basically all leases.

(2) Scheduled Date of Adoption

Subsidiaries outside of Japan are going to adopt this standard starting from the beginning of the year ending March 31, 2020.

(3) Impact of Adoption

The Company is currently evaluating the effect of adopting this accounting standard on its consolidated financial statements.

o) Changes in Presentation

Partial Amendments to Accounting Standard for Tax Effect Accounting

The Company and its consolidated subsidiaries have adopted "Partial Amendments to Accounting Standard for Tax Effect Accounting" (ASBJ Statement No. 28, February 16, 2018) (the Partial Amendments) from the beginning of the year ended March 31, 2019. As such, deferred tax assets and deferred tax liabilities are included within investments and other assets and non-current liabilities, respectively.

As a result, ¥25,641 million of deferred tax assets in current assets and ¥30 million of deferred tax liabilities in other current liabilities previously presented in the consolidated balance sheet as of March 31, 2018 are reclassified and included in deferred tax assets in investments and other assets and deferred tax liabilities in non-current liabilities, respectively.

Since the Company and its consolidated subsidiaries offset deferred tax assets and deferred tax liabilities of the same taxable entity, total assets as of March 31, 2018 decreased by ¥17,004 million.

Also, Note 10. INCOME TAXES in the Notes to the Consolidated Financial Statements is expanded in accordance with Articles 3, 4 and 5 of the Partial Amendments. However, comparative information for the year ended March 31, 2018 is not provided in Note 10 in accordance with the transitional provisions set forth in Article 7 of the Partial Amendments.

2. U.S. DOLLAR AMOUNTS

The Company and its domestic consolidated subsidiaries maintain their accounting records in yen. The U.S. dollar amounts included in the accompanying consolidated financial statements and notes thereto represent the arithmetic results of translating yen into U.S. dollars at the rate of ¥111.0 to \$1.00, the approximate exchange

rate prevailing on March 31, 2019. The inclusion of such U.S. dollar amounts is solely for the convenience of readers outside Japan and is not intended to imply that the assets and liabilities that originated in yen have been or could be readily converted, realized or settled in U.S. dollars at this or at any other rate.

3. INVENTORIES

At March 31, 2019 and 2018, inventories consisted of the following:

	Millions of yen		Thousands of U.S. dollars
	2019	2018	2019
Merchandise and finished goods	¥ 228,480	¥ 248,513	\$ 2,058,378
Work in process	85,880	92,501	773,694
Raw materials and supplies	105,167	98,659	947,450
	¥ 419,527	¥ 439,673	\$ 3,779,523

Losses recognized and charged to cost of sales as a result of valuation at March 31, 2019 and 2018 were ¥4,502 million (\$40,559 thousand) and ¥2,578 million, respectively.

4. SHORT-TERM BANK LOANS, LONG-TERM DEBT AND LEASE OBLIGATIONS

Short-term bank loans at March 31, 2019 and 2018 represented bank overdrafts and short-term notes. The Company is not required to pay commitment fees on unused balances of the bank overdraft agreements.

Long-term debt and lease obligations at March 31, 2019 and 2018 were as follows:

	Millions of yen		Thousands of U.S. dollars
	2019	2018	2019
Loans principally from banks and insurance companies with interest rates primarily from 0.00% to 11.50%, maturing serially through 2029:			
Unsecured	¥ 456,402	¥ 388,821	\$ 4,111,730
Secured	453	546	4,081
Lease obligations maturing serially through 2036:			
Unsecured	3,829	3,529	34,495
Yen notes with an interest rate of 0.96% due 2018	—	4	—
Yen notes with an interest rate of 0.93% due 2022	20,000	20,000	180,180
Yen notes with an interest rate of 1.01% due 2023	20,000	20,000	180,180
Yen notes with an interest rate of 0.25% due 2024	40,000	40,000	360,360
Yen notes with an interest rate of 0.24% due 2025	40,000	—	360,360
Yen notes with an interest rate of 0.38% due 2027	60,000	60,000	540,541
Yen notes with an interest rate of 0.38% due 2028	40,000	—	360,360
Yen notes with an interest rate of 0.83% due 2038	20,000	—	180,180
Zero coupon convertible bonds due 2019	50,000	50,000	450,450
Zero coupon convertible bonds due 2021	50,000	50,000	450,450
Yen notes with a floating interest rate of 6 month Japanese yen TIBOR + 0% due 2024	—	1,488	—
	800,684	634,389	7,213,369
Less amounts due within one year	94,493	63,646	851,288
	¥ 706,191	¥ 570,743	\$ 6,362,081

At March 31, 2019, assets pledged as collateral were as follows:

	Millions of yen	Thousands of U.S. dollars
	2019	2019
Time deposits	¥ 919	\$ 8,279
Property, plant and equipment, net	1,191	10,730
Investment securities	1,006	9,063
Others	623	5,613
	¥ 3,739	\$ 33,685

The annual maturities of long-term debt and lease obligations subsequent to March 31, 2019 were as follows:

	Millions of yen	Thousands of U.S. dollars
	2019	2019
Years ending March 31:		
2020	¥ 94,493	\$ 851,288
2021	111,114	1,001,027
2022	90,365	814,099
2023	83,914	755,982
2024	103,403	931,559
2025 and thereafter	317,395	2,859,414
	¥ 800,684	\$ 7,213,369

5. FINANCIAL INSTRUMENTS

Conditions of Financial Instruments

a) Policy in Relation to Financial Instruments

The policy of the Company and its consolidated subsidiaries is to manage funds only by short-term deposits, etc. and to raise funds by borrowing from banks and issuing corporate bonds. The Company and its consolidated subsidiaries use derivatives to hedge risks associated with foreign currency exchange rates and fluctuations of borrowing interest rates and do not enter into derivative transactions for speculative or trading purposes.

b) Contents and Risk of Financial Instruments and Risk Management System

Trade receivables are operating receivables and therefore are exposed to customer credit risk. Under its internal regulations, the Company carefully manages the payment periods for receivables and outstanding balances of all customers and regularly monitors the credit standing of major clients. Consolidated subsidiaries also monitor and manage the credit standings of their clients. Operating receivables and payables denominated in foreign currencies that arise from the global business operations are also exposed to foreign currency exchange risk. The Company and its consolidated subsidiaries hedge this risk mainly through the use of forward exchange contracts against positions after netting receivables and payables denominated in the same foreign currencies. Likewise, the Company and its consolidated subsidiaries mainly use currency swaps to hedge the foreign currency exchange risk of bank loans denominated in foreign currencies.

Investment securities are mostly the shares of corporations with which the Company and its consolidated subsidiaries have business relationships and are exposed to the risk of market price fluctuations. The fair value of the investment securities and financial positions of the issuing entities (clients) are regularly monitored.

Trade payables are operating payables, most of which are due and payable within one year.

Short-term bank loans and commercial paper are financing instruments mainly for operating transactions, while long-term bank loans and bonds are primarily for capital expenditures. Bank loans and bonds are exposed to the risk of interest rate fluctuation. Those with floating rates bear the risk of higher nominal interest expenses when interest rates rise, whereas those with fixed rates bear the risk of higher real interest expenses when interest rates fall. The Company and its consolidated subsidiaries use derivative transactions (interest rate swap transactions) to minimize the risk of interest rate fluctuation, taking into consideration the balance between fixed interest rates and floating interest rates.

Hedging instruments, hedged items, the policy for utilizing such hedging instruments and the method for evaluating the effectiveness of hedging activities are described in Note 1. SIGNIFICANT ACCOUNTING POLICIES d) Financial Instruments, Hedge Accounting in the Notes to the Consolidated Financial Statements.

Derivative transactions are executed and managed in accordance with the internal regulations prescribing the authorization for transactions. To mitigate the credit risk, the Company and its consolidated subsidiaries carry out derivative transactions only with highly rated financial institutions.

c) Supplemental Explanation on Fair Value of Financial Instruments

The fair value of financial instruments is based on market prices, or reasonable estimate of fair value for instruments for which market prices are not available. Estimates of fair value are subject to fluctuation because they employ various factors and assumptions. In addition, the contract amount of derivatives in Note 7. DERIVATIVES in the Notes to the Consolidated Financial Statements is not an indicator of market risk associated with derivative transactions.

Fair Value of Financial Instruments

Carrying value, fair value and unrealized gain (loss) as of March 31, 2019 and 2018 were as follows.

In addition, financial instruments, for which it is extremely difficult to measure the fair value, are not included. (Please refer to Note 2 below)

	Millions of yen		
	2019		
	Carrying value	Fair value	Unrealized gain (loss)
Cash and time deposits	¥ 168,507	¥ 168,507	¥ —
Trade receivables	531,058	531,058	—
Investment securities			
Held-to-maturity debt securities	101	105	4
Investment securities in subsidiaries and affiliated companies	73,940	62,426	(11,514)
Other securities	188,586	188,586	—
Assets	¥ 962,192	¥ 950,682	¥ (11,510)
Trade payables	¥ 240,554	¥ 240,554	¥ —
Short-term bank loans	175,567	175,567	—
Commercial paper	—	—	—
Bonds *1	340,000	345,092	5,092
Long-term bank loans *2	456,855	456,478	(377)
Liabilities	¥ 1,212,976	¥ 1,217,691	¥ 4,715
Derivative transactions *3			
Hedge accounting is not applied	¥ (587)	¥ (587)	¥ —
Hedge accounting is applied	779	779	—
Derivative transactions	¥ 192	¥ 192	¥ —

	Millions of yen		
	2018		
	Carrying value	Fair value	Unrealized gain (loss)
Cash and time deposits	¥ 141,101	¥ 141,101	¥ —
Trade receivables	489,549	489,549	—
Investment securities			
Held-to-maturity debt securities	100	101	1
Investment securities in subsidiaries and affiliated companies	75,608	62,736	(12,872)
Other securities	191,975	191,975	—
Assets	¥ 898,333	¥ 885,462	¥ (12,871)
Trade payables	¥ 245,550	¥ 245,550	¥ —
Short-term bank loans	135,936	135,936	—
Commercial paper	46,000	46,000	—
Bonds *1	241,493	263,419	21,926
Long-term bank loans *2	389,367	386,972	(2,395)
Liabilities	¥ 1,058,346	¥ 1,077,877	¥ 19,531
Derivative transactions *3			
Hedge accounting is not applied	¥ (614)	¥ (614)	¥ —
Hedge accounting is applied	(1,479)	(1,479)	—
Derivative transactions	¥ (2,093)	¥ (2,093)	¥ —

Thousands of U.S. dollars

	2019		
	Carrying value	Fair value	Unrealized gain (loss)
Cash and time deposits	\$ 1,518,081	\$ 1,518,081	\$ —
Trade receivables	4,784,306	4,784,306	—
Investment securities			
Held-to-maturity debt securities	910	946	36
Investment securities in subsidiaries and affiliated companies	666,126	562,396	(103,730)
Other securities	1,698,973	1,698,973	—
Assets	\$ 8,668,396	\$ 8,564,703	\$ (103,694)
Trade payables	\$ 2,167,153	\$ 2,167,153	\$ —
Short-term bank loans	1,581,685	1,581,685	—
Commercial paper	—	—	—
Bonds * ¹	3,063,063	3,108,937	45,874
Long-term bank loans * ²	4,115,811	4,112,414	(3,396)
Liabilities	\$ 10,927,712	\$ 10,970,189	\$ 42,477
Derivative transactions * ³			
Hedge accounting is not applied	\$ (5,288)	\$ (5,288)	\$ —
Hedge accounting is applied	7,018	7,018	—
Derivative transactions	\$ 1,730	\$ 1,730	\$ —

*1 Bonds include bonds due within one year.

*2 Long-term bank loans include long-term bank loans due within one year.

*3 Receivables and payables arising from derivative transactions are indicated in net amounts. Total net payables, if any, are shown in parentheses.

Notes:

1. Estimation method for fair value of financial instruments and items related to securities and derivative transactions

Assets

Cash and time deposits and Trade receivables

Carrying value is used for fair value since the items will be settled within the short term and the fair value is approximately equal to the carrying value.

Investment securities

Securities are valued at quoted market price. Debt securities, etc. are valued at quoted market price or at the price provided by correspondent financial institutions. For information on securities classified by holding purpose, please refer to Note 6. SECURITIES of the Notes to the Consolidated Financial Statements.

Liabilities

Trade payables, Short-term bank loans and Commercial paper

Carrying value is used for fair value since the items will be settled within the short term and the fair value is approximately equal to the carrying value.

Bonds

The fair value of bonds with market price is based on market price. The fair value of bonds without market price is estimated by discounting the principal amounts and interest based on interest rates adjusted for the remaining periods and credit risk of the bonds. However, for floating-rate bonds and fixed-rate bonds converted to floating using interest rate swaps accounted for under the special accounting method for interest rate swaps, the fair value is approximately equal to the carrying value because the interest rates are adjusted periodically. Therefore, the fair value is based on the carrying value.

Long-term bank loans

The fair value of long-term bank loans is estimated by discounting the principal amounts and interest based on estimated interest rates if similar new loans were entered into in the current period. The fair value of long-term bank loans for which the special accounting method for interest rate swaps is applied is estimated by discounting the total principal amount and interest (accounted for together with the interest rate swaps) based on estimated interest rates if similar new loans were entered into in the current period. For long-term bank loans at floating interest rates, however, the fair value is approximately equal to the carrying value because the interest rates are adjusted periodically. Therefore, the fair value is based on the carrying value.

Derivative transactions

Please refer to Note 7. DERIVATIVES in the Notes to the Consolidated Financial Statements.

2. Financial instruments for which it is extremely difficult to determine the fair value

	Millions of yen		Thousands of U.S. dollars
	2019	2018	2019
Unlisted equity securities	¥ 78,466	¥ 83,414	\$ 706,901
Unlisted debt securities	—	2,000	—

These securities have no quoted market price and the fair value is extremely difficult to determine. Therefore, they are not included in the preceding table.

3. Redemption schedule for receivables and investment securities with maturities at March 31, 2019 and 2018

	Millions of yen			
	2019			
	Due within one year	Due after one year through five years	Due after five years through ten years	Due after ten years
Cash and time deposits	¥ 168,507	¥ —	¥ —	¥ —
Trade receivables	531,058	—	—	—
Investment securities				
Held-to-maturity debt securities	32	58	11	—
Other securities	7,412	12	53	—
	¥ 707,009	¥ 70	¥ 64	¥ —

	Millions of yen			
	2018			
	Due within one year	Due after one year through five years	Due after five years through ten years	Due after ten years
Cash and time deposits	¥ 141,101	¥ —	¥ —	¥ —
Trade receivables	489,401	148	—	—
Investment securities				
Held-to-maturity debt securities	7	81	12	—
Other securities	—	12	53	—
	¥ 630,509	¥ 241	¥ 65	¥ —

	Thousands of U.S. dollars			
	2019			
	Due within one year	Due after one year through five years	Due after five years through ten years	Due after ten years
Cash and time deposits	\$ 1,518,081	\$ —	\$ —	\$ —
Trade receivables	4,784,306	—	—	—
Investment securities				
Held-to-maturity debt securities	288	523	99	—
Other securities	66,775	108	477	—
	\$ 6,369,450	\$ 631	\$ 577	\$ —

4. The redemption schedule for long-term debt is disclosed in Note 4. SHORT-TERM BANK LOANS, LONG-TERM DEBT AND LEASE OBLIGATIONS of the Notes to the Consolidated Financial Statements.

6. SECURITIES

At March 31, 2019 and 2018, information on securities classified as held-to-maturity debt securities was as follows:

	Millions of yen				Thousands of U.S. dollars			
	2019				2019			
	Carrying value	Fair value	Unrealized gains	Unrealized losses	Carrying value	Fair value	Unrealized gains	Unrealized losses
Held-to-maturity debt securities	¥ 101	¥ 105	¥ 4	¥ 0	\$ 910	\$ 946	\$ 36	\$ 0

	Millions of yen			
	2018			
	Carrying value	Fair value	Unrealized gains	Unrealized losses
Held-to-maturity debt securities	¥ 100	¥ 101	¥ 2	¥ 1

At March 31, 2019 and 2018, information on securities classified as other securities was as follows:

	Millions of yen				Thousands of U.S. dollars			
	2019				2019			
	Carrying value	Acquisition cost	Unrealized gains	Unrealized losses	Carrying value	Acquisition cost	Unrealized gains	Unrealized losses
Other securities	¥ 188,586	¥ 97,348	¥ 96,192	¥ 4,954	\$ 1,698,973	\$ 877,009	\$ 866,595	\$ 44,631

	Millions of yen			
	2018			
	Carrying value	Acquisition cost	Unrealized gains	Unrealized losses
Other securities	¥ 191,975	¥ 87,263	¥ 104,906	¥ 194

7. DERIVATIVES

The Company and its consolidated subsidiaries had the following derivative contracts outstanding at March 31, 2019 and 2018:

Hedge accounting is not applied

	Millions of yen			Thousands of U.S. dollars		
	Contract amount	Fair value	Unrealized gain (loss)	Contract amount	Fair value	Unrealized gain (loss)
2019						
Forward foreign exchange contracts:						
Buying U.S. dollar	¥ 6,481	¥ 24	¥ 24	\$ 58,387	\$ 216	\$ 216
Buying euro	10,298	(28)	(28)	92,775	(252)	(252)
Buying Thai baht	375	4	4	3,378	36	36
Buying Malaysian ringgit	649	4	4	5,847	36	36
Buying Japanese yen	4,453	(19)	(19)	40,117	(171)	(171)
Selling U.S. dollar	15,505	(102)	(102)	139,685	(919)	(919)
Selling euro	1,777	17	17	16,009	153	153
Selling Chinese yuan	931	(25)	(25)	8,387	(225)	(225)
Selling Thai baht	87	0	0	784	0	0
Selling Indonesian rupiah	136	0	0	1,225	0	0
Selling Japanese yen	8,331	(114)	(114)	75,054	(1,027)	(1,027)
Foreign currency swaps:						
Receiving U.S. dollar, paying Thai baht	3,688	(348)	(348)	33,225	(3,135)	(3,135)
	¥ —	¥ (587)	¥ (587)	\$ —	\$ (5,288)	\$ (5,288)

	Millions of yen		
	Contract amount	Fair value	Unrealized gain (loss)
2018			
Forward foreign exchange contracts:			
Buying U.S. dollar	¥ 10,350	¥ (252)	¥ (252)
Buying euro	1,865	(32)	(32)
Buying Thai baht	370	3	3
Buying Malaysian ringgit	212	(2)	(2)
Buying Japanese yen	1,077	2	2
Selling U.S. dollar	14,057	117	117
Selling euro	1,532	32	32
Selling British pound	10	0	0
Selling Chinese yuan	402	(9)	(9)
Selling Thai baht	179	(1)	(1)
Selling Indonesian rupiah	87	(0)	(0)
Selling Japanese yen	5,806	(60)	(60)
Foreign currency swaps:			
Receiving U.S. dollar, paying Thai baht	3,592	(412)	(412)
	¥ —	¥ (614)	¥ (614)

Hedge accounting is applied

Millions of yen

		2019		
Hedge accounting method	Type of contract and primary hedged items	Contract amount	Fair value	Estimation method for fair value
Deferral hedge method	Forward foreign exchange contracts:			
	For trade receivables and trade payables			
	Buying Japanese yen	¥ 1,638	¥ (2)	Forward foreign exchange quotes
	Selling U.S. dollar	1,150	(11)	
	Selling euro	647	3	
	Selling Chinese yuan	182	1	
	Foreign currency swaps:			
	For long-term bank loans			
	Receiving U.S. dollar, paying Korean won	4,900	80	Prices provided by financial institutions
	Receiving Japanese yen, paying Korean won	7,782	225	
Special accounting method for interest rate swaps	Interest rate swaps:			
	For long-term bank loans			
	Floating-rate receipt, fixed-rate payment	40,000	29	Prices provided by financial institutions
	For bonds and long-term bank loans			
	Floating-rate receipt, fixed-rate payment	504		
	Floating-rate receipt, floating-rate payment	26,900	—*1	—
	Fixed-rate receipt, floating rate payment	40,000		
Allocation method for forward foreign exchange contracts	Forward foreign exchange contracts:			
	For forecast transactions denominated in foreign currencies			
	Buying U.S. dollar	23,887	376	Forward foreign exchange quotes
	Buying euro	730	(8)	
	Buying Chinese yuan	537	(4)	
	Buying Thai baht	426	111	
	Buying Korean won	2,158	(20)	
	Selling U.S. dollar	21,422	(9)	
	Selling euro	649	8	
	Selling British pound	10	0	
	Selling Thai baht	1	0	
	Selling Japanese yen	52	0	
	Forward foreign exchange contracts:			
	For trade receivables and trade payables			
	Buying U.S. dollar	12,383		
	Buying euro	217		
	Buying British pound	1		
	Buying Chinese yuan	72		
	Buying Japanese yen	4		
	Selling U.S. dollar	28,612	—*2	—
	Selling euro	3,685		
	Selling British pound	13		
	Selling Chinese yuan	44		
	Selling Thai baht	6		
	Foreign currency swaps:			
	For long-term bank loans			
	Receiving U.S. dollar, paying Japanese yen	129,389	—*2	—
		¥ —	¥ 779	

DATA

		Millions of yen		
		2018		
Hedge accounting method	Type of contract and primary hedged items	Contract amount	Fair value	Estimation method for fair value
Deferral hedge method	Forward foreign exchange contracts:			
	For trade receivables and trade payables			
	Buying U.S. dollar	¥ 426	¥ 2	Forward foreign exchange quotes
	Buying Japanese yen	2,512	29	
	Selling U.S. dollar	854	(1)	
	Selling euro	1,202	1	
	Selling Chinese yuan	839	4	
	Foreign currency swaps:			
	For long-term bank loans			
	Receiving U.S. dollar, paying Korean won	5,994	(240)	Prices provided by
Special accounting method for interest rate swaps	Receiving Japanese yen, paying Korean won	10,196	(321)	financial institutions
	Interest rate swaps:			
	For long-term bank loans			Prices provided by
	Floating-rate receipt, fixed-rate payment	54,985	153	financial institutions
	Interest rate swaps:			
	For bonds and long-term bank loans			
	Floating-rate receipt, fixed-rate payment	364		
	Floating-rate receipt, floating-rate payment	26,900	—*1	—
	Fixed-rate receipt, floating rate payment	40,000		
Allocation method for forward foreign exchange contracts	Forward foreign exchange contracts:			
	For forecast transactions denominated in foreign currencies			
	Buying U.S. dollar	21,996	(183)	Forward foreign exchange quotes
	Buying euro	123,153	(1,343)	
	Buying Chinese yuan	367	(1)	
	Buying Thai baht	483	105	
	Buying Korean won	177	(2)	
	Selling U.S. dollar	9,583	280	
	Selling euro	1,422	38	
	Selling British pound	10	0	
	Selling Thai baht	3	0	
	Selling Japanese yen	30	0	
	Forward foreign exchange contracts:			
	For trade receivables and trade payables			
	Buying U.S. dollar	12,568		
	Buying euro	91		
	Buying Chinese yuan	8		
	Buying Korean won	31		
	Buying Japanese yen	7	—*2	—
	Selling U.S. dollar	25,303		
	Selling euro	3,854		
	Selling British pound	28		
	Selling Chinese yuan	73		
	Foreign currency swaps:			
	For long-term bank loans			
	Receiving U.S. dollar, paying Japanese yen	131,046	—*2	—
		¥ —	¥ (1,479)	

Thousands of U.S. dollars

Hedge accounting method	Type of contract and primary hedged items	2019		
		Contract amount	Fair value	Estimation method for fair value
Deferral hedge method	Forward foreign exchange contracts:			
	For trade receivables and trade payables			
	Buying Japanese yen	\$ 14,757	\$ (18)	Forward foreign exchange quotes
	Selling U.S. dollar	10,360	(99)	
	Selling euro	5,829	27	
	Selling Chinese yuan	1,640	9	
	Foreign currency swaps:			
	For long-term bank loans			
	Receiving U.S. dollar, paying Korean won	44,144	721	Prices provided by financial institutions
	Receiving Japanese yen, paying Korean won	70,108	2,027	
	Interest rate swaps:			
	For long-term bank loans			Prices provided by financial institutions
	Floating-rate receipt, fixed-rate payment	360,360	261	
Special accounting method for interest rate swaps	Interest rate swaps:			
	For bonds and long-term bank loans			
	Floating-rate receipt, fixed-rate payment	4,541		
	Floating-rate receipt, floating-rate payment	242,342	—*1	—
	Fixed-rate receipt, floating rate payment	360,360		
Allocation method for forward foreign exchange contracts	Forward foreign exchange contracts:			
	For forecast transactions denominated in foreign currencies			
	Buying U.S. dollar	215,198	3,387	Forward foreign exchange quotes
	Buying euro	6,577	(72)	
	Buying Chinese yuan	4,838	(36)	
	Buying Thai baht	3,838	1,000	
	Buying Korean won	19,441	(180)	
	Selling U.S. dollar	192,991	(81)	
	Selling euro	5,847	72	
	Selling British pound	90	0	
	Selling Thai baht	9	0	
	Selling Japanese yen	468	0	
	Forward foreign exchange contracts:			
	For trade receivables and trade payables			
	Buying U.S. dollar	111,559		
	Buying euro	1,955		
	Buying British pound	9		
	Buying Chinese yuan	649		
	Buying Japanese yen	36		
	Selling U.S. dollar	257,766	—*2	—
	Selling euro	33,198		
	Selling British pound	117		
	Selling Chinese yuan	396		
	Selling Thai baht	54		
	Foreign currency swaps:			
	For long-term bank loans			
	Receiving U.S. dollar, paying Japanese yen	1,165,667	—*2	—
		\$ —	\$ 7,018	

*1 The fair value of interest rate swaps to which a special accounting method is applied is included in the fair value of bonds and long-term bank loans in Note 5. FINANCIAL INSTRUMENTS of the Notes to the Consolidated Financial Statements because such interest rate swaps are accounted for together with the corresponding bonds and long-term bank loans.

*2 The fair value of forward foreign exchange contracts to which the allocation method is applied, except for forecast transactions, is included in the fair value of trade receivables, trade payables and long-term bank loans in Note 5. FINANCIAL INSTRUMENTS of the Notes to the Consolidated Financial Statements since such forward foreign exchange contracts are accounted for together with the corresponding trade receivables, trade payables and long-term bank loans.

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8. RETIREMENT BENEFIT PLAN

The changes in the retirement benefit obligation during the years ended March 31, 2019 and 2018 were as follows:

	Millions of yen		Thousands of U.S. dollars
	2019	2018	2019
Retirement benefit obligation at beginning of the year	¥ 190,262	¥ 196,911	\$ 1,714,072
Service cost	7,171	7,552	64,604
Interest cost	1,549	1,596	13,955
Actuarial gains and losses	(109)	(1,573)	(982)
Retirement benefit paid	(14,225)	(14,178)	(128,153)
Past service cost	(294)	—	(2,649)
Other	(215)	(46)	(1,937)
Retirement benefit obligation at end of the year	¥ 184,139	¥ 190,262	\$ 1,658,910

The changes in the plan assets at fair value during the years ended March 31, 2019 and 2018 were as follows:

	Millions of yen		Thousands of U.S. dollars
	2019	2018	2019
Plan assets at beginning of the year	¥ 117,288	¥ 121,774	\$ 1,056,649
Expected return on plan assets	2,417	2,560	21,775
Actuarial gains and losses	(2,154)	5,738	(19,405)
Contributions	7,547	6,602	67,991
Retirement benefit paid	(8,858)	(9,258)	(79,802)
Return of assets from retirement benefits trust	(7,867)	(9,931)	(70,874)
Other	(524)	(197)	(4,721)
Plan assets at end of the year	¥ 107,849	¥ 117,288	\$ 971,613

The following table sets forth the funded status of the plans and the amounts recognized in the consolidated balance sheets as of March 31, 2019 and 2018 for the Company's and its consolidated subsidiaries' defined benefit plans:

	Millions of yen		Thousands of U.S. dollars
	2019	2018	2019
Funded retirement benefit obligation	¥ 90,262	¥ 96,258	\$ 813,171
Plan assets at fair value	(107,849)	(117,288)	(971,613)
	(17,587)	(21,030)	(158,441)
Unfunded retirement benefit obligation	93,877	94,004	845,739
Net liability for retirement benefits in the balance sheets	76,290	72,974	687,297
Net defined benefit liability	100,730	101,786	907,477
Net defined benefit asset (included in other non-current assets)	(24,440)	(28,812)	(220,180)
Net liability for retirement benefits in the balance sheets	¥ 76,290	¥ 72,974	\$ 687,297

The components of retirement benefit expense for the years ended March 31, 2019 and 2018 were as follows:

	Millions of yen		Thousands of U.S. dollars
	2019	2018	2019
Service cost	¥ 7,171	¥ 7,552	\$ 64,604
Interest cost	1,549	1,596	13,955
Expected return on plan assets	(2,417)	(2,560)	(21,775)
Amortization of actuarial gains and losses	2,465	622	22,207
Amortization of past service cost	(36)	(4,248)	(324)
Gain on return of assets from retirement benefits trust	(2,532)	—	(22,811)
Retirement benefit expense	¥ 6,200	¥ 2,962	\$ 55,856

In addition to the above, special severance payments of ¥1,705 million (\$15,360 thousand) and ¥1,442 million were recognized for the years ended March 31, 2019 and 2018, respectively. Contributions to defined contribution pension plans of ¥7,118 million (\$64,126 thousand) and ¥6,996 million were recognized for the years ended March 31, 2019 and 2018, respectively.

The components of remeasurements of defined benefit plans included in other comprehensive income (before tax effect) for the years ended March 31, 2019 and 2018 were as follows:

	Millions of yen		Thousands of U.S. dollars
	2019	2018	2019
Past service cost	¥ 258	¥ (4,248)	\$ 2,324
Actuarial gains and losses	(2,114)	7,960	(19,045)
Total	¥ (1,856)	¥ 3,712	\$ (16,721)

The components of remeasurements of defined benefit plans included in accumulated other comprehensive income (before tax effect) as of March 31, 2019 and 2018 were as follows:

	Millions of yen		Thousands of U.S. dollars
	2019	2018	2019
Unrecognized past service cost	¥ (212)	¥ 46	\$ (1,910)
Unrecognized actuarial gains and losses	(3,896)	(6,010)	(35,099)
Total	¥ (4,108)	¥ (5,964)	\$ (37,009)

The fair value of plan assets, by major category, as a percentage of total plan assets as of March 31, 2019 and 2018 was as follows:

	2019	2018
Bonds	9%	11%
Stocks	45%	50%
General accounts of life insurance companies	27%	26%
Cash and time deposits	16%	10%
Other	3%	3%
Total	100%	100%

The expected rate of return on plan assets is determined based on the current and anticipated allocation of plan assets and the current and expected long-term returns on diverse assets that compose the plan assets.

The key assumptions used in accounting for the above plans were as follows:

	2019	2018
Discount rate	primarily 0.6%	primarily 0.6%
Expected rate of return on plan assets	primarily 2.0%	primarily 2.0%
Expected rate of salary increase	primarily 5.9%	primarily 7.5%

9. STOCK OPTION PLANS

1. Stock option expenses included in selling, general and administrative expenses amounted to ¥290 million (\$2,613 thousand) and ¥338 million for the years ended March 31, 2019 and 2018, respectively.

2. Information on stock options issued

The following table summarizes the stock options outstanding as of March 31, 2019.

Company name		Toray Industries, Inc.		
		No.1 Stock Option Plan	No.2 Stock Option Plan	No.3 Stock Option Plan
Position and number of grantees	Members of the Board of the Company	28	26	26
	Directors of the Company	32	32	26
Class and number of shares to be issued upon exercise	Common stock	747,000 shares	844,000 shares	583,000 shares
Grant date		August 20, 2011	August 4, 2012	August 10, 2013
Vesting conditions		Based on the number of months that have elapsed during the vesting period	Based on the number of months that have elapsed during the vesting period	Based on the number of months that have elapsed during the vesting period
Vesting period		June 24, 2011-June 22, 2012	June 22, 2012-June 26, 2013	June 26, 2013-June 25, 2014
Exercise period		August 21, 2011-August 20, 2041	August 5, 2012-August 4, 2042	August 11, 2013-August 10, 2043

Company name		Toray Industries, Inc.		
		No.4 Stock Option Plan	No.5 Stock Option Plan	No. 6 Stock Option Plan
Position and number of grantees	Members of the Board of the Company	25	23	23
	Directors of the Company	27	31	30
Class and number of shares to be issued upon exercise	Common stock	569,000 shares	358,000 shares	381,000 shares
Grant date		August 9, 2014	August 22, 2015	August 20, 2016
Vesting conditions		Based on the number of months that have elapsed during the vesting period	Based on the number of months that have elapsed during the vesting period	Based on the number of months that have elapsed during the vesting period
Vesting period		June 25, 2014-June 24, 2015	June 24, 2015-June 28, 2016	June 28, 2016-June 27, 2017
Exercise period		August 10, 2014-August 9, 2044	August 23, 2015-August 22, 2045	August 21, 2016-August 20, 2046

Company name		Toray Industries, Inc.	
		No.7 Stock Option Plan	No.8 Stock Option Plan
Position and number of grantees	Members of the Board of the Company	23	17
	Directors of the Company	31	35
Class and number of shares to be issued upon exercise	Common stock	374,000 shares	387,000 shares
Grant date		August 19, 2017	August 18, 2018
Vesting conditions		Based on the number of months that have elapsed during the vesting period	Based on the number of months that have elapsed during the vesting period
Vesting period		June 27, 2017-June 26, 2018	June 26, 2018-June 25, 2019
Exercise period		August 20, 2017-August 19, 2047	August 19, 2018-August 18, 2048

The following table summarizes movements of stock options during the year and price information on stock options as of March 31, 2019. The number of stock options are translated into the number of shares.

(1) Number of stock options

Company name	Toray Industries, Inc.		
	No.1 Stock Option Plan	No.2 Stock Option Plan	No.3 Stock Option Plan
Stock acquisition rights not yet vested			
As of March 31, 2018	—	—	—
Granted	—	—	—
Forfeited	—	—	—
Vested	—	—	—
As of March 31, 2019	—	—	—
Stock acquisition rights already vested			
As of March 31, 2018	218,000	290,000	252,000
Vested	—	—	—
Exercised	59,000	74,000	58,000
Forfeited	—	—	—
As of March 31, 2019	159,000	216,000	194,000

Company name	Toray Industries, Inc.		
	No.4 Stock Option Plan	No.5 Stock Option Plan	No.6 Stock Option Plan
Stock acquisition rights not yet vested			
As of March 31, 2018	—	—	—
Granted	—	—	—
Forfeited	—	—	—
Vested	—	—	—
As of March 31, 2019	—	—	—
Stock acquisition rights already vested			
As of March 31, 2018	302,000	241,000	330,000
Vested	—	—	—
Exercised	66,000	48,000	59,000
Forfeited	—	—	—
As of March 31, 2019	236,000	193,000	271,000

Company name	Toray Industries, Inc.	
	No.7 Stock Option Plan	No.8 Stock Option Plan
Stock acquisition rights not yet vested		
As of March 31, 2018	109,000	—
Granted	—	387,000
Forfeited	—	—
Vested	109,000	277,000
As of March 31, 2019	—	110,000
Stock acquisition rights already vested		
As of March 31, 2018	265,000	—
Vested	109,000	277,000
Exercised	61,000	—
Forfeited	—	—
As of March 31, 2019	313,000	277,000

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(2) Price information

Yen

Company name	Toray Industries, Inc.		
	No.1 Stock Option Plan	No.2 Stock Option Plan	No.3 Stock Option Plan
Exercise price	¥ 1	¥ 1	¥ 1
Weighted average price at exercise	852.7	852.7	852.7
Fair value per share at the grant date	513	394	546

Yen

Company name	Toray Industries, Inc.		
	No.4 Stock Option Plan	No.5 Stock Option Plan	No.6 Stock Option Plan
Exercise price	¥ 1	¥ 1	¥ 1
Weighted average price at exercise	852.7	852.7	852.7
Fair value per share at the grant date	605	987	902

Yen

Company name	Toray Industries, Inc.	
	No.7 Stock Option Plan	No.8 Stock Option Plan
Exercise price	¥ 1	¥ 1
Weighted average price at exercise	852.7	—
Fair value per share at the grant date	899	710

U.S. dollars

Company name	Toray Industries, Inc.		
	No.1 Stock Option Plan	No.2 Stock Option Plan	No.3 Stock Option Plan
Exercise price	\$ 0.01	\$ 0.01	\$ 0.01
Weighted average price at exercise	7.68	7.68	7.68
Fair value per share at the grant date	4.62	3.55	4.92

U.S. dollars

Company name	Toray Industries, Inc.		
	No.4 Stock Option Plan	No.5 Stock Option Plan	No.6 Stock Option Plan
Exercise price	\$ 0.01	\$ 0.01	\$ 0.01
Weighted average price at exercise	7.68	7.68	7.68
Fair value per share at the grant date	5.45	8.89	8.13

U.S. dollars

Company name	Toray Industries, Inc.	
	No.7 Stock Option Plan	No.8 Stock Option Plan
Exercise price	\$ 0.01	\$ 0.01
Weighted average price at exercise	7.68	—
Fair value per share at the grant date	8.10	6.40

3. Estimation method and assumptions used for the per share fair value of stock options

(1) Estimation method

Black-Scholes model

(2) Assumptions used for the per share fair value of stock options

Company name	Toray Industries, Inc.
	No.8 Stock Option Plan
Expected volatility*1	24.874%
Expected holding period*2	7 years
Expected dividend*3	¥15 per share (\$0.14)
Risk-free rate*4	(0.015)%

*1 The expected volatility is based on actual share prices during 7 years from August 19, 2011 to August 17, 2018.

*2 The expected holding period is calculated based on the service period of past members of the Board.

*3 This is based on the dividend for the year ended March 31, 2018.

*4 The risk-free interest rate is the yield on Japanese government bonds for the period that corresponds to the remaining life of the option.

Because it is difficult to reasonably estimate the number of options that will expire in the future, only the number of options that have actually forfeited is applied.

10. INCOME TAXES

The statutory tax rates in Japan for the years ended March 31, 2019 and 2018 were 30.6% and 30.9%, respectively.

At March 31, 2019 and 2018, significant components of deferred tax assets and liabilities were as follows:

	Millions of yen		Thousands of U.S. dollars
	2019	2018	2019
Deferred tax assets:			
Accrued bonuses	¥ 6,496	¥ 6,134	\$ 58,523
Depreciation and impairment loss	10,379	10,876	93,505
Net defined benefit liability	31,035	32,101	279,595
Net operating loss carryforwards (Note)	14,924	13,473	134,450
Unrealized intercompany profits	15,362	15,401	138,396
Other	36,944	33,481	332,829
	115,140	111,466	1,037,297
Valuation allowance for net operating loss carryforwards (Note)	(12,673)	—	(114,171)
Valuation allowance for deductible temporary differences	(15,213)	—	(137,054)
Total valuation allowance	(27,886)	(23,228)	(251,225)
Total deferred tax assets	87,254	88,238	786,072
Deferred tax liabilities:			
Reserve for tax purpose reduction entry	6,157	4,571	55,468
Depreciation	21,195	18,419	190,946
Undistributed earnings of subsidiaries and affiliated companies	22,154	19,870	199,586
Unrealized gains on securities	28,990	31,776	261,171
Acquisition-related basis differences	19,746	4,700	177,892
Other	15,792	18,750	142,270
Total deferred tax liabilities	114,034	98,086	1,027,333
Net deferred tax assets (liabilities)	¥ (26,780)	¥ (9,848)	\$ (241,261)

DATA

Note: A breakdown of net operating loss carryforwards and valuation allowance by expiry date as of March 31, 2019 is as follows:

Millions of yen							
	2019						
	Due within one year	Due after one year through two years	Due after two years through three years	Due after three years through four years	Due after four years through five years	Due after five years	Total
Net operating loss carryforwards*	¥ 1,108	¥ 537	¥ 841	¥ 591	¥ 1,105	¥ 10,742	¥ 14,924
Valuation allowance	(1,106)	(434)	(401)	(522)	(891)	(9,319)	(12,673)
Deferred tax assets	¥ 2	¥ 103	¥ 440	¥ 69	¥ 214	¥ 1,423	¥ 2,251

Thousands of U.S. dollars							
	2019						
	Due within one year	Due after one year through two years	Due after two years through three years	Due after three years through four years	Due after four years through five years	Due after five years	Total
Net operating loss carryforwards*	\$ 9,982	\$ 4,838	\$ 7,577	\$ 5,324	\$ 9,955	\$ 96,775	\$ 134,450
Valuation allowance	(9,964)	(3,910)	(3,613)	(4,703)	(8,027)	(83,955)	(114,171)
Deferred tax assets	\$ 18	\$ 928	\$ 3,964	\$ 622	\$ 1,928	\$ 12,820	\$ 20,279

* The amount is determined by multiplying the corresponding net operating loss carryforwards by the effective statutory tax rate.

Changes in Presentation

"Acquisition-related basis differences" that were posted in "Other" under "Deferred tax liabilities" as of March 31, 2018 are listed as a separate line item starting from the year ended March 31, 2019 due to an increase in materiality. The figures as of March 31, 2018 are restated to reflect this change in presentation.

As a result, ¥23,450 million posted in "Other" under "Deferred tax liabilities" as of March 31, 2018 is reclassified into "Acquisition-related basis differences" of ¥4,700 million and "Other" of ¥18,750 million.

The reconciliation of the statutory tax rate and the effective income tax rate for the years ended March 31, 2019 and 2018 was as follows:

	2019	2018
Statutory tax rate	—	30.9%
Increase (decrease) in taxes resulting from:		
Permanent differences	—	0.7
Recognition of certain deferred tax assets by reversal of valuation allowance	—	(0.2)
Equity in earnings of unconsolidated subsidiaries and affiliated companies	—	(2.1)
Income taxes for prior periods	—	(0.2)
Differences of tax rates for overseas consolidated subsidiaries	—	(3.9)
Undistributed earnings of subsidiaries and affiliated companies	—	1.6
Impact of the Tax Cuts and Jobs Act in the United States	—	(3.2)
Amortization of goodwill	—	2.0
Other	—	(1.1)
Effective income tax rate	—	24.5%

* Information for the year ended March 31, 2019 is not provided because the difference between the statutory tax rate and the effective income tax rate was less than 5% of the statutory tax rate.

11. NET ASSETS

The Corporation Law of Japan provides that an amount equal to 10% of the amount to be disbursed as distributions of capital surplus (other than the capital reserve) and retained earnings (other than the earned reserve) be transferred to the capital reserve and the earned reserve, respectively, until the sum of the capital reserve and the earned reserve equals 25% of the capital stock account. Such distributions can be made at any time by resolution

of the stockholders, or by the Board of Directors if certain conditions are met.

At the June 2019 annual stockholders' meeting, stockholders approved the payment of cash dividends of ¥8.00 per share, aggregating to ¥12,806 million (\$115,369 thousand) which has not been reflected in the accompanying consolidated financial statements for the year ended March 31, 2019.

12. COMMITMENTS AND CONTINGENT LIABILITIES

At March 31, 2019, commitment line of credit to unconsolidated subsidiaries and affiliated companies was as follows:

	Millions of yen	Thousands of U.S. dollars
	2019	2019
Total commitment line of credit	¥ 380	\$ 3,423
Loans receivable outstanding	155	1,396
Balance	¥ 225	\$ 2,027

This commitment does not necessarily imply that the unused amount may be fully utilized.

At March 31, 2019 and 2018, contingent liabilities were as follows:

	Millions of yen		Thousands of U.S. dollars
	2019	2018	2019
As guarantors of loans to:			
Unconsolidated subsidiaries and affiliated companies	¥ 6,579	¥ 5,959	\$ 59,270
Other	3,341	3,494	30,099
	¥ 9,920	¥ 9,453	\$ 89,369
Notes discounted	¥ 1,550	¥ 1,922	\$ 13,964
Export bills discounted	6,140	2,820	55,315
Notes endorsed	1,755	1,538	15,811
Contingent liabilities associated with securitization of receivables	¥ 1,187	¥ 1,216	\$ 10,694

13. LEASES

Finance leases

The Company and its consolidated subsidiaries hold certain buildings, machinery and equipment and intangible assets by leases.

Operating leases

Future minimum lease payments under non-cancellable operating leases subsequent to March 31, 2019 and 2018 were as follows:

	Millions of yen		Thousands of U.S. dollars
	2019	2018	2019
Due within one year	¥ 903	¥ 358	\$ 8,135
Due after one year	5,535	952	49,865
Total	¥ 6,438	¥ 1,310	\$ 58,000

14. RESEARCH AND DEVELOPMENT EXPENSES

Research and development expenses included in cost of sales and selling, general and administrative expenses for the years ended March 31, 2019 and 2018 were ¥66,355 million (\$597,793 thousand) and ¥66,229 million, respectively.

15. LOSS ON IMPAIRMENT OF FIXED ASSETS

The Company and its consolidated subsidiaries grouped assets used for business based on the classification under the management accounting. For assets to be disposed and idle assets, each individual asset is considered to constitute a group.

For the year ended March 31, 2019, the carrying value of goodwill, intangible assets and other assets of some consolidated subsidiaries was fully written down because the originally anticipated income was not expected any longer.

As a result, the Company and its consolidated subsidiaries recognized loss on impairment in the amount of ¥18,414 million (\$165,892 thousand).

The major assets for which a loss on impairment was recognized were as follows:

Location	Use	Classification	Millions of yen	Thousands of U.S. dollars
			Loss on impairment	Loss on impairment
Seoul, Korea, etc.	Fibers & Textiles	Machinery and equipment	¥ 840	\$ 7,568
		Goodwill	6,054	54,541
		Other intangible assets	5,154	46,432
Yokohama, Kanagawa, Japan	Environment & Engineering	Goodwill	¥ 1,654	\$ 14,901

The recoverable amount of the above assets was measured at value in use, and that of goodwill and other intangible assets was assessed at zero.

For the year ended March 31, 2018, the carrying value of certain business-use assets for which profitability declined were written down to the recoverable amount.

As a result, the Company and its consolidated subsidiaries recognized loss on impairment of fixed assets in the amount of ¥3,944 million.

The major assets for which a loss on impairment was recognized were as follows:

Location	Use	Classification	Millions of yen
			Loss on impairment
Esslingen, Germany, etc.	Composites production facilities	Buildings	¥ 156
		Machinery and equipment	893
		Construction in progress	1,781
		Other	94

The recoverable amount of the above assets was measured at the net selling value. The net selling value was calculated based on the appraisal value.

16. OTHER COMPREHENSIVE INCOME

The following table presents reclassification adjustments and tax effects allocated to each component of other comprehensive income for the years ended March 31, 2019 and 2018.

	Millions of yen		Thousands of U.S. dollars
	2019	2018	2019
Net unrealized gains (losses) on securities:			
Amount arising during the year	¥(12,196)	¥ 15,089	\$ (109,874)
Reclassification adjustments for gains and losses included in net income	(1,296)	(3,400)	(11,676)
Before tax effect	(13,492)	11,689	(121,550)
Tax effect	3,913	(3,589)	35,252
Net unrealized gains (losses) on securities	(9,579)	8,100	(86,297)
Net deferred gains (losses) on hedges:			
Amount arising during the year	1,414	(1,302)	12,739
Reclassification adjustments for gains and losses included in net income	(25)	(104)	(225)
Basis adjustments for assets	130	—	1,171
Before tax effect	1,519	(1,406)	13,685
Tax effect	(455)	409	(4,099)
Net deferred gains (losses) on hedges	1,064	(997)	9,586
Foreign currency translation adjustments:			
Amount arising during the year	(4,767)	(4,471)	(42,946)
Reclassification adjustments for gains and losses included in net income	—	(1,375)	—
Before tax effect	(4,767)	(5,846)	(42,946)
Tax effect	—	26	—
Foreign currency translation adjustments	(4,767)	(5,820)	(42,946)
Remeasurements of defined benefit plans:			
Amount arising during the year	(1,753)	7,338	(15,793)
Reclassification adjustments for gains and losses included in net income	(103)	(3,626)	(928)
Before tax effect	(1,856)	3,712	(16,721)
Tax effect	531	(1,077)	4,784
Remeasurements of defined benefit plans	(1,325)	2,635	(11,937)
Share of other comprehensive income of unconsolidated subsidiaries and affiliated companies accounted for by the equity method:			
Amount arising during the year	(422)	(1,697)	(3,802)
Reclassification adjustments for gains and losses included in net income	(183)	(73)	(1,649)
Share of other comprehensive income of unconsolidated subsidiaries and affiliated companies accounted for by the equity method	(605)	(1,770)	(5,450)
Total other comprehensive income	¥(15,212)	¥ 2,148	\$ (137,045)

DATA

17. BUSINESS COMBINATIONS

Business combination by acquisition

1. Overview of the business combination

The Company purchased all shares of TenCate Advanced Composites Holding B.V. (TCAC) on July 17, 2018.

(1) Name of the acquired company and description of its business

Name of the acquired company

TenCate Advanced Composites Holding B.V.

Description of business

Manufacture and distribution of carbon fiber composite materials

(2) Major reason for the business combination

TCAC is a prepreg manufacturer with its main manufacturing bases in Europe and the U.S. and has a track record of widely supplying thermoplastic resins and high heat resistance thermoset resin materials. Especially, TCAC is a global leading company of carbon fiber intermediate materials using thermoplastic resins. The acquisition is expected to generate significant synergies by combining the product lineup in which TCAC specializes with the broad range of carbon fiber as well as polymer technologies, which are Toray's strengths. Combining the two companies' distribution channels, the Company can offer a wider product lineup to the customers.

Toray will respond swiftly to the expansion of the market for small-sized aircraft and expand the business further for industrial use applications including automobiles in the medium- to long-term.

(3) Date of the business combination

July 17, 2018

(4) Legal form of the business combination

Share acquisition in consideration of cash

(5) Name of the company after the business combination

Toray TCAC Holding B.V.

(6) Percentage of voting rights acquired

100%

(7) Basis for determining an acquiring company

The Company acquired 100% of the voting rights through a share acquisition in consideration of cash.

2. Period of acquiree's results included in the consolidated financial statements

From October 1, 2018 to March 31, 2019

3. Acquisition cost

Consideration for acquisition	Cash	¥117,117 million (\$1,055,108 thousand)
Acquisition cost		¥117,117 million (\$1,055,108 thousand)

4. Major acquisition-related costs

Advisory fees and others	¥1,205 million (\$10,856 thousand)
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5. Amount of goodwill incurred, reasons for the goodwill incurred and the method and period of amortization

(1) Amount of goodwill incurred

¥65,783 million (\$592,640 thousand)

(2) Reasons for the goodwill incurred

Since the acquisition cost exceeded the net amount of assets acquired and liabilities assumed, the excess amount was recorded as goodwill.

(3) Method and period of amortization

Goodwill is amortized by the straight-line method over 20 years.

6. Assets acquired and liabilities assumed on the date of the business combination

	Millions of yen	Thousands of U.S. dollars
Current assets	¥ 11,422	\$ 102,901
Non-current assets	72,566	653,748
Total assets	¥ 83,988	\$ 756,649
Current liabilities	¥ 13,864	\$ 124,901
Non-current liabilities	18,940	170,631
Total liabilities	¥ 32,804	\$ 295,532

7. Breakdown of amount allocated to intangible assets other than goodwill and weighted average amortization period by major type of asset

Breakdown by major type	Millions of yen	Thousands of U.S. dollars	Amortization period
	Amount		
Customer-related assets	¥ 42,021	\$ 378,568	20 years
Technology-related assets	26,957	242,856	24 years
Total	¥ 68,978	\$ 621,423	22 years

8. Effect on the consolidated statements of income assuming the business combination had been carried out on April 1, 2018

The effect on operating results for the year ended March 31, 2019 was immaterial. This information has not been audited by the independent auditors of the Company.

18. SUPPLEMENTARY CASH FLOW INFORMATION

The following table reconciles the net payments with the acquisition cost with regard to the share acquisition of TenCate Advanced Composites Holding B.V. executed in the year ended March 31, 2019.

	Millions of yen	Thousands of U.S. dollars
	2019	2019
Acquisition cost	¥ 117,117	\$ 1,055,108
Cash and cash equivalents	(2,553)	(23,000)
Net payments for acquisition	¥ 114,564	\$ 1,032,108

19. SEGMENT INFORMATION

1. Outline of reportable segments

The reportable segments of the Company and its consolidated subsidiaries are components for which discrete financial information is available and whose operating results are regularly reviewed by the Board of Directors to make decisions about resource allocation to the segments and assess performance.

The Company identifies the following five segments according to the nature of the products and market for their products.

Reportable segment	Main products
Fibers & Textiles	Filament yarns, staple fibers, spun yarns, woven and knitted fabrics of nylon, polyester, acrylic and others; non-woven fabrics; ultra-microfiber non-woven fabric with suede texture; apparel products
Performance Chemicals	Nylon, ABS, PBT, PPS and other resins and molded products; polyolefin foam; polyester, polyethylene, polypropylene and other films and processed film products; raw materials for synthetic fibers and other plastics; fine chemicals; electronic and information materials and graphic materials
Carbon Fiber Composite Materials	Carbon fibers, carbon fiber composite materials and their molded products
Environment & Engineering	Comprehensive engineering; condominiums; industrial equipment and machinery; IT-related equipment; water treatment membranes and related equipment; materials for housing, building and civil engineering applications
Life Science	Pharmaceuticals, medical devices, etc.

2. Measurement of sales, income, assets and other material items of reportable segments

The accounting policies for the reportable segments are the same as those described in Note 1. SIGNIFICANT ACCOUNTING POLICIES. The figures of segment income are based on operating income. Intersegment sales are determined based on consideration of the market price and related information.

3. Information on sales, income, assets and other material items of reportable segments

Millions of yen									
	2019								
	Fibers & Textiles	Performance Chemicals	Carbon Fiber Composite Materials	Environment & Engineering	Life Science	Others* ¹	Total	Adjustments* ²	Consolidated Total* ³
Sales to outside customers	¥ 974,265	¥ 868,847	¥ 215,913	¥ 257,673	¥ 53,653	¥ 18,497	¥ 2,388,848	¥ —	¥ 2,388,848
Intersegment sales	1,372	18,985	820	74,960	—	26,536	122,673	(122,673)	—
Total sales	¥ 975,637	¥ 887,832	¥ 216,733	¥ 332,633	¥ 53,653	¥ 45,033	¥ 2,511,521	¥ (122,673)	¥ 2,388,848
Segment income	¥ 72,880	¥ 67,702	¥ 11,542	¥ 12,236	¥ 1,301	¥ 3,084	¥ 168,745	¥ (27,276)	¥ 141,469
Segment assets	¥ 795,382	¥ 1,002,305	¥ 640,161	¥ 255,338	¥ 70,792	¥ 83,764	¥ 2,847,742	¥ (59,391)	¥ 2,788,351
Depreciation and amortization	29,342	39,099	25,042	4,531	2,638	1,416	102,068	(357)	101,711
Investment in unconsolidated subsidiaries and affiliated companies accounted for by the equity method	76,464	50,969	1,611	12,205	2,849	8,248	152,346	(318)	152,028
Capital expenditures * ⁴	51,726	67,004	43,079	7,621	2,126	3,430	174,986	(2,290)	172,696

Millions of yen									
	2018								
	Fibers & Textiles	Performance Chemicals	Carbon Fiber Composite Materials	Environment & Engineering	Life Science	Others* ¹	Total	Adjustments* ²	Consolidated Total* ³
Sales to outside customers	¥ 913,610	¥ 803,310	¥ 177,949	¥ 238,256	¥ 53,803	¥ 17,930	¥ 2,204,858	¥ —	¥ 2,204,858
Intersegment sales	1,248	17,902	591	69,453	—	24,456	113,650	(113,650)	—
Total sales	¥ 914,858	¥ 821,212	¥ 178,540	¥ 307,709	¥ 53,803	¥ 42,386	¥ 2,318,508	¥ (113,650)	¥ 2,204,858
Segment income	¥ 72,418	¥ 71,363	¥ 20,764	¥ 13,287	¥ 1,942	¥ 2,897	¥ 182,671	¥ (26,207)	¥ 156,464
Segment assets	¥ 778,930	¥ 974,165	¥ 463,640	¥ 273,259	¥ 78,194	¥ 64,362	¥ 2,632,550	¥ (56,640)	¥ 2,575,910
Depreciation and amortization	28,186	37,451	21,575	4,719	2,572	1,418	95,921	(106)	95,815
Investment in unconsolidated subsidiaries and affiliated companies accounted for by the equity method	84,079	48,318	8,073	10,930	2,780	7,867	162,047	(240)	161,807
Capital expenditures * ⁴	48,761	61,362	32,604	5,978	2,768	1,564	153,037	287	153,324

Thousands of U.S. dollars									
	2019								
	Fibers & Textiles	Performance Chemicals	Carbon Fiber Composite Materials	Environment & Engineering	Life Science	Others* ¹	Total	Adjustments* ²	Consolidated Total* ³
Sales to outside customers	\$ 8,777,162	\$ 7,827,450	\$ 1,945,162	\$ 2,321,378	\$ 483,360	\$ 166,640	\$ 21,521,153	\$ —	\$ 21,521,153
Intersegment sales	12,360	171,036	7,387	675,315	—	239,063	1,105,162	(1,105,162)	—
Total sales	\$ 8,789,523	\$ 7,998,486	\$ 1,952,550	\$ 2,996,694	\$ 483,360	\$ 405,703	\$ 22,626,315	\$ (1,105,162)	\$ 21,521,153
Segment income	\$ 656,577	\$ 609,928	\$ 103,982	\$ 110,234	\$ 11,721	\$ 27,784	\$ 1,520,225	\$ (245,730)	\$ 1,274,495
Segment assets	\$ 7,165,604	\$ 9,029,775	\$ 5,767,216	\$ 2,300,342	\$ 637,766	\$ 754,631	\$ 25,655,333	\$ (535,054)	\$ 25,120,279
Depreciation and amortization	264,342	352,243	225,604	40,820	23,766	12,757	919,532	(3,216)	916,315
Investment in unconsolidated subsidiaries and affiliated companies accounted for by the equity method	688,865	459,180	14,514	109,955	25,667	74,306	1,372,486	(2,865)	1,369,622
Capital expenditures * ⁴	466,000	603,640	388,099	68,658	19,153	30,901	1,576,450	(20,631)	1,555,820

*1 "Others" represents service-related businesses such as analysis, physical evaluation and research.

*2 a) "Adjustments" of segment income for the year ended March 31, 2019 of ¥(27,276) million (\$245,730 thousand) includes intersegment eliminations of ¥(1,018) million (\$9,171 thousand) and corporate expenses of ¥(26,258) million (\$236,559 thousand). "Adjustments" of segment income for the year ended March 31, 2018 of ¥(26,207) million includes intersegment eliminations of ¥(1,600) million and corporate expenses of ¥(24,607) million. The corporate expenses consist of the headquarters' research expenses that are not allocated to each reportable segment.

b) "Adjustments" of segment assets for the year ended March 31, 2019 of ¥(59,391) million (\$535,054 thousand) includes intersegment eliminations of ¥(79,609) million (\$717,198 thousand) and corporate assets of ¥20,218 million (\$182,144 thousand). "Adjustments" of segment assets for the year ended March 31, 2018 of ¥(56,640) million includes intersegment eliminations of ¥(77,624) million and corporate assets of ¥20,984 million. The corporate assets consist of the headquarters' research assets that are not allocated to each reportable segment.

*3 "Segment income" is reconciled to operating income.

*4 "Capital expenditures" do not include the increase in assets resulting from inclusion of subsidiaries in consolidation.

4. Related information

a) Geographic information on sales to outside customers

Millions of yen					
	2019				
	Japan	Asia		North America, Europe and other areas	Total
		China	Others		
Sales to outside customers	¥ 1,085,701	¥ 426,788	¥ 454,401	¥ 421,958	¥ 2,388,848

Millions of yen					
	2018				
	Japan	Asia		North America, Europe and other areas	Total
		China	Others		
Sales to outside customers	¥ 1,005,260	¥ 386,520	¥ 421,456	¥ 391,622	¥ 2,204,858

Thousands of U.S. dollars					
	2019				
	Japan	Asia		North America, Europe and other areas	Total
		China	Others		
Sales to outside customers	\$ 9,781,090	\$ 3,844,937	\$ 4,093,703	\$ 3,801,423	\$ 21,521,153

Sales amounts are allocated to countries or regions according to the customers' location.

b) Geographic information on property, plant and equipment

Millions of yen						
	2019					
	Japan	Asia		North America, Europe and other areas		Total
		Republic of Korea	Others	U.S.A.	Others	
Property, plant and equipment, net	¥ 331,978	¥ 212,713	¥ 166,506	¥ 131,848	¥ 153,831	¥ 996,876

Millions of yen						
	2018					
	Japan	Asia		North America, Europe and other areas		Total
		Republic of Korea	Others	U.S.A.	Others	
Property, plant and equipment, net	¥ 326,679	¥ 199,721	¥ 153,741	¥ 123,042	¥ 123,846	¥ 927,029

Thousands of U.S. dollars						
	2019					
	Japan	Asia		North America, Europe and other areas		Total
		Republic of Korea	Others	U.S.A.	Others	
Property, plant and equipment, net	\$ 2,990,793	\$ 1,916,333	\$ 1,500,054	\$ 1,187,820	\$ 1,385,865	\$ 8,980,865

5. Loss on impairment of fixed assets by reportable segment

Millions of yen								
	2019							
	Fibers & Textiles	Performance Chemicals	Carbon Fiber Composite Materials	Environment & Engineering	Life Science	Others	Elimination & Corporate	Total
Loss on impairment	¥ 13,322	¥ 1,145	¥ 776	¥ 2,395	¥ 776	¥ —	¥ —	¥ 18,414

Millions of yen								
	2018							
	Fibers & Textiles	Performance Chemicals	Carbon Fiber Composite Materials	Environment & Engineering	Life Science	Others	Elimination & Corporate	Total
Loss on impairment	¥ 24	¥ 899	¥ 2,924	¥ 36	¥ 61	¥ —	¥ —	¥ 3,944

Thousands of U.S. dollars								
	2019							
	Fibers & Textiles	Performance Chemicals	Carbon Fiber Composite Materials	Environment & Engineering	Life Science	Others	Elimination & Corporate	Total
Loss on impairment	\$ 120,018	\$ 10,315	\$ 6,991	\$ 21,577	\$ 6,991	\$ —	\$ —	\$ 165,892

6. Amortization and balance of goodwill by reportable segment

Millions of yen								
	2019							
	Fibers & Textiles	Performance Chemicals	Carbon Fiber Composite Materials	Environment & Engineering	Life Science	Others	Elimination & Corporate	Total
Amortization of goodwill	¥ 1,297	¥ 4,384	¥ 5,054	¥ 864	¥ —	¥ —	¥ —	¥ 11,599
Balance of goodwill	81	10,705	73,337	1,589	—	—	—	85,712

Millions of yen								
	2018							
	Fibers & Textiles	Performance Chemicals	Carbon Fiber Composite Materials	Environment & Engineering	Life Science	Others	Elimination & Corporate	Total
Amortization of goodwill	¥ 1,289	¥ 4,186	¥ 2,613	¥ 777	¥ —	¥ —	¥ —	¥ 8,865
Balance of goodwill	7,440	15,094	13,474	4,138	—	—	—	40,146

Thousands of U.S. dollars								
	2019							
	Fibers & Textiles	Performance Chemicals	Carbon Fiber Composite Materials	Environment & Engineering	Life Science	Others	Elimination & Corporate	Total
Amortization of goodwill	\$ 11,685	\$ 39,495	\$ 45,532	\$ 7,784	\$ —	\$ —	\$ —	\$ 104,495
Balance of goodwill	730	96,441	660,694	14,315	—	—	—	772,180

20. AMOUNTS PER SHARE

Basic net income per share is computed based on the net income attributable to owners of parent available for distribution to stockholders of common stock and the weighted-average number of shares of common stock outstanding during the year.

Diluted net income per share is computed based on the net income attributable to owners of parent available for distribution to the stockholders and the weighted-average number of shares of common stock outstanding during the year after giving effect to the dilutive potential of shares of common stock to be issued

upon the exercise of warrants and stock acquisition rights.

Amounts per share of net assets are computed based on the net assets available for distribution to the stockholders and the number of shares of common stock outstanding at year end.

Cash dividends per share represent the cash dividends proposed by the Board of Directors applicable to the respective years together with any interim cash dividends paid.

	Yen		U.S. dollars
	2019	2018	2019
Net income attributable to owners of parent:			
Basic	¥ 49.61	¥ 59.97	\$ 0.45
Diluted	49.56	59.90	0.45
Cash dividends applicable to the year	16.00	15.00	0.14
Net assets	706.95	681.92	6.37

21. RELATED PARTY TRANSACTIONS

Year ended March 31, 2019

No items to be reported.

Year ended March 31, 2018

No items to be reported.



Ernst & Young ShinNihon LLC
Hibiya Mitsui Tower, Tokyo Midtown Hibiya
1-1-2 Yurakucho, Chiyoda-ku
Tokyo 100-0006, Japan

Tel: +81 3 3503 1036
Fax: +81 3 3503 1506
ey.com

Independent Auditor's Report

The Board of Directors
Toray Industries, Inc.

We have audited the accompanying consolidated financial statements of Toray Industries, Inc. and its consolidated subsidiaries, which comprise the consolidated balance sheet as at March 31, 2019, and the 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, all expressed in Japanese yen.

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 designing and operating such internal control as management determines is necessary to enable the preparation and fair presentation of the 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. The purpose of an audit of the consolidated financial statements is not to express an opinion on the effectiveness of the entity's internal control, but in making these risk assessments the auditor considers internal controls 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. 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 Toray Industries, Inc. and its consolidated subsidiaries as at March 31, 2019, and their consolidated financial performance and cash flows for the year then ended in conformity with accounting principles generally accepted in Japan.

Convenience Translation

We have reviewed the translation of these consolidated financial statements into U.S. dollars, presented for the convenience of readers, and, in our opinion, the accompanying consolidated financial statements have been properly translated on the basis described in Note 2.

Ernst & Young ShinNihon LLC

June 25, 2019
Tokyo, Japan