

Management's Discussion & Analysis

CONTENTS

- 34 Management's Discussion & Analysis
- 38 Risk Factors
- 40 Consolidated Financial Statements
 - 40 Consolidated Balance Sheets
 - 42 Consolidated Statements of Income
Consolidated Statements of Comprehensive Income
 - 43 Consolidated Statements of Changes in Net Assets
 - 44 Consolidated Statements of Cash Flows
 - 45 Notes to Consolidated Financial Statements

Analysis of Operating Results

Change in the Fiscal Year End

At the 47th General Meeting of Shareholders on June 17, 2017, a partial amendment to the articles of incorporation was approved, and the THK Group changed from a fiscal year end of March 31 to December 31, beginning with the 2017 fiscal year. As the transition took place during the previous fiscal year for THK Group consolidated companies, that modified reporting period included 9 months for companies whose fiscal years ended in March (April 1, 2017, to December 31, 2017) and 12 months for companies whose fiscal years ended in December (January 1, 2017, to December 31, 2017) in the scope of consolidation. For this reason, this report omits percentage comparisons with the previous reporting period.

Net Sales

While the second half of this consolidated reporting period saw an economic slowdown spreading through China and other regions due to the trade war between China and the United States, the global economy held firm as developed countries primarily in Europe and the Americas continued to experience sound economic growth led by domestic demand throughout the year.

The THK Group has identified *full-scale globalization*, the *development of new business areas*, and a *change in business style* as cornerstones of its growth strategy to expand markets for its products, including LM (Linear Motion) Guides. Under its *full-scale globalization* strategy, the Group is striving to expand its production and sales structures globally to capture demand from China and other emerging countries, where the market is growing due to developments in factory automation (FA) and other areas, as well as the demand from developed countries, where the user base is expanding. Under the *development of new business areas* strategy, the THK Group is working to increase sales revenue from not only existing products, but also newly developed products, buoyed by growing use of the Group's products in fields related to consumer goods, such as seismic isolation and damping systems, medical equipment, aircraft, robotics, renewable energy, and especially automotive parts. Additionally, to promote these strategies, the Company is making full use of new technologies such as AI and robots in a variety of different ways, thereby expanding its business domains by realizing a *change in business style*.

Despite signs of adjustment regarding demand in the electronics and other industries beginning in the second half of the consolidated reporting period, the THK Group captured what had been an overall favorable trend in demand, resulting in ¥353,479 million in consolidated net sales.

Income and Expenses

Although fixed costs and other expenses increased with the expansion in net sales, with the favorable shift in overall demand, the Group has continued to pursue robotization, automation, and other activities to improve productivity. As a result of those efforts, the cost to sales ratio was 71.1%, and the ratio of SG&A expenses to sales was 14.8%. Additionally, operating income was ¥49,832 million, and the operating margin was 14.1% due to the greater impact of the increase in sales volumes compared to the increase in fixed costs.

Total non-operating income was ¥1,697 million. This largely comprised interest and dividend income of ¥875 million and ¥614 million of equity in earnings of an affiliate.

As a result, net income attributable to shareholders of THK CO., LTD., was ¥35,400 million.

Segment Information

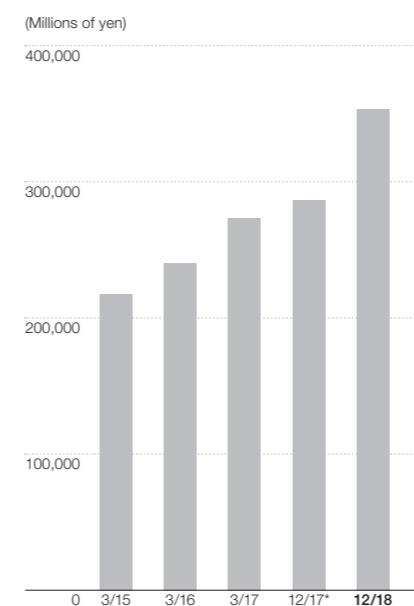
Japan

Despite a continued slowdown in exports, Japan experienced a moderate economic recovery as domestic capital investments held firm. During the first half of the fiscal year, the rapid advancement of automation and robotization led to an overall favorable trend in demand for general machinery and machine tools, in line with a similar trend for electronics. The Group captured this demand, resulting in net sales of ¥160,742 million and an operating income (segment income) of ¥38,460 million.

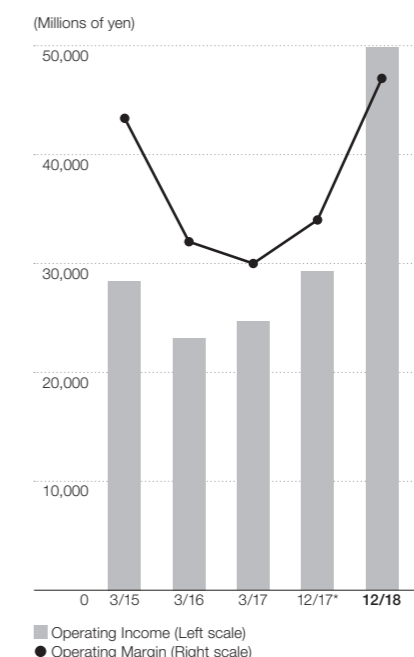
The Americas

Economic growth continued in the Americas, driven by favorable consumer spending. The THK Group captured the steady trend in demand for electronics and machine tools, resulting in net sales of ¥69,882 million. However, profitability worsened due to fluctuations in the exchange rate and sharp increases in material prices in the automotive and transportation business. As a result, the operating income (segment income) stood at ¥309 million.

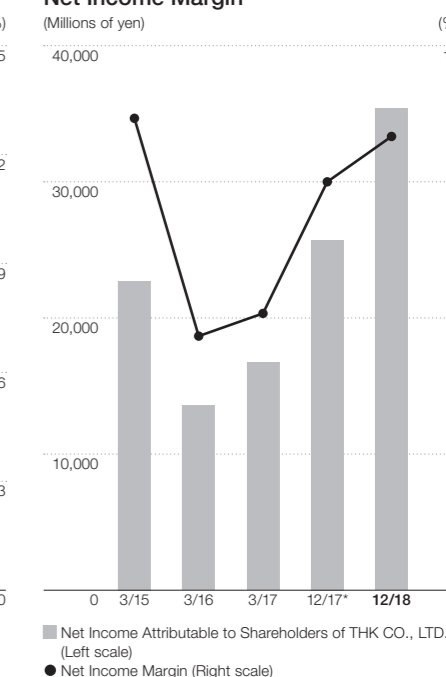
Net Sales



Operating Income/ Operating Margin



Net Income Attributable to Shareholders of THK CO., LTD./ Net Income Margin



* This data reflects a modified reporting period that includes 9 months from consolidated companies whose fiscal years ended in March and 12 months from consolidated companies whose fiscal years ended in December.

Europe

Modest economic growth continued in Europe, driven by steady capital investments. The THK Group captured the steady trend in demand for general machinery and machine tools, resulting in net sales of ¥59,482 million. However, profitability worsened due to fluctuations in the exchange rate and sharp increases in raw material prices in the automotive and transportation business. As a result, the operating income (segment income) stood at ¥74 million.

China

In the second half of the year, China saw broad adjustments being made to capital investments due to the trade war with the United States. However, the THK Group captured the demand for electronics and products related to automation and robotization, which had been trending favorably. As a result, net sales stood at ¥46,735 million, resulting in an operating income (segment income) of ¥8,194 million.

Asia and Other

As the range of demand for THK products steadily grew in India, the ASEAN region, and other parts of the world, the Group undertook aggressive sales activities to expand transactions with existing customers and acquire new customers. As a result, net sales stood at ¥16,636 million, resulting in an operating income (segment income) of ¥2,384 million.

Financial Position

Assets, Liabilities, and Net Assets

▶ Assets

Total current assets stood at ¥288,340 million as of December 31, 2018, an increase of ¥17,365 million compared with the previous fiscal year end. In line with the upswing in net sales, trade accounts and notes receivable climbed ¥5,637 million, and inventories rose ¥6,262 million. Cash and cash equivalents increased ¥4,592 million due primarily to free cash flow.

Total non-current assets stood at ¥175,009 million as of December 31, 2018, an increase of ¥9,320 million compared with the previous fiscal year end. This increase was primarily due to a ¥13,761 million increase in tangible fixed assets from capital investments, despite a ¥4,289 million decrease in goodwill and other intangible fixed assets.

▶ Liabilities

Total liabilities came to ¥168,631 million, up ¥13,721 million compared with the previous fiscal year end. This increase was primarily due to an increase of ¥2,770 million in trade accounts and notes payable, and an increase of ¥10,597 million in income taxes payable and other accrued expenses.

▶ Net Assets

Total net assets stood at ¥294,719 million as of December 31, 2018, an increase of ¥12,964 million compared with the previous fiscal year end. This increase was primarily due to a decrease in foreign currency translation adjustments of ¥10,704 million, cash dividends of ¥9,326 million, and a net income attributable to shareholders of THK CO., LTD., of ¥35,400 million.

Cash Flows

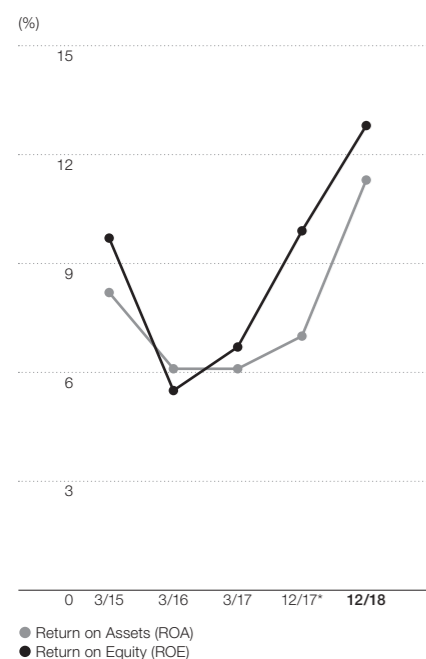
Net cash provided by operating activities came to ¥55,177 million. The major cash inflows were an income before income taxes of ¥51,529 million, depreciation and amortization of ¥15,562 million, a ¥7,547 million increase in accounts and notes receivable, and a ¥3,624 million increase in accounts and notes payable.

Net cash used in investing activities totaled ¥33,055 million, primarily due to the purchase of fixed assets.

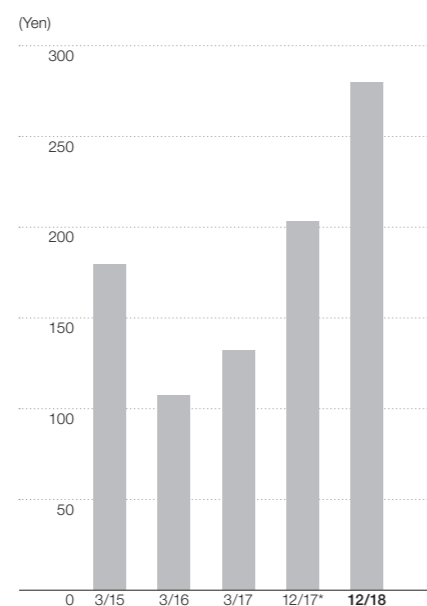
Net cash used in financial activities totaled ¥11,645 million, which included ¥9,326 million in cash dividends.

In addition to each of the aforementioned activities, accounting for the effect of exchange differences, cash and cash equivalents stood at ¥134,513 million as of December 31, 2018, an increase of ¥4,592 million compared with the previous fiscal year end.

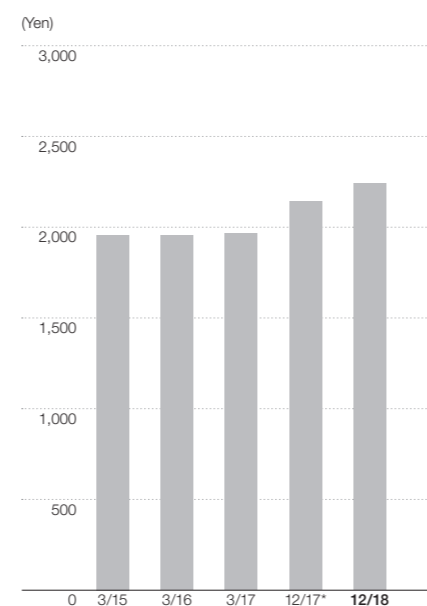
Return on Assets (ROA)/
Return on Equity (ROE)



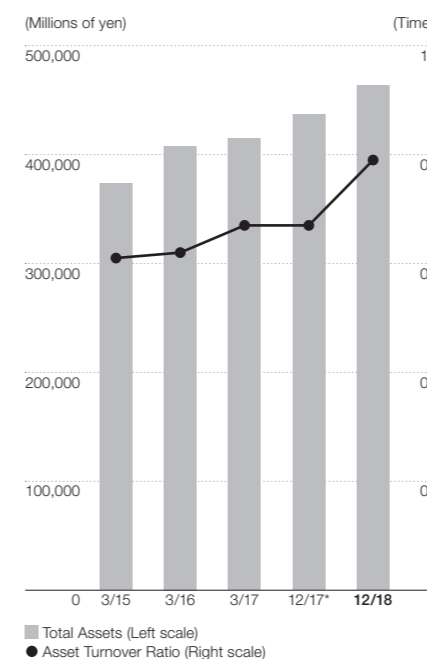
Net Income per Share



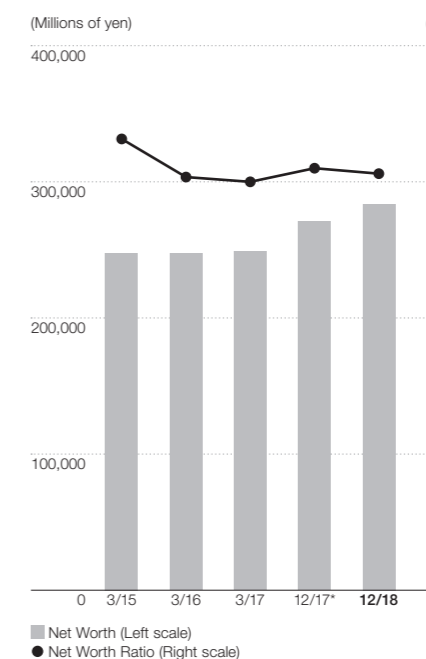
Net Assets per Share



Total Assets/
Asset Turnover Ratio



Net Worth/
Net Worth Ratio



* This data reflects a modified reporting period that includes 9 months from consolidated companies whose fiscal years ended in March and 12 months from consolidated companies whose fiscal years ended in December.

* This data reflects a modified reporting period that includes 9 months from consolidated companies whose fiscal years ended in March and 12 months from consolidated companies whose fiscal years ended in December.

Risk Factors

Risk factors and uncertainties that could affect the THK Group's business results and financial position include, but are not limited to, the items outlined below.

Please note that any items relating to the future are based on the best judgment of THK Group management as of March 18, 2019.

Effect of Changes in Demand Trends Within Specific Industries

The THK Group manufactures and sells LM Guides, ball screws, and other machine components, as well as link balls, suspension ball joints, and other transportation equipment components. The principal users of these products are companies that make industrial machinery and equipment, including machine tools, general machinery, and semiconductor manufacturing equipment, as well as manufacturers of transportation equipment. While the THK Group is striving through its three core strategies of full-scale globalization, the development of new business areas, and a change in business style to realize expansions in its business domains, the performance of the THK Group is influenced by demand trends within industrial sectors such as machine tools, general machinery, semiconductor manufacturing equipment, and transportation equipment, whose manufacturers constitute the THK Group's major customers.

Therefore, future drastic changes in demand trends in these specific industries are a risk.

Business Expansion Outside of Japan

The THK Group has manufacturing and sales operations in the Americas, Europe, Asia, and other regions, and there is a risk of unexpected legal and regulatory changes or shifts in political and economic conditions in countries and regions where the THK Group manufactures or sells products.

Exchange Rate Fluctuations

While the THK Group engages in the hedging of risks by means such as foreign exchange contracts for foreign currency transactions, primarily concerning importing and exporting, there is a risk of major exchange rate fluctuations.

Furthermore, the financial statements of THK's subsidiaries outside of Japan are converted to yen for the generation of the Company's consolidated financial statements. Thus, there is also the possibility that, even with there being no change in the value in the local currency, the amount on the consolidated financial statement after the conversion to yen could be affected by the exchange rate at the time of conversion.

Product Development

The principal business of the THK Group is the manufacture and sale of linear motion systems, notably LM (Linear Motion) Guides, and automotive and transportation components, notably link balls. Between the two, linear motion systems

account for the majority of sales and are expected to continue to do so for the foreseeable future. To secure and expand the foundation of its business, the THK Group continues to develop new high-performance products with high added value. However, if THK is unable to develop appealing new products because it cannot predict the needs of the industry and market sufficiently, if it presents new products to the market too late, or if another company develops a revolutionary new product, it could reduce THK's growth and profitability.

Heightened Competition

The THK Group makes every effort to provide high-quality products that meet the needs of the market and its customers, but it is conducting its manufacturing and sales activities in an environment of competition that is intensifying on a global scale. The Company faces growing competition in terms of price and other factors due to the rise of products made in China and other emerging countries. Even in fields where the THK Group commands a large market share, there is no guarantee that it can maintain its competitive edge in the future.

Reliance on Specific Supply Sources

The THK Group procures some of its raw materials and parts from external supply sources. As a result, there is a risk of a shortfall in raw materials and parts due to factors such as a supplier's insufficient production capacity, poor quality, or insolvency, or a natural disaster such as a fire or earthquake.

Furthermore, in response to society's demand for strong ESG-related efforts, the Group demonstrates CSR in its purchasing activities by means such as appropriately handling conflict minerals and promoting eco-friendliness throughout its supply chain. However, any failure in THK's supply sources could affect its procurement activities.

Sharp Hikes in the Prices of Raw Materials

The THK Group procures the raw materials and components used in its products from several sources outside of the Group. In the event of unanticipated sharp hikes in the prices of raw materials arising from factors such as high crude oil prices, the social conditions in countries that supply raw materials, and rising demand in emerging countries, the manufacturing costs of the Group's products can be expected to increase. Although the Company works to absorb any impact by controlling its costs and adjusting its prices accordingly, there is a risk that raw material costs could rise more than anticipated.

Problems with Product Quality

THK Group products are widely used in industrial machinery, including machine tools, industrial robots, and semiconductor manufacturing equipment. Applications for THK products have also expanded to include various areas related to consumer goods, including seismic isolation and damping systems,

medical equipment, aircraft, robots, renewable energy, and especially automotive parts.

Under these circumstances, the THK Group has worked to establish quality assurance systems to maintain high product quality across all product sectors. However, in the unlikely event that an unforeseen product defect were to occur that could lead to a large-scale recall or to THK being held liable for those products, there could be substantial costs, a loss of trust among the general public, or a suspension of transactions.

Although the THK Group possesses product liability insurance, there is no guarantee that it would cover all losses incurred through the reparation of damages.

Intellectual Property Rights

The THK Group pays meticulous attention to ensure that it does not infringe the intellectual property rights of others, and it secures its intellectual property rights through domestic and overseas patents, thereby protecting its rights concerning the expertise that is invaluable to its business activities and the technology it has accumulated through its production techniques and product development. Nevertheless, in the event that THK is unable to effectively prevent the manufacture of similar products based on an infringement of the THK Group's intellectual property due to the insufficient intellectual property rights protections in certain countries and regions, the possibility that this could impact the Group's business cannot be entirely discounted.

Therefore, there is a risk that a third party could infringe THK's intellectual property rights, or that the Company could unintentionally infringe the intellectual property rights of another party.

Information Security

The THK Group collects personal information as well as confidential information relating to sales and technology as it conducts its business activities. Every effort is made to ensure that this information is stringently managed. The Group also utilizes various computer systems and IT networks for its entire business, and appropriate security measures have been taken for these systems. However, if part or all of this information were to be leaked due to a cyberattack, computer virus, unauthorized access, infrastructure failure, information system defect, or another factor, or if an unforeseen event were to shut down a system or cause the destruction or alteration of important data, there could be a loss of trust among the general public, suspension of business activities, expenses to implement countermeasures, significant financial penalties, or a suspension of transactions.

Disasters, Acts of Terrorism, Infectious Diseases, and Other Maladies

The THK Group possesses manufacturing facilities as well as sales offices in Japan, the Americas, Europe, Asia, and other regions. In the event that any of the Group's places of business or those of its business partners are affected by natural disas-

ters, including earthquakes and fires, political unrest due to acts of terrorism or war, or the outbreak of an infectious disease, there could be a significant impact on THK's production and general business activities. The Group has established a risk management structure and has taken preemptive measures along with procedures to continue and quickly recover its operations in the event of a crisis to minimize losses. However, it is difficult to completely avoid all risks, so the THK Group could be affected by any losses that exceed expectations.

Workforce

The THK Group continues to hire and develop talented employees both within and outside of Japan to maintain its competitiveness. However, if hiring becomes increasingly competitive in every field due to the aging population and declining birthrate and THK is unable to hire the proper talent as planned, or if there is an inconsistency with talent development, it could hinder the Group's ability to pass on skills and expertise to new employees and limit the execution of the Group's business.

THK works to establish stable labor-management relations, but there are differences in labor practices among locations outside of Japan. Therefore, the THK Group could be affected if a labor dispute were to occur or labor-management relations were to deteriorate due to unforeseen legislative, economic, or social changes, or if employee wages were to rise suddenly, particularly in emerging countries.

Compliance

As the THK Group expands its business globally, it conducts fair business activities in compliance with the laws and regulations that apply in each country. Furthermore, the Group works to improve compliance awareness by notifying Group employees of the standard of conduct they must follow and performing required internal training.

Although the Company maintains an internal reporting system and works to prevent compliance risks, it is difficult to avoid such risks entirely while expanding business globally. Therefore, in the event of a legal violation, the THK Group could bear criminal, civil, or administrative liability, which could result in a loss of trust among the general public.

Environmental Problems

The THK Group works to counteract climate change, conserve resources, and reduce its environmental impact. The Company has never caused any significant environmental problems. However, if an environmental problem were to occur in the future due to an unforeseen event, it could result in expenses to compensate damages or respond to the problem, administrative sanctions such as penalties, a loss of trust among the general public, or a suspension of production activities.

In addition, if regulations become stricter, there is a risk that THK could bear additional obligations or expenses.

Consolidated Financial Statements

THK CO., LTD. and Consolidated Subsidiaries

CONSOLIDATED BALANCE SHEETS

December 31, 2018 and 2017

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2018	2017	2018
ASSETS			
Current Assets:			
Cash and cash equivalents (Note 19)	¥ 134,513	¥ 129,920	\$ 1,225,966
Receivables (Note 19):			
Trade accounts and notes receivable (Note 3)	90,095	85,457	821,135
—Unconsolidated subsidiaries and affiliates	2,600	1,600	23,696
Other receivables	1,456	1,593	13,270
—Unconsolidated subsidiaries and affiliates	874	1,102	7,965
	95,026	89,754	866,077
Less allowance for doubtful receivables	(134)	(218)	(1,221)
	94,891	89,535	864,846
Inventories (Note 4)	50,065	43,802	456,297
Short-term loans receivable	3	3	27
Deferred tax assets (Note 16)	3,459	2,337	31,525
Other current assets	5,406	5,374	49,270
Total current assets	288,340	270,975	2,627,962
Investments and Other:			
Investments in securities (Notes 6 and 19)	3,839	6,087	34,989
Investments in unconsolidated subsidiaries and affiliates	5,825	5,290	53,089
Net defined benefit asset (Note 8)	1,569	2,295	14,300
Long-term loans receivable	74	72	674
—Unconsolidated subsidiaries and affiliates	1,500	—	13,671
Deferred tax assets (Note 16)	1,554	754	14,163
Other investments	2,844	2,860	25,920
Total investments and other	17,207	17,359	156,826
Property, Plant and Equipment (Note 5):			
Buildings and structures	71,113	72,565	648,131
Machinery, equipment, vehicles and others (Note 15)	219,950	212,559	2,004,648
	291,063	285,124	2,652,779
Less accumulated depreciation	(194,885)	(193,598)	(1,776,203)
	96,178	91,525	876,576
Land	13,797	13,955	125,747
Construction in progress	19,720	10,452	179,730
Total property, plant and equipment	129,695	115,934	1,182,054
Intangibles:			
Goodwill	10,003	11,449	91,168
Other	18,102	20,945	164,983
Total intangibles	28,106	32,395	256,161
Total assets	¥ 463,350	¥ 436,664	\$ 4,223,022

The accompanying notes are an integral part of these statements.

	Millions of yen		Thousands of U.S. dollars (Note 1)
	2018	2017	2018
LIABILITIES AND NET ASSETS			
Current Liabilities:			
Current portion of long-term debt (Notes 7 and 19)	¥ 12,185	¥ 22,185	\$ 111,055
Payables (Note 19):			
Trade accounts and notes payable	47,890	45,190	436,474
—Unconsolidated subsidiaries and affiliates	1,133	1,063	10,326
Other payables	7,179	5,773	65,430
—Unconsolidated subsidiaries and affiliates	27	121	246
	56,230	52,148	512,486
Income taxes payable	12,271	1,673	111,839
Accrued bonuses to employees	3,899	2,971	35,535
Other accrued expenses	8,135	8,639	74,143
Lease obligations	85	126	774
Other current liabilities	5,429	5,452	49,480
Total current liabilities	98,237	93,196	895,342
Long-term Liabilities:			
Long-term debt (Notes 7 and 19)	55,295	47,480	503,964
Reserve for directors' and corporate auditors' retirement benefits	131	108	1,193
Reserve for product warranty	112	118	1,020
Long-term lease obligations	121	114	1,102
Net defined benefit liability (Note 8)	7,908	7,389	72,074
Deferred tax liabilities (Note 16)	5,491	5,134	50,045
Other liabilities	1,334	1,368	12,158
Total long-term liabilities	70,394	61,713	641,578
Commitment and Contingent Liabilities (Notes 9 and 10)			
Net Assets (Note 11):			
Shareholders' equity			
Common stock			
Authorized: 465,877,700 shares; Issued: 133,856,903 shares as of December 31, 2018 and 2017	34,606	34,606	315,402
Additional paid-in capital	40,420	40,440	368,392
Retained earnings	220,787	194,626	2,012,276
Treasury stock, at cost: 7,288,846 shares and 7,287,650 shares as of December 31, 2018 and 2017, respectively	(14,002)	(13,998)	(127,615)
Total shareholders' equity	281,811	255,675	2,568,456
Accumulated other comprehensive income:			
Net unrealized gain on available-for-sale securities	1,102	2,847	10,043
Foreign currency translation adjustments	2,755	13,459	25,109
Remeasurements of defined benefit plans	(2,063)	(1,033)	(18,802)
Total accumulated other comprehensive income	1,794	15,272	16,350
Non-controlling interests	11,113	10,806	101,285
Total net assets	294,719	281,754	2,686,100
Total liabilities and net assets	¥463,350	¥436,664	\$4,223,022

The accompanying notes are an integral part of these statements.

CONSOLIDATED STATEMENTS OF INCOME

Year ended December 31, 2018, and nine months ended December 31, 2017

	Millions of yen		Thousands of U.S. dollars (Note 1)
	Year ended December 31, 2018	Nine months ended December 31, 2017	Year ended December 31, 2018
Net Sales	¥353,479	¥286,603	\$3,221,646
Cost of Sales (Note 13)	251,181	214,490	2,289,290
Gross profit	102,298	72,112	932,355
Selling, General and Administrative Expenses (Notes 12 and 13)	52,465	42,833	478,171
Operating income	49,832	29,279	454,174
Non-Operating Income (Expenses):			
Interest and dividend income	875	551	7,974
Interest expenses	(256)	(360)	(2,333)
Foreign exchange loss, net	(1,178)	(270)	(10,736)
Equity in earnings of an affiliate	614	948	5,596
Rental income	390	317	3,554
Loss on sales and disposal of property, plant, equipment and intangibles, net (Note 14)	(228)	(123)	(2,078)
Impairment loss (Note 5)	—	(54)	—
Other, net	1,478	747	13,470
	1,697	1,755	15,466
Income before income taxes	51,529	31,034	469,640
Income Taxes (Note 16)			
Current	16,097	5,091	146,709
Deferred	(585)	(195)	(5,331)
Total income taxes	15,511	4,895	141,368
Net income	36,017	26,139	328,262
Net income attributable to non-controlling interests	617	409	5,623
Net income attributable to shareholders of THK CO., LTD.	¥ 35,400	¥ 25,729	\$ 322,639

The accompanying notes are an integral part of these statements.

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

Year ended December 31, 2018, and nine months ended December 31, 2017

	Millions of yen		Thousands of U.S. dollars (Note 1)
	Year ended December 31, 2018	Nine months ended December 31, 2017	Year ended December 31, 2018
Net Income	¥ 36,017	¥ 26,139	\$ 328,262
Other Comprehensive (Loss) Income (Note 17):			
Net unrealized (loss) gain on available-for-sale securities	(1,734)	1,255	(15,803)
Foreign currency translation adjustments	(11,376)	6,469	(103,682)
Remeasurements of defined benefit plans	(935)	227	(8,521)
Share of other comprehensive income of an affiliate accounted for under the equity method	284	317	2,588
Total other comprehensive (loss) income	(13,762)	8,270	(125,428)
Comprehensive Income	22,255	34,409	202,834
Attributable to:			
Shareholders of THK CO., LTD.	21,969	33,879	200,227
Non-controlling interests	286	530	2,606

The accompanying notes are an integral part of these statements.

CONSOLIDATED STATEMENTS OF CHANGES IN NET ASSETS

Year ended December 31, 2018, and nine months ended December 31, 2017

	Millions of yen				
	Shareholders' equity				
	Common stock	Additional paid-in capital	Retained earnings	Treasury stock, at cost	Total shareholders' equity
Balance at April 1, 2017	¥34,606	¥44,584	¥176,617	¥(13,991)	¥241,817
Cash dividends	—	—	(7,721)	—	(7,721)
Net income attributable to shareholders of THK CO., LTD.	—	—	25,729	—	25,729
Purchase of treasury stock	—	—	—	(6)	(6)
Changes in parent's interest due to transactions with non-controlling shareholders	—	(4,143)	—	—	(4,143)
Net changes of items other than shareholders' equity	—	—	—	—	—
Balance at December 31, 2017	¥34,606	¥40,440	¥194,626	¥(13,998)	¥255,675
Cash dividends	—	—	(9,239)	—	(9,239)
Net income attributable to shareholders of THK CO., LTD.	—	—	35,400	—	35,400
Purchase of treasury stock	—	—	—	(4)	(4)
Changes in parent's interest due to transactions with non-controlling shareholders	—	(20)	—	—	(20)
Net changes of items other than shareholders' equity	—	—	—	—	—
Balance at December 31, 2018	¥34,606	¥40,420	¥220,787	¥(14,002)	¥281,811

	Millions of yen					
	Accumulated other comprehensive income					
	Net unrealized gain on available-for-sale securities	Foreign currency translation adjustments	Remeasurements of defined benefit plans	Total accumulated other comprehensive income	Non-controlling interests	Total net assets
Balance at April 1, 2017	¥ 1,585	¥ 6,793	¥(1,256)	¥ 7,122	¥ 2,600	¥251,540
Cash dividends	—	—	—	—	—	(7,721)
Net income attributable to shareholders of THK CO., LTD.	—	—	—	—	—	25,729
Purchase of treasury stock	—	—	—	—	—	(6)
Changes in parent's interest due to transactions with non-controlling shareholders	—	—	—	—	—	(4,143)
Net changes of items other than shareholders' equity	1,261	6,666	222	8,149	8,206	16,355
Balance at December 31, 2017	¥ 2,847	¥ 13,459	¥(1,033)	¥ 15,272	¥10,806	¥281,754
Cash dividends	—	—	—	—	—	(9,239)
Net income attributable to shareholders of THK CO., LTD.	—	—	—	—	—	35,400
Purchase of treasury stock	—	—	—	—	—	(4)
Changes in parent's interest due to transactions with non-controlling shareholders	—	—	—	—	—	(20)
Net changes of items other than shareholders' equity	(1,744)	(10,704)	(1,030)	(13,478)	306	(13,171)
Balance at December 31, 2018	¥ 1,102	¥ 2,755	¥(2,063)	¥ 1,794	¥11,113	¥294,719

	Thousands of U.S. dollars (Note 1)				
	Shareholders' equity				
	Common stock	Additional paid-in capital	Retained earnings	Treasury stock, at cost	Total shareholders' equity
Balance at December 31, 2017	\$315,402	\$368,574	\$1,773,842	\$(127,579)	\$2,330,249
Cash dividends	—	—	(84,205)	—	(84,205)
Net income attributable to shareholders of THK CO., LTD.	—	—	322,639	—	322,639
Purchase of treasury stock	—	—	—	(36)	(36)
Changes in parent's interest due to transactions with non-controlling shareholders	—	(182)	—	—	(182)
Net changes of items other than shareholders' equity	—	—	—	—	—
Balance at December 31, 2018	\$315,402	\$368,392	\$2,012,276	\$(127,615)	\$2,568,456

	Thousands of U.S. dollars (Note 1)					
	Accumulated other comprehensive income					
	Net unrealized gain on available-for-sale securities	Foreign currency translation adjustments	Remeasurements of defined benefit plans	Total accumulated other comprehensive income	Non-controlling interests	Total net assets
Balance at December 31, 2017	\$ 25,947	\$122,666	\$ (9,414)	\$ 139,190	\$ 98,487	\$2,567,936
Cash dividends	—	—	—	—	—	(84,205)
Net income attributable to shareholders of THK CO., LTD.	—	—	—	—	—	322,639
Purchase of treasury stock	—	—	—	—	—	(36)
Changes in parent's interest due to transactions with non-controlling shareholders	—	—	—	—	—	(182)
Net changes of items other than shareholders' equity	(15,895)	(97,557)	(9,387)	(122,839)	2,788	(120,041)
Balance at December 31, 2018	\$ 10,043	\$ 25,109	\$(18,802)	\$ 16,350	\$101,285	\$2,686,100

The accompanying notes are an integral part of these statements.

CONSOLIDATED STATEMENTS OF CASH FLOWS

Year ended December 31, 2018, and nine months ended December 31, 2017

	Millions of yen		Thousands of U.S. dollars (Note 1)
	Year ended December 31, 2018	Nine months ended December 31, 2017	Year ended December 31, 2018
Cash Flows from Operating Activities:			
Income before income taxes	¥ 51,529	¥ 31,034	\$ 469,640
Adjustments:			
Depreciation and amortization	15,562	13,240	141,833
Impairment loss	—	54	—
Amortization of goodwill	887	854	8,084
Interest and dividend income	(875)	(551)	(7,974)
Interest expenses	256	360	2,333
Foreign exchange loss, net	2,970	110	27,068
Equity in earnings of an affiliate	(614)	(948)	(5,596)
Loss on sales and disposal of property, plant, equipment and intangibles, net	228	165	2,078
Changes in assets and liabilities:			
Increase in accounts and notes receivable	(7,547)	(9,897)	(68,784)
Increase in inventories	(7,958)	(5,463)	(72,530)
Increase in accounts and notes payable	3,624	2,246	33,029
Increase (decrease) in provisions	938	(439)	8,549
(Decrease) increase in net defined benefit liability	(231)	420	(2,105)
Other, net	1,677	856	15,284
Subtotal	60,447	32,044	550,920
Interest and dividend received	872	542	7,947
Interest paid	(253)	(398)	(2,305)
Income taxes paid	(5,888)	(6,572)	(53,663)
Net cash provided by operating activities	55,177	25,616	502,889
Cash Flows from Investing Activities:			
Purchase of property, plant and equipment and intangibles	(31,412)	(15,699)	(286,292)
Proceeds from sales of property, plant and equipment	186	26	1,695
Increase in investments in securities, unconsolidated subsidiaries and affiliates	(250)	(209)	(2,278)
Increase in loans receivable	(1,597)	(11)	(14,555)
Payment for insurance fund	(207)	(7)	(1,886)
Other, net	226	69	2,059
Net cash used in investing activities	(33,055)	(15,831)	(301,266)
Cash Flows from Financing Activities:			
Repayment of long-term debt	¥ (2,185)	¥ —	\$ (19,914)
Redemption of corporate bonds	(20,000)	(13,000)	(182,282)
Proceeds from issuance of corporate bonds	20,000	—	182,282
Cash dividends	(9,326)	(7,726)	(84,998)
Proceeds from payment from non-controlling shareholders	—	3,000	—
Cash dividends paid to non-controlling shareholders	(8)	—	(72)
Purchase of treasury stock	(4)	(6)	(36)
Repayment of lease obligations	(121)	(69)	(1,102)
Net cash used in financing activities	(11,645)	(17,802)	(106,133)
Foreign Currency Translation Adjustments on Cash and Cash Equivalents	(5,883)	593	(53,618)
Net Increase (Decrease) in Cash and Cash Equivalents	4,592	(7,424)	41,851
Cash and Cash Equivalents at Beginning of Year	129,920	137,345	1,184,104
Cash and Cash Equivalents at End of Year	¥134,513	¥129,920	\$1,225,966

The accompanying notes are an integral part of these statements.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

THK CO., LTD. and consolidated subsidiaries

1. Basis of Presenting Consolidated Financial Statements

The accompanying consolidated financial statements of THK CO., LTD. (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 generally accepted in Japan ("Japanese GAAP"), which are different in certain respects from International Financial Reporting Standards as to application and disclosure requirements.

The accompanying consolidated financial statements include certain reclassifications and rearrangements to present them in a form that is more familiar to readers outside Japan. Certain amounts previously reported may have been reclassified to conform to the current year financial statement presentation. Such reclassifications have been made solely for comparability of the consolidated financial statements, and do not affect net income or net assets. In addition, the notes to the consolidated financial statements include information that is not required under Japanese GAAP, but which is provided herein as additional information.

Effective from the previous fiscal year, the Company and its consolidated subsidiaries with fiscal closing dates other than December 31 changed their fiscal closing dates to December 31. As a result of this change of the fiscal closing date from

March 31 to December 31, the previous reporting period covers the nine-month period from April 1, 2017, to December 31, 2017, for the Company and its consolidated subsidiaries whose fiscal closing dates were March 31, and the twelve-month period from January 1, 2017, to December 31, 2017, for the consolidated subsidiaries whose fiscal closing dates were December 31.

U.S. dollar amounts presented in the consolidated financial statements are included solely for the convenience of the readers. These translations should not be construed as presentations that the yen amounts actually represent or could be converted into U.S. dollars at that or any other rate. For this purpose, the rate of ¥109.72 to U.S. \$1, the approximate rate of exchange prevailing in Tokyo on December 31, 2018, has been used for the translation of the accompanying consolidated financial statements as of December 31, 2018, and for the year then ended.

As permitted by the Financial Instruments and Exchange Act, amounts of less than one million yen have been omitted. U.S. dollar amounts are translated from such yen amounts, and amounts of less than one thousand dollars have been omitted. As a result, the total amounts in Japanese yen and translated U.S. dollars shown in the consolidated financial statements and notes to the consolidated financial statements do not necessarily agree with the sum of the individual amounts.

2. Summary of Significant Accounting Policies**(a) Consolidation**

The accompanying consolidated financial statements include the accounts of the Company and its subsidiaries that are controlled by the Company. Under the effective control approach, all majority-owned companies are to be consolidated. Additionally, those companies over which the Company is able to directly or indirectly exercise control are to be consolidated even if the holding ratio equals 50% or less. All significant inter-company transaction accounts and unrealized inter-company profits are eliminated upon consolidation. For consolidated subsidiaries and an affiliate whose closing dates are different from that of the Company, certain adjustments necessary for consolidation have been made.

The Company had 39 subsidiaries as of December 31, 2018 and 2017. The consolidated financial statements for the year ended December 31, 2018, and nine months ended December 31, 2017, include the accounts of the Company and its 36 consolidated subsidiaries (collectively, "the Group"). Investments in the remaining three subsidiaries including THK BRAZIL INDUSTRIA E COMERCIO LTDA., are not consolidated and stated at cost, because these companies are small in size, and if these companies had been consolidated, the effect on the

consolidated financial statements would not have been significant.

The excess of the cost of acquisition over the fair value of the net assets of an acquired subsidiary (goodwill) at the date of acquisition is amortized over 15 years by the straight-line method.

(Application of the equity method)

The Company had three affiliates and three unconsolidated subsidiaries as of December 31, 2018 and 2017. Under the control concept, companies over which the Company directly or indirectly has the ability to exercise significant influence are accounted for using the equity method. For the year ended December 31, 2018, and the nine months ended December 31, 2017, the Company has applied the equity method to investment in SAMICK THK CO., LTD. Investments in the remaining affiliates and unconsolidated subsidiaries (THK BRAZIL INDUSTRIA E COMERCIO LTDA., etc.) are stated at cost. If the equity method had been applied to the investments in those companies, the effect on the consolidated financial statements would not have been significant.

(Change in the fiscal closing dates of the Company and certain consolidated subsidiaries)

As noted in Note 1, the fiscal closing date was unified into December 31, effective from the previous fiscal year. Consequently, the fiscal closing date of consolidated subsidiaries agrees with that of the Company as of December 31, 2017. The reporting period of the previous fiscal year ended December 31, 2017, for the Company, its domestic consolidated subsidiaries and THK India Pvt. Ltd. was the nine months from April 1, 2017, to December 31, 2017, and that for overseas consolidated subsidiaries, excluding THK India Pvt. Ltd., was the twelve months from January 1, 2017, to December 31, 2017.

Unification of Accounting Policies Applied to Foreign Subsidiaries for the Consolidated Financial Statements

Under Japanese GAAP: (1) the accounting policies and procedures applied to a parent company and its subsidiaries for similar transactions and events under similar circumstances should in principle be unified for the preparation of the consolidated financial statements, and (2) financial statements prepared by foreign subsidiaries in accordance with either International Financial Reporting Standards or the generally accepted accounting principles in the United States of America tentatively may be used for the consolidation process; (3) however, the following items should be adjusted in the consolidation process so that net income is accounted for in accordance with Japanese GAAP unless they are immaterial: 1) amortization of goodwill; 2) scheduled amortization of actuarial gain or loss of pensions that has been directly recorded in net assets; 3) expensing capitalized development costs of research and development; 4) cancellation of the fair value model accounting for property, plant, and equipment and investment properties and incorporation of the cost model accounting; 5) exclusion of non-controlling interests from net income, if contained.

(b) Translation of Foreign Currency Financial Statements

Assets and liabilities of foreign subsidiaries and an affiliate are translated into Japanese yen at exchange rates prevailing at the balance sheet date. Net assets except for minority interest accounts at beginning of year are translated into Japanese yen at historical rates. Profit and loss accounts are translated into Japanese yen using the average exchange rate during the year. Differences in yen amounts arising from use of different rates are presented as foreign currency translation adjustments in the accumulated other comprehensive income of the net assets section.

(c) Inventories

Inventories, except for work in process, are stated at cost determined principally by the gross average method. Work in process for ordered products is stated at cost determined principally by the specific identified cost method. If acquisition cost of an inventory exceeds its net selling value, the carrying

amount of such inventory is written down to its net selling value, and the difference is charged to income.

(d) Financial Instruments**Securities**

Investments in securities are classified and accounted for, depending on management's intent, as follows: (1) trading securities, which are held for the purpose of earning capital gains in the near term, are reported at fair value, and the related unrealized gains and losses are included in earnings; (2) held to maturity debt securities, which are expected to be held to maturity with the positive intent and ability to hold to maturity, are reported at amortized cost; and (3) available-for-sale securities, which are not classified as either of the aforementioned securities, are reported at fair value, with unrealized gains and losses, net of applicable taxes, reported as a separate component of net assets. If the fair value of available-for-sale securities is not readily determinable, such investments are stated at cost.

With respect to equity investments in investment business limited partnerships, which are regarded as securities pursuant to paragraph 2 of Article 2 of the Financial Instruments and Exchange Act, such investments are stated using net equity based on the recent available financial statements as of the reporting dates which are provided by the partnership agreements.

For other than temporary declines in fair value, investments in securities are written down to the net realizable value, and the difference is charged to income.

Derivatives and Hedging Accounting**Derivatives are measured at fair value.**

The Group uses a variety of derivative financial instruments, including forward foreign exchange contracts, interest rate swap contracts and interest rate and currency swap contracts to manage foreign exchange risks and interest rate risks. The Company has established a control environment, which includes policies and procedures for risk assessments and approval, and reporting and monitoring of transactions involving derivative financial instruments. The Group does not hold or issue derivative financial instruments for speculative purposes.

Hedge accounting method:

For forward foreign exchange contracts which satisfy the required condition under the related Japanese accounting standards, the hedged foreign currency-denominated receivables and payables are translated at the contract rates, and no gains or losses are recognized.

For interest rate swap contracts which satisfy the required condition under the related Japanese accounting standards, the hedged foreign currency assets and liabilities are translated at the contract rates, no gains or losses on the translation are recognized, and the differentials paid or received on interest rates under swap contracts are recognized and included in the interest income or expenses.

For interest rate and currency swap contracts which satisfy the required condition under the related Japanese accounting

standards, the hedged foreign currency assets and liabilities are translated at the contract rates, no gains or losses on the translation are recognized, and the differentials paid or received on interest rates under swap contracts are recognized and included in the interest income or expenses.

Hedging instruments and hedged items are as follows:

Hedging instruments:	Hedged items:
Forward foreign exchange contracts	Foreign currency-denominated receivables and payables
Interest rate swap contracts	Interest on bank loans
Interest rate and currency swap contracts	Foreign currency-denominated loans and interest thereof

Hedging policy:

Forward foreign exchange contracts aim to hedge foreign exchange fluctuation risk and fix cash flows associated with collection of and payment for foreign currency-denominated receivables and payables.

Interest rate swap contracts aim to hedge interest rate fluctuation risk associated with bank loans.

Interest rate and currency swap contracts aim to hedge foreign exchange fluctuation risk and interest rate fluctuation risk associated with foreign currency-denominated bank loans.

Assessment of hedge effectiveness:

With respect to forward foreign exchange contracts, assessment of hedge effectiveness is omitted since significant conditions concerning hedging instruments and hedged items are identical, and it is assumed in advance that those contracts will offset market fluctuations or cash flow fluctuations upon and continuously after the beginning of the hedge.

With respect to interest rate swap contracts, assessment of hedge effectiveness is omitted since they meet the requirements for special hedge accounting treatments.

With respect to interest rate and currency swap contracts, assessment of hedge effectiveness is omitted since they meet the requirements for applicable special accounting treatments as mentioned above.

(e) Property, Plant and Equipment (except for leased assets)

Property, plant and equipment of the Company and its domestic consolidated subsidiaries are depreciated using the straight-line method.

The range of useful lives is principally from 5 to 50 years for buildings and structures and from 4 to 12 years for machinery, equipment and vehicles.

Normal repairs and maintenance, including minor renewals and improvements, are charged to income as incurred.

(f) Intangibles

Intangible assets are amortized using the straight-line method.

Software for internal use by the Company and domestic consolidated subsidiaries is amortized on a straight-line basis

over a period of five years, the estimated useful life of the software.

(g) Lease

Leased assets under finance lease arrangements that do not transfer ownership are depreciated using the straight-line method over the lease term as the useful life, with the residual value deemed to be zero.

(h) Allowance for Doubtful Receivables

Allowance for doubtful receivables is stated in amounts considered to be appropriate based on the Group's past credit loss experience and an evaluation of potential losses in the receivables outstanding.

(i) Accrued Bonuses to Employees

Accrued bonuses to employees are stated at an estimated amount to be paid in the following year based on the employees' compensation in the current year.

(j) Reserve for Directors' and Corporate Auditors' Retirement Benefits

Reserve for directors' and corporate auditors' retirement benefits represents the liability at the amount that would be required if all eligible directors and corporate auditors retired at each balance sheet date.

(k) Reserve for Product Warranty

Reserve for product warranty is stated at amount based on the Group's past experience in order to cover possible warranty liabilities.

(l) Accounting for Employees' Retirement Benefits

- Methods to determine the estimated retirement benefits to be attributed to the reporting period
The benefit formula is employed for the method of determining the estimated retirement obligation to be attributed to the reporting period.
- Amortization of actuarial gains/losses and prior service cost
Prior service cost is amortized pro rata in the years from the fiscal year when incurred by the straight-line method, based on the average remaining service years (15 years) of the employees.
Actuarial gains/losses are amortized pro rata in the years from the following fiscal year when incurred by the straight-line method, based on the average remaining service years (from 5 to 18 years) of the employees.
Unrecognized actuarial gains/losses and unrecognized prior service cost, after adjustment for tax effect, are recorded as remeasurements of defined benefit plans under the accumulated other comprehensive income in the net assets.
- Application of the simplified method for small businesses
For certain consolidated subsidiaries, a simplified method is

applied for the calculation of retirement benefit obligations and retirement benefit expenses whereby the necessary retirement benefit provisions for voluntary resignations at the end of the consolidated fiscal year are recorded as retirement benefit obligations.

(m) Foreign Currency Translation

All monetary assets and liabilities denominated in foreign currencies, whether long-term or short-term, are translated into Japanese yen at exchange rates prevailing at the balance sheet date. Gains and losses from translation are recognized in the consolidated statements of income to the extent that they are not hedged by forward foreign exchange contracts.

(n) Consumption Taxes

Japanese consumption taxes are levied at the flat rate of eight percent on all domestic consumption of goods and services, with certain exemptions. The consumption taxes received by the Company and domestic subsidiaries on sales are excluded from net sales, but are recorded as a liability. The consumption taxes paid by the Company and domestic subsidiaries on purchases of goods and services are excluded from costs or expenses, but are recorded as an asset. The net balance of liability after offsetting against assets is included in "Other current liabilities" in the consolidated balance sheets.

(o) Income Taxes

Japanese income taxes consist of corporate income taxes, local inhabitants' taxes and enterprise taxes.

Provision for income taxes is computed based on the pretax income included in the consolidated statements of income. The asset and liability approach is used to recognize deferred tax assets and liabilities for expected future tax consequences of temporary differences between the carrying amounts and the tax bases of assets and liabilities. Deferred taxes are determined by applying currently enacted tax laws to the temporary differences.

(p) Cash and Cash Equivalents

Cash and cash equivalents are composed of cash on hand, bank deposits that can be withdrawn on demand and short-term investments with original maturity of three months or less and which carry a minor risk of fluctuations in value.

(q) Per Share Information

Net assets per share is computed by dividing net assets except minority interests at the year-end by the number of common stock outstanding at the year-end.

Net income per share is computed by dividing net income attributable to common shareholders by the weighted-average number of common shares outstanding for the period.

Diluted net income per share reflects the potential dilution that could occur if securities were exercised or converted into common stock. Diluted net income per share of common stock

assumes full conversion of the outstanding convertible notes and bonds at the beginning of the year (or at the time of issuance) with an applicable adjustment for related interest expense, net of tax, and full exercise of outstanding warrants.

(r) New Accounting Standards Issued, But Not Yet Applied Implementation Guidance on Tax Effect Accounting and Implementation Guidance on Recoverability of Deferred Tax Assets

On February 16, 2018, the ASBJ issued "Implementation Guidance on Tax Effect Accounting" (ASBJ Guidance No. 28) and "Implementation Guidance on Recoverability of Deferred Tax Assets" (revised 2018) (ASBJ Guidance No. 26).

(1) Overview

The accounting treatment for taxable temporary differences related to investments in subsidiaries when an entity prepares separate financial statements was modified. In addition, the accounting treatment related to the recoverability of deferred tax assets in entities that qualify as Category 1 was clarified.

(2) Scheduled date of adoption

The Company expects to adopt the implementation guidance from the beginning of the fiscal year ending December 31, 2019.

(3) Impact of the adoption of implementation guidance

The Company is currently evaluating the effect of the adoption of this implementation guidance on its consolidated financial statements.

Accounting Standard and Implementation Guidance on Revenue Recognition

On March 30, 2018, the 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. Specifically, the accounting standard establishes the following five-step model that will apply to revenue from customers:

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

(2) Scheduled date of adoption

The Company expects to adopt the accounting standard and implementation guidance from the beginning of the fiscal year ending December 31, 2022.

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

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

3. Notes Receivable

December 31 fell on a bank holiday in 2018 and 2017. The following notes receivable matured on that date were accounted for as if they were settled on that date:

	Millions of yen		U.S. dollars
	2018	2017	2018
Notes receivable (including electronically recorded receivables)	¥3,396	¥2,087	\$30,951

4. Inventories

Inventories as of December 31, 2018 and 2017, comprised the following:

	Millions of yen		Thousands of U.S. dollars
	2018	2017	2018
Merchandise and finished goods	¥18,625	¥14,357	\$169,750
Work in process	10,815	10,104	98,569
Raw materials and supplies	20,624	19,340	187,969
Total	¥50,065	¥43,802	\$456,297

5. Long-lived Assets

No impairment loss was recognized for the year ended December 31, 2018.

For the nine months ended December 31, 2017, the Group recognized an impairment loss on the following asset group:

Location	Use	Type	Millions of yen
Hamamatsu, Shizuoka	Assets planned to be disposed of	Land	¥54

In assessing whether there is an impairment of long-lived assets, assets are grouped basically based on managerial accounting units. Among rental properties, idle assets and those properties which the Board of Directors made a decision to dispose of, significant assets planned to be disposed of are treated as an individual grouping by item.

For the asset group planned to be disposed of, the Company wrote down the book value to the recoverable amount, and such amount was recognized as an impairment loss. The recoverable amount of the applicable asset group is measured at net selling value and assessed by the estimated sales value.

6. Investments in Securities

As of December 31, 2018 and 2017, available-for-sale securities with available fair value were as follows:

	Millions of yen		
	2018		
	Carrying amount	Acquisition cost	Net unrealized gain (loss)
Carrying amount (fair value) exceeds acquisition cost: Equity securities	¥2,732	¥ 986	¥1,745
Carrying amount (fair value) does not exceed acquisition cost: Equity securities	302	503	(200)
Total	¥3,034	¥1,489	¥1,544

Millions of yen			
2017			
	Carrying amount	Acquisition cost	Net unrealized gain (loss)
Carrying amount (fair value) exceeds acquisition cost: Equity securities	¥5,467	¥1,461	¥4,005
Carrying amount (fair value) does not exceed acquisition cost: Equity securities	12	12	(0)
Total	¥5,480	¥1,474	¥4,005

Thousands of U.S. dollars			
2018			
	Carrying amount	Acquisition cost	Net unrealized gain (loss)
Carrying amount (fair value) exceeds acquisition cost: Equity securities	\$24,899	\$ 8,986	\$15,904
Carrying amount (fair value) does not exceed acquisition cost: Equity securities	2,752	4,584	(1,822)
Total	\$27,652	\$13,570	\$14,072

As of December 31, 2018 and 2017, available-for-sale securities whose fair value is not reliably determinable were as follows:

	Millions of yen		Thousands of U.S. dollars
	2018	2017	2018
Available-for-sale securities:			
Unlisted equity securities	¥205	¥193	\$1,868
Investments in investment business limited partnerships	599	413	5,459

These unlisted equity securities and investments in investment business limited partnerships are not included in "Available-for-sale securities" in the above table.

"Acquisition cost" in the above table refers to the cost after deducting impairment losses. No impairment losses on available-for-sale securities value were recognized during the year ended December 31, 2018, and the nine months ended December 31, 2017.

When the fair value of each issue of securities declined more than 50% of the acquisition cost, impairment losses would be

recognized. When the fair value declined between 30% and 50% of the acquisition cost, whether the impairment losses should be recognized or not is determined by considering the financial positions as of the latest fiscal year end and operating results for the past two fiscal years and comparing the average month-end closing market price during the past 24 months with the acquisition cost by each issue.

There were no available-for-sale securities sold during the year ended December 31, 2018, and the nine months ended December 31, 2017.

7. Long-term Debt

Long-term debt as of December 31, 2018 and 2017, consisted of the following:

	Millions of yen		Thousands of U.S. dollars
	2018	2017	2018
Bank loans -0.177% due in 2026	¥ 27,480	¥ 29,665	\$ 250,455
Corporate bonds issued by the Company:			
0.850% unsecured straight bonds due in 2018	—	10,000	—
0.430% unsecured straight bonds due in 2018	—	10,000	—
0.660% unsecured straight bonds due in 2020	10,000	10,000	91,141
0.296% unsecured straight bonds due in 2020	10,000	10,000	91,141
0.140% unsecured straight bonds due in 2023	10,000	—	91,141
0.270% unsecured straight bonds due in 2025	10,000	—	91,141
	¥ 67,480	¥ 69,665	\$ 615,020
Current portion	(12,185)	(22,185)	(111,055)
Long-term debt, less current portion	¥ 55,295	¥ 47,480	\$ 503,964

Annual maturities of long-term debt as of December 31, 2018, are as follows:

Millions of yen						
2018						
	Due within 1 year	Due after 1 to 2 years	Due after 2 to 3 years	Due after 3 to 4 years	Due after 4 to 5 years	Due after 5 years
Bonds	¥ —	¥20,000	¥ —	¥ —	¥10,000	¥10,000
Bank loans	12,185	2,185	2,185	2,185	2,185	6,555
Total	¥12,185	¥22,185	¥2,185	¥2,185	¥12,185	¥16,555

Thousands of U.S. dollars						
2018						
	Due within 1 year	Due after 1 to 2 years	Due after 2 to 3 years	Due after 3 to 4 years	Due after 4 to 5 years	Due after 5 years
Bonds	\$ —	\$182,282	\$ —	\$ —	\$ 91,141	\$ 91,141
Bank loans	111,055	19,914	19,914	19,914	19,914	59,742
Total	\$111,055	\$202,196	\$19,914	\$19,914	\$111,055	\$150,884

8. Employees' Retirement Benefits

1. Outline of the retirement benefit plans adopted

The Company and consolidated subsidiaries adopt contributory and non-contributory defined benefit plans and defined contribution plans.

Under the defined benefit corporate pension plans (all of which are contributory), lump-sum severance benefits or pensions based on salaries and service years are provided.

Under lump-sum payment plans (all of which are non-contributory), lump-sum payments based on salaries and service years are provided.

Under some defined benefit corporate pension plans and lump-sum payment plans of certain consolidated subsidiaries, net defined benefit liability and retirement benefit expenses are calculated using a simplified method.

2. Defined Benefit Plans

(1) The changes in projected benefit obligations for the year ended December 31, 2018, and the nine months ended December 31, 2017, were as follows:

	Millions of yen		Thousands of U.S. dollars
	Year ended December 31, 2018	Nine months ended December 31, 2017	Year ended December 31, 2018
Beginning balance of projected benefit obligation	¥26,624	¥24,842	\$242,654
Service cost	1,213	962	11,055
Interest cost	358	287	3,262
Actuarial differences	(360)	524	(3,281)
Prior service cost	249	—	2,269
Retirement benefits paid	(591)	(420)	(5,386)
Other	(763)	427	(6,954)
Ending balance of projected benefit obligations	¥26,729	¥26,624	\$243,611

(2) The changes in plan assets for the year ended December 31, 2018, and the nine months ended December 31, 2017, were as follows:

	Millions of yen		Thousands of U.S. dollars
	Year ended December 31, 2018	Nine months ended December 31, 2017	Year ended December 31, 2018
Beginning balance of plan assets	¥21,530	¥19,126	\$196,226
Expected return on plan assets	672	578	6,124
Actuarial differences	(1,471)	801	(13,406)
Contribution from the employer	857	627	7,810
Retirement benefits paid	(434)	(315)	(3,955)
Impact from foreign exchanges	(763)	712	(6,954)
Ending balance of plan assets	¥20,390	¥21,530	\$185,836

(3) Reconciliation between the ending balances of defined benefit obligations and plan assets and net defined benefit liability recorded in the consolidated balance sheet

	Millions of yen		Thousands of U.S. dollars
	2018	2017	2018
Contributory defined benefit obligations	¥ 24,406	¥ 25,414	\$ 222,438
Plan assets	(20,390)	(21,530)	(185,836)
	4,016	3,883	36,602
Non-contributory defined benefit obligations	2,323	1,210	21,172
Net liability recorded in the consolidated balance sheet	¥ 6,339	¥ 5,094	\$ 57,774
Net defined benefit liability	7,908	7,389	72,074
Net defined benefit asset	(1,569)	(2,295)	(14,300)
Net liability recorded in the consolidated balance sheet	¥ 6,339	¥ 5,094	\$ 57,774

(4) The components of retirement benefit expenses for the year ended December 31, 2018, and the nine months ended December 31, 2017, were as follows:

	Millions of yen		Thousands of U.S. dollars
	Year ended December 31, 2018	Nine months ended December 31, 2017	Year ended December 31, 2018
Service cost	¥1,213	¥ 962	\$11,055
Interest cost	358	287	3,262
Expected return on plan assets	(672)	(578)	(6,124)
Amortization of actuarial differences	48	93	437
Amortization of prior service costs	164	103	1,494
Retirement benefit expenses on defined benefit plans	¥1,113	¥ 868	\$10,144

(5) Remeasurements of defined benefit plans

The components of remeasurements of defined benefit plans (before tax effect) on "Other comprehensive income" were as follows:

	Millions of yen		Thousands of U.S. dollars
	Year ended December 31, 2018	Nine months ended December 31, 2017	Year ended December 31, 2018
Actuarial differences	¥(1,062)	¥369	\$ (9,679)
Prior service cost	(84)	103	(765)
Total	¥(1,147)	¥473	\$ (10,453)

(6) Remeasurements of defined benefit plans

The components of remeasurements of defined benefit plans (before tax effect) on "Accumulated other comprehensive income" were as follows:

	Millions of yen		Thousands of U.S. dollars
	Year ended December 31, 2018	Nine months ended December 31, 2017	Year ended December 31, 2018
Unrecognized actuarial differences	¥1,245	¥ (40)	\$11,347
Unrecognized prior service costs	1,072	1,211	9,770
Total	¥2,318	¥1,170	\$21,126

Note: Above amounts are related to the Company and consolidated subsidiaries, and remeasurements of defined benefit plans on "Accumulated other comprehensive income" include unrecognized items (corresponding to the equity) of affiliates accounted for using the equity method.

(7) Plan assets

a. Components of plan assets

Plan assets consisted of the following:

	2018	2017
Debt securities	39%	36%
Equity securities	33%	44%
General account	21%	19%
Other	7%	1%
Total	100%	100%

b. Method of determining the long-term expected rate of return on plan assets

The long-term expected rate of return on plan assets is determined considering allocation of plan assets which are expected currently and in the future and the long-term rates of return which are expected currently and in the future from the various components of the plan assets.

(8) Main actuarial assumptions used for the year ended December 31, 2018, and the nine months ended December 31, 2017, were set forth as follows:

	Year ended December 31, 2018	Nine months ended December 31, 2017
Discount rate	0.5%	0.5%
Long-term expected rate of return	2.0%	2.0%

3. Defined Contribution Plans

The amounts of the required contribution to the defined contribution plans of the Company and its consolidated subsidiaries were ¥570 million (\$5,195 thousand) and ¥323 million for the year ended December 31, 2018, and the nine months ended December 31, 2017, respectively.

9. Committed Line of Credit

As of December 31, 2018 and 2017, the Group had committed lines of credit amounting to ¥30,000 million (\$273,423 thousand) and ¥15,000, respectively. None of the committed lines of credit were used.

10. Contingent Liabilities

As of December 31, 2018 and 2017, the Group had no material contingent liabilities.

11. Net Assets

The Companies Act of Japan (the "Act") requires that at least 50% of the paid-in capital of new share issues be transferred to the "Common stock" account and the amount not exceeding 50% of the paid-in capital be included in capital surplus as "Additional paid-in capital."

Under the Act, companies can pay dividends at any time during the fiscal year in addition to the year-end dividend upon resolution at the shareholders' meeting. Interim dividends may be paid at any time during the fiscal year upon resolution by the Board of Directors if the company has prescribed so in its articles of incorporation.

The Act provides certain limitations on the amounts available for dividends or the purchase of treasury stock. The limitation is defined as the amount available for distribution to the share-

holders, but the amount of net assets after dividends must be maintained at no less than ¥3 million.

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

The changes in the number of issued shares of common stock and treasury stock during the year ended December 31, 2018, and the nine months ended December 31, 2017, were as follows:

	Number of shares			December 31, 2018
	January 1, 2018	Increase	Decrease	
Outstanding shares issued:				
Common stock	133,856,903	—	—	133,856,903
Treasury stock:				
Common stock	7,287,650	1,196	—	7,288,846

An increase of 1,196 shares in treasury stock is due to acquisition of less than one share unit.

The treasury stock in the above table includes treasury stock (shares issued by the Company) acquired by an affiliate accounted for using the equity method which is attributed to the Company.

	Number of shares			December 31, 2017
	April 1, 2017	Increase	Decrease	
Outstanding shares issued:				
Common stock	133,856,903	—	—	133,856,903
Treasury stock:				
Common stock	7,285,746	1,904	—	7,287,650

An increase of 1,904 shares in treasury stock is due to acquisition of less than one share unit.

The treasury stock in the above table includes treasury stock (shares issued by the Company) acquired by an affiliate accounted for using the equity method which is attributed to the Company.

Year ended December 31, 2018

The following cash dividend payments were approved during the fiscal year:

General shareholders' meeting held on March 17, 2018:

	Total amount	Per share amount	Dividend record date	Effective date
	Millions of yen (Thousands of U.S. dollars)	Yen (U.S. dollar)		
Common stock	¥3,290 million (\$29,985 thousand)	¥26.00 (\$0.23)	Dec. 31, 2017	Mar. 19, 2018

Board of Directors meeting held on August 9, 2018:

	Total amount	Per share amount	Dividend record date	Effective date
	Millions of yen (Thousands of U.S. dollars)	Yen (U.S. dollar)		
Common stock	¥5,948 million (\$54,210 thousand)	¥47.00 (\$0.42)	June 30, 2018	Sept. 10, 2018

Nine months ended December 31, 2017

The following cash dividend payments were approved during the fiscal year:

General shareholders' meeting held on June 17, 2017:

	Total amount	Per share amount	Dividend record date	Effective date
	Millions of yen	Yen		
Common stock	¥3,164 million	¥25.00	Mar. 31, 2017	June 19, 2017

Board of Directors meeting held on November 13, 2017:

	Total amount	Per share amount	Dividend record date	Effective date
	Millions of yen	Yen		
Common stock	¥4,556 million	¥36.00	Sept. 30, 2017	Dec. 5, 2017

12. Amortization of Goodwill

Amortization of goodwill included in selling, general and administrative expenses for the year ended December 31, 2018, and the nine months ended December 31, 2017, were ¥887 million (\$8,084 thousand) and ¥854 million, respectively.

13. Research and Development

Research and development expenses included in cost of sales or selling, general and administrative expenses for the year ended December 31, 2018, and the nine months ended December 31, 2017, were ¥5,718 million (\$52,114 thousand) and ¥4,415 million, respectively.

14. Loss on Sales and Disposal of Property, Plant, Equipment and Intangibles, Net

Breakdown of "Loss on sales and disposal of property, plant, equipment and intangibles, net" for the year ended December 31, 2018, and the nine months ended December 31, 2017, was as follows:

	Millions of yen		Thousands of U.S. dollars
	Year ended December 31, 2018	Nine months ended December 31, 2017	Year ended December 31, 2018
Gain on sales of property, plant, equipment and intangibles:			
Buildings and structures	¥ 10	¥ —	\$ 91
Machinery, equipment and vehicles	70	18	637
Land	6	—	54
Other (property, plant and equipment)	1	2	9
Other (intangibles)	0	—	0
Total	¥ 88	¥ 20	\$ 802
Loss on sales of property, plant and equipment:			
Buildings and structures	¥ 19	¥ —	\$ 173
Machinery, equipment and vehicles	10	14	91
Other (property, plant and equipment)	1	0	9
Total	¥ 31	¥ 14	\$ 282
Loss on disposal of property, plant, equipment and intangibles:			
Buildings and structures	¥ 12	¥ 12	\$ 109
Machinery, equipment and vehicles	126	100	1,148
Construction in progress	137	1	1,248
Other (property, plant and equipment)	8	12	72
Other (intangibles)	—	1	—
Total	¥285	¥128	\$2,597
Total, net loss	¥228	¥123	\$2,078

15. Lease

a. Finance leases

The Group mainly leases computer machines and peripheral devices (tools, furniture and fixtures) used at the head office and other locations.

Leased assets under finance lease arrangements are depreciated using the straight-line method over the lease term as useful life, with the residual value deemed to be zero.

b. Operating leases

Lease commitments under non-cancelable operating leases as of December 31, 2018 and 2017, were as follows:

	Millions of yen		Thousands of U.S. dollars
	2018	2017	2018
Due within one year	¥ 409	¥ 457	\$ 3,727
Due after one year	692	649	6,306
Total	¥1,101	¥1,107	\$10,034

16. Income Taxes

The Company and its domestic subsidiaries are subject to Japanese national and local income taxes which, in the aggregate, resulted in a normal effective statutory tax rate of approximately 30.9% for the year ended December 31, 2018, and the nine months ended December 31, 2017.

As of December 31, 2018 and 2017, significant components of deferred tax assets and liabilities were as follows:

	Millions of yen		Thousands of U.S. dollars
	2018	2017	2018
Deferred tax assets:			
Net defined benefit liability	¥ 1,840	¥ 1,677	\$ 16,769
Unrealized gain on intercompany sales of inventories	1,420	1,007	12,942
Accrued bonuses to employees	1,039	775	9,469
Valuation loss of investments in affiliates	900	900	8,202
Tax loss carried forward	819	962	7,464
Loss on devaluation of inventories	697	638	6,352
Enterprise tax payable	668	111	6,088
Unrealized gain on intercompany sales of property, plant and equipment	510	479	4,648
Accumulated depreciation	410	296	3,736
Accrued expenses	267	344	2,433
Retirement benefits payable to directors and corporate auditors	266	259	2,424
Loss on devaluation of investments in securities	62	59	565
Impairment loss	40	109	364
Allowance for doubtful receivables	39	42	355
Other	614	588	5,596
Total	9,598	8,254	87,477
Less: valuation allowance	(3,317)	(3,158)	(30,231)
Total deferred tax assets	6,280	5,095	57,236

	Millions of yen		Thousands of U.S. dollars
	2018	2017	2018
Deferred tax liabilities:			
Depreciation	(1,776)	(1,318)	(16,186)
Adjustment to book value of a subsidiary due to fair value measurement at the inception of consolidation	(1,712)	(1,989)	(15,603)
Unrealized gains on available-for-sale securities	(1,677)	(2,399)	(15,284)
Unrealized gains on land revaluation	(1,175)	(1,179)	(10,709)
Special depreciation reserve for tax purpose	(2)	(6)	(18)
Other	(419)	(245)	(3,818)
Total deferred tax liabilities	(6,765)	(7,139)	(61,656)
Net deferred tax (liabilities) assets	¥ (484)	¥(2,043)	\$ (4,411)

A reconciliation between the normal effective statutory tax rate and the actual effective tax rate reflected in the accompanying consolidated statements of income for the year ended December 31, 2018, is omitted since the difference is less than 5% of the normal effective statutory tax rate.

A reconciliation between the normal effective statutory tax rate and the actual effective tax rate reflected in the accompanying consolidated statements of income for the nine months ended December 31, 2017, was as follows:

	Nine months ended December 31, 2017
Normal effective statutory tax rate	30.9%
Non-deductible items such as entertainment expenses	0.7
Non-taxable items such as dividends received	(0.9)
Amortization of goodwill	0.8
Equity in earnings of affiliates	(0.9)
Inhabitant per capita tax	0.2
Statutory tax rate difference between parent and subsidiaries	(1.5)
Difference from effective tax rate applied	(0.1)
Tax credit for research and development	(1.8)
Special tax incentives	(0.9)
Valuation allowance	(21.1)
Investments in consolidated subsidiaries	0.8
Consolidation adjustment of gain on sales of shares in affiliates	9.8
Other	(0.2)
Actual effective tax rate	15.8%

17. Other Comprehensive (Loss) Income

The components of other comprehensive (loss) income for the year ended December 31, 2018, and the nine months ended December 31, 2017, were as follows:

	Millions of yen		Thousands of U.S. dollars
	Year ended December 31, 2018	Nine months ended December 31, 2017	Year ended December 31, 2018
Net unrealized (loss) gain on available-for-sale securities:			
(Loss) gain recognized during the year	¥ (2,474)	¥1,788	\$ (22,548)
Reclassification adjustment to net income	17	—	154
Amount before tax effect	(2,457)	1,788	(22,393)
Tax effect	722	(533)	6,580
Net unrealized (loss) gain on available-for-sale securities	(1,734)	1,255	(15,803)
Foreign currency translation adjustments:			
(Loss) gain recognized during the year	(11,376)	6,469	(103,682)
Reclassification adjustment to net income	—	—	—
Amount before tax effect	(11,376)	6,469	(103,682)
Tax effect	—	—	—
Foreign currency translation adjustments	(11,376)	6,469	(103,682)
Remeasurements of defined benefit plans			
(Loss) gain recognized during the year	(1,360)	285	(12,395)
Reclassification adjustment to net income	212	188	1,932
Amount before tax effect	(1,147)	473	(10,453)
Tax effect	212	(245)	1,932
Remeasurements of defined benefit plans	(935)	227	(8,521)
Share of other comprehensive income of an affiliate accounted for under the equity method:			
Income recognized during the year	284	317	2,588
Reclassification adjustment to net income	—	—	—
Share of other comprehensive income of an affiliate accounted for under the equity method	284	317	2,588
Total other comprehensive (loss) income	¥(13,762)	¥8,270	\$(125,428)

18. Per Share Information

Per share information as of and for the year ended December 31, 2018, and the nine months ended December 31, 2017, is as follows:

	Yen		U.S. dollars
	As of December 31, 2018, or for the year then ended	As of December 31, 2017, or for the nine months then ended	As of December 31, 2018, or for the year then ended
Net income – basic	¥ 279.70	¥ 203.28	\$ 2.54
Net assets	2,240.74	2,140.71	20.42

Diluted net income per share for the year ended December 31, 2018, and the nine months ended December 31, 2017, is not presented since the Company did not have any kind of securities with potential dilutive effect in the fiscal years.

19. Financial Instruments and Related Disclosures

(1) Policy for financial instruments

The Group's use of its surplus funds is limited to short-term deposits and other low-risk financial assets. As to raising funds, the Group finances by issuing bonds and bank loans in accordance with business plans. The Group does not hold or issue derivative financial instruments for speculative purposes.

(2) Nature and risks of financial instruments

Notes and accounts receivable are subject to credit risks of customers. Receivables denominated in foreign currencies arising from the Group's global business are subject to foreign exchange risks. The Group controls these risks by utilizing forward foreign exchange contracts applicable to net amounts of receivables and payables denominated in foreign currencies.

Most investment securities consist of equity securities and are subject to market value volatility risks.

Most of notes and accounts payable are due within a year.

Bonds and bank loans are financed for working capital or capital investment use and other investments for which the maximum redemption/repayment period is seven years and three months. Long-term debt is exposed to interest rate fluctuation risk and foreign exchange fluctuation risk, but with respect to certain long-term debt, the principal and interest are hedged by derivatives (interest rate swaps and interest rate and currency swap contracts).

The Group utilizes forward foreign exchange contracts to manage foreign exchange fluctuation risk associated with foreign currency-denominated trade receivables and payables, interest rate swap contracts to manage interest rate fluctuation risk associated with long-term debt and interest rate and currency swap contracts to manage foreign exchange fluctuation risk and interest rate fluctuation risk associated with foreign currency-denominated bank loans within the extent of actual demand. With respect to hedging instruments and hedged items, hedging policy and assessment method of hedge effectiveness concerning hedge accounting, please see Note 2 (d).

(3) Risk management

(a) Credit risks—The Company controls customers' credit risks in accordance with internal rules for controlling receivables. Appropriate departments of the Company monitor major customers' financial conditions to promptly obtain information about possible bad debts. Because the counterparties of derivatives are limited to major international financial institutions, the Company does not anticipate any losses arising from credit risk.

(b) Market risks—The Company utilizes forward foreign exchange contracts to manage foreign exchange fluctuation risk identified by currency associated with foreign currency-denominated trade receivables and payables. The Company also utilizes interest rate swap contracts to manage interest rate risks associated with bank loans and interest rate and currency swap contracts to manage foreign exchange fluctuation risk and interest rate fluctuation risk associated with foreign currency-denominated bank loans. As to investments in securities, fair value and financial condition of investees are periodically reviewed. Derivative transactions are executed and controlled by the Corporate Strategy Division. The general manager of the Corporate Strategy Division reports results and conditions of derivative transactions at the Board of Director's meetings on a monthly basis.

(c) Liquidity risks—Each company of the Group prepares and updates cash-flow plans and maintains appropriate amounts of ready liquidity.

(4) Supplementary explanation about matters concerning fair values of financial instruments

Fair values of financial instruments are based on quoted prices in active markets. If a quoted price is not available, other rational valuation techniques are used instead. Because such valuation techniques include certain assumptions, results may differ if different assumptions are used in the valuation. The contract amounts for derivatives listed in Note 19 do not represent the volume of underlying market risks of the derivative transactions.

Financial instruments whose fair value is readily determinable as of December 31, 2018 and 2017, are as follows:

Millions of yen			
2018			
	Carrying amount	Fair value	Difference
Assets:			
(1) Cash and cash equivalents	¥134,513	¥134,513	¥ —
(2) Trade accounts and notes receivable	92,695	92,695	—
(3) Investments in securities			
Available-for-sale securities	3,034	3,034	—
Total	¥230,243	¥230,243	¥ —
Liabilities:			
(4) Trade accounts and notes payable	¥ 49,022	¥ 49,022	¥ —
(5) Long-term debt—Bonds and bank loans, including current portion	67,480	67,688	208
Total	¥116,504	¥116,712	¥208
Derivatives:			
Derivatives to which hedge accounting is not applied*	¥ (114)	¥ (114)	¥ —
Derivatives to which hedge accounting is applied	—	—	—
Total	¥ (114)	¥ (114)	¥ —

Millions of yen			
2017			
	Carrying amount	Fair value	Difference
Assets:			
(1) Cash and cash equivalents	¥129,920	¥129,920	¥ —
(2) Trade accounts and notes receivable	87,058	87,058	—
(3) Investments in securities			
Available-for-sale securities	5,480	5,480	—
Total	¥222,459	¥222,459	¥ —
Liabilities:			
(4) Trade accounts and notes payable	¥ 46,253	¥ 46,253	¥ —
(5) Long-term debt—Bonds and bank loans, including current portion	69,665	69,984	319
Total	¥115,919	¥116,238	¥319
Derivatives	¥ —	¥ —	¥ —

Thousands of U.S. dollars			
2018			
	Carrying amount	Fair value	Difference
Assets:			
(1) Cash and cash equivalents	\$1,225,966	\$1,225,966	\$ —
(2) Trade accounts and notes receivable	844,832	844,832	—
(3) Investments in securities			
Available-for-sale securities	27,652	27,652	—
Total	\$2,098,459	\$2,098,459	\$ —
Liabilities:			
(4) Trade accounts and notes payable	\$ 446,791	\$ 446,791	\$ —
(5) Long-term debt—Bonds and bank loans, including current portion	615,020	616,915	1,895
Total	\$1,061,830	\$1,063,725	\$1,895
Derivatives:			
Derivatives to which hedge accounting is not applied*	\$ (1,039)	\$ (1,039)	\$ —
Derivatives to which hedge accounting is applied	—	—	—
Total	\$ (1,039)	\$ (1,039)	\$ —

*Net receivables and payables arising from derivative transactions are presented in net amounts and net payables in total are shown in parentheses.

Note:

Assets:

(1) and (2) — As these items are settled within a year and have fair values approximately equal to their carrying amounts, they are stated at the carrying amounts.

(3) — Fair value of equity securities is stated at quoted market price. Fair value information of investment securities is discussed in Note 6.

Liabilities:

(4) — As these items are settled within a year and have fair values approximately equal to their carrying amounts, they are stated at the carrying amounts.

(5) — Fair value of bonds is stated at present value of a total amount of its principal and interest discounted by a rate determined considering its remaining periods and credit risks. Bank loans are payable with variable interest rates. Fair value of bank loans is stated at carrying amount because fair value of such bank loans is considered approximately equal to its carrying amount based on the following assumptions: (a) variable interest rates reflect the current market rate, and (b) the Company's credit status has not significantly changed after the issuance.

Derivatives — Details and information are discussed in Note 20.

Financial instruments which do not have quoted market prices and whose fair value is not reliably determinable are not included in the table above. Such financial instruments as of December 31, 2018 and 2017, are as follows:

Millions of yen		Thousands of U.S. dollars
2018	2017	2018
Unlisted equity securities	¥205	\$1,868
Investments in investment business limited partnerships	599	5,459

Detailed information about investments in securities is discussed in Note 6.

Maturity analysis for financial assets as of December 31, 2018, is as follows:

Millions of yen		
2018		
	Due within one year	Due after one year
(1) Cash and cash equivalents	¥134,513	—
(2) Trade accounts and notes receivable	92,695	—
Total	¥227,209	—

Thousands of U.S. dollars		
2018		
	Due within one year	Due after one year
(1) Cash and cash equivalents	\$1,225,966	—
(2) Trade accounts and notes receivable	844,832	—
Total	\$2,070,807	—

Maturities of long-term debt as of December 31, 2018, are disclosed in Note 7.

20. Derivatives and Hedging Activities

Derivatives to which hedge accounting is not applied:

The following derivatives are measured at fair value as of December 31, 2018:

Millions of yen				
2018				
Non-market transactions:	Contract Amount		Fair value	Revaluation gains (losses)
	Within one year	Over one year		
Forward foreign exchange contracts: Sold USD	¥ 480	¥—	¥ 6	¥ 6
Forward foreign exchange contracts: Sold EUR	350	—	7	7
Forward foreign exchange contracts: Sold CNY	123	—	(0)	(0)
Forward foreign exchange contracts: Bought CAD	4,525	—	(128)	(128)
Total	¥5,480	¥—	¥(114)	¥(114)

Thousands of U.S. dollars				
2018				
Non-market transactions:	Contract Amount		Fair value	Revaluation gains (losses)
	Within one year	Over one year		
Forward foreign exchange contracts: Sold USD	\$ 4,374	\$—	\$ 54	\$ 54
Forward foreign exchange contracts: Sold EUR	3,189	—	63	63
Forward foreign exchange contracts: Sold CNY	1,121	—	(0)	(0)
Forward foreign exchange contracts: Bought CAD	41,241	—	(1,166)	(1,166)
Total	\$49,945	\$—	\$(1,039)	\$(1,039)

Fair value of derivative instruments in the table above is stated at the amount obtained from financial institutions, the counterparties of the contracts.

There were no derivatives to which hedge accounting is not applied as of December 31, 2017.

Derivatives to which hedge accounting is applied:

The Group utilizes interest rate swap agreements to hedge interest rate risks associated with its bank loans and interest rate and currency swap contracts to hedge foreign exchange risk and interest rate risks associated with its foreign currency-denominated bank loans. The Group's interest rate swaps and interest rate and currency swap contracts qualify for hedge accounting and meet specific matching criteria under Japanese GAAP and are not remeasured at market value, but the differentials paid or received under the swap agreements are recognized and included in interest expenses or income, and the foreign currency assets and liabilities hedged by interest rate and currency swap contracts are translated at the contract rates, and no gains or losses are recognized.

Fair value information of such derivatives as of December 31, 2018 and 2017, is as follows:

Derivatives to which hedge accounting is applied:

Millions of yen			
2018			
	Contract Amount		Fair value of derivative instruments
	Within one year	Over one year	
Interest rate and currency swaps (fixed rate payment in JPY, floating rate receipt in USD)	¥17,480	¥15,295	¥471

Millions of yen			
2017			
	Contract Amount		Fair value of derivative instruments
	Within one year	Over one year	
Interest rate and currency swaps (fixed rate payment in JPY, floating rate receipt in USD)	¥19,665	¥17,480	¥919

Thousands of U.S. dollars			
2018			
	Contract Amount		Fair value of derivative instruments
	Within one year	Over one year	
Interest rate and currency swaps (fixed rate payment in JPY, floating rate receipt in USD)	\$159,314	\$139,400	\$4,292

Fair value of interest rate and currency swaps in the table above is stated at the amount obtained from financial institutions, the counterparties of the contracts.

The above interest rate and currency swap contracts qualify for hedge accounting and meet specific matching criteria under Japanese GAAP and are not remeasured at market value, but the differentials paid or received under the swap agreements are recognized and included in interest expenses or income, and the foreign currency assets and liabilities hedged by interest rate and currency swap contracts are translated at the contract rates, and no gains or losses are recognized. Accordingly, the fair value of such interest rate and swap contracts is included in that of long-term debt as hedged items.

Millions of yen			
2018			
	Contract Amount		Fair value of derivative instruments
	Within one year	Over one year	
Interest rate swaps (fixed rate payment, floating rate receipt)	¥10,000	¥—	¥(16)

Millions of yen			
2017			
	Contract Amount		Fair value of derivative instruments
	Within one year	Over one year	
Interest rate swaps (fixed rate payment, floating rate receipt)	¥10,000	¥10,000	¥(48)

Thousands of U.S. dollars			
2018			
	Contract Amount		Fair value of derivative instruments
	Within one year	Over one year	
Interest rate swaps (fixed rate payment, floating rate receipt)	\$91,141	\$—	\$(145)

Fair value of interest rate swaps in the table above is stated at the amount obtained from financial institutions, the counterparties of the contracts.

The above interest rate swap contracts qualify for hedge accounting and meet specific matching criteria under Japanese GAAP and are not remeasured at fair value, but the differentials paid or received under the swap agreements are recognized and included in interest expense or income. Accordingly, the fair value of such interest rate swaps is included in that of the long-term debt as hedged items.

21. Asset Retirement Obligation

The Group recognizes restoration duty at the time of leaving based on the real estate rent contracts of the Company's head office, etc. as asset retirement obligation.

Regarding asset retirement obligation as of December 31, 2018 and 2017, the Company reasonably estimates the amount of security deposits related to the building rent contracts that are not expected to be ultimately collected and records the amount attributed to the current fiscal year in place of recording a liability.

22. Segment Information

The reportable segments are components of the Group for which separate financial information is available, and whose operating results are reviewed periodically by the Board of Directors to determine allocation of operating resources and evaluate their performance.

The Group's main products are machinery parts such as LM (Linear Motion) Guides and ball screws, and transportation equipment-related parts such as link balls and suspension ball joints. In each country, local subsidiaries establish their comprehensive business strategies and conduct their business activities in a similar way that the Company and domestic subsidiaries do in Japan.

Therefore, the reportable segment information consists of the five geographical segments, namely: (1) Japan, (2) the Americas (the United States and others), (3) Europe (Germany, France and others), (4) China, and (5) Other (Taiwan, Singapore and others) based on the Group's production/sales structure.

Segment income is computed based on operating income. The reportable segment information is prepared under the same accounting policies as discussed in Note 2. Inter-segment sales and transfers are stated at amounts based on their fair market values. All adjustments in the following tables are inter-segment elimination on consolidation.

Segment information of the Group as of December 31, 2018 and 2017, and for the year and the nine months then ended is as follows:

Reportable segments

Millions of yen								
As of December 31, 2018, or for the year then ended								
	Japan	The Americas	Europe	China	Other	Total	Adjustments	Consolidated
Sales to customers	¥160,742	¥69,882	¥ 59,482	¥46,735	¥16,636	¥353,479	¥ —	¥353,479
Inter-segment	58,600	225	161	7,502	1,898	68,388	(68,388)	—
Total	219,343	70,107	59,644	54,238	18,534	421,868	(68,388)	353,479
Segment profit	¥ 38,460	¥ 309	¥ 74	¥ 8,194	¥ 2,384	¥ 49,424	¥ 408	¥ 49,832
Assets	¥403,943	¥70,576	¥112,749	¥64,890	¥21,176	¥673,336	¥(209,986)	¥463,350
Other items:								
Depreciation and amortization	¥ 5,480	¥ 3,082	¥ 2,629	¥ 3,406	¥ 426	¥ 15,026	¥ (63)	¥ 14,962
Amortization of goodwill	—	159	728	—	—	887	—	887
Investment in an affiliate accounted for under the equity method	5,659	—	—	—	—	5,659	—	5,659
Increase in property, plant and equipment and intangibles	17,547	3,653	3,208	5,204	3,057	32,671	459	33,131

Millions of yen								
As of December 31, 2017, or for the nine months then ended								
	Japan	The Americas	Europe	China	Other	Total	Adjustments	Consolidated
Sales to customers	¥106,072	¥67,130	¥ 57,247	¥40,024	¥16,128	¥286,603	¥ —	¥286,603
Inter-segment	41,345	112	31	4,579	1,400	47,469	(47,469)	—
Total	147,418	67,242	57,278	44,604	17,528	334,072	(47,469)	286,603
Segment profit	¥ 20,248	¥ 2,738	¥ 627	¥ 3,126	¥ 2,171	¥ 28,913	¥ 365	¥ 29,279
Assets	¥371,737	¥71,002	¥117,181	¥61,486	¥17,736	¥639,142	¥(202,477)	¥436,664
Other items:								
Depreciation and amortization	¥ 3,263	¥ 3,083	¥ 2,298	¥ 3,340	¥ 428	¥ 12,415	¥ (69)	¥ 12,346
Amortization of goodwill	—	161	692	—	—	854	—	854
Investment in an affiliate accounted for under the equity method	5,123	—	—	—	—	5,123	—	5,123
Increase in property, plant and equipment and intangibles	7,220	3,251	4,288	2,889	199	17,848	80	17,928

Thousands of U.S. dollars								
As of December 31, 2018, or for the year then ended								
	Japan	The Americas	Europe	China	Other	Total	Adjustments	Consolidated
Sales to customers	\$1,465,020	\$636,912	\$ 542,125	\$425,947	\$151,622	\$3,221,646	\$ —	\$3,221,646
Inter-segment	534,086	2,050	1,467	68,374	17,298	623,295	(623,295)	—
Total	1,999,115	638,962	543,601	494,331	168,920	3,844,950	(623,295)	3,221,646
Segment profit	\$ 350,528	\$ 2,816	\$ 674	\$ 74,681	\$ 21,728	\$ 450,455	\$ 3,718	\$ 454,174
Assets	\$3,681,580	\$643,237	\$1,027,606	\$591,414	\$193,000	\$6,136,857	\$(1,913,835)	\$4,223,022
Other items:								
Depreciation and amortization	\$ 49,945	\$ 28,089	\$ 23,960	\$ 31,042	\$ 3,882	\$ 136,948	\$ (574)	\$ 136,365
Amortization of goodwill	—	1,449	6,635	—	—	8,084	—	8,084
Investment in an affiliate accounted for under the equity method	51,576	—	—	—	—	51,576	—	51,576
Increase in property, plant and equipment and intangibles	159,925	33,293	29,238	47,429	27,861	297,767	4,183	301,959

Notes:

- Segmentation by country or area is determined based on geographical proximity.
- The main countries or areas which belong to the reportable segments other than Japan and China are as follows:
 - "The Americas": The United States of America and others
 - "Europe": Germany, France and others
 - "Other": Taiwan, Singapore and others
- "Adjustments" are as follows:
 - Adjustments of "Segment profit (loss)" in an amount of ¥408 million (\$3,718 thousand) for the year ended December 31, 2018, represent elimination of inter-segment transactions
 - Adjustments of "Segment profit (loss)" in an amount of ¥365 million for the nine months ended December 31, 2017, represent elimination of inter-segment transactions.
 - Adjustments of "Segment assets" in an amount of ¥209,986 million (\$1,913,835 thousand) and ¥202,477 million for the year ended December 31, 2018, and the nine months ended December 31, 2017, respectively, are all elimination of inter-segment transactions.
 - Adjustments of "Depreciation and amortization" in an amount of ¥63 million (\$574 thousand) and ¥69 million for the year ended December 31, 2018, and the nine months ended December 31, 2017, respectively, are all elimination of inter-segment transactions.
 - Adjustments of "Increase in property, plant and equipment and intangibles" in an amount of ¥459 million (\$4,183 thousand) and ¥80 million for the year ended December 31, 2018, and the nine months ended December 31, 2017, respectively, are all elimination of inter-segment transactions.
- "Segment profit (loss)" is reconciled with operating income in the consolidated statements of income.
- Effective from the previous fiscal year ended December 31, 2017, the Company and its consolidated subsidiaries with fiscal closing dates other than December 31 changed their fiscal closing dates to December 31. As a result of this change of the fiscal closing date, the previous reporting period covers the nine-month period from April 1, 2017, to December 31, 2017, for the Company and its consolidated subsidiaries whose fiscal closing dates were March 31, and the twelve-month period from January 1, 2017, to December 31, 2017, for the consolidated subsidiaries whose fiscal closing dates were December 31.

Sales by business for the year ended December 31, 2018, and the nine months ended December 31, 2017

	Millions of yen		Thousands of U.S. dollars
	Year ended December 31, 2018	Nine months ended December 31, 2017	Year ended December 31, 2018
Industrial Equipment-Related Business	¥239,943	¥175,645	\$2,186,866
Transportation Equipment-Related Business	113,535	110,957	1,034,770
Total	¥353,479	¥286,603	\$3,221,646

Sales by geographical area

	Millions of yen					
	Year ended December 31, 2018					
	Japan	The Americas	Europe	China	Other	Total
Sales to customers	¥147,949	¥70,548	¥56,980	¥49,228	¥28,772	¥353,479

	Millions of yen					
	Nine months ended December 31, 2017					
	Japan	The Americas	Europe	China	Other	Total
Sales to customers	¥99,099	¥67,194	¥54,001	¥41,410	¥24,896	¥286,603

	Thousands of U.S. dollars					
	Year ended December 31, 2018					
	Japan	The Americas	Europe	China	Other	Total
Sales to customers	\$1,348,423	\$642,982	\$519,321	\$448,669	\$262,231	\$3,221,646

Tangible fixed assets by geographical area

	Millions of yen					
	December 31, 2018					
	Japan	The Americas	Europe	China	Other	Total
Tangible fixed assets	¥61,378	¥17,987	¥17,183	¥27,688	¥5,457	¥129,695

	Millions of yen					
	December 31, 2017					
	Japan	The Americas	Europe	China	Other	Total
Tangible fixed assets	¥50,398	¥17,416	¥16,976	¥28,479	¥2,663	¥115,934

	Thousands of U.S. dollars					
	December 31, 2018					
	Japan	The Americas	Europe	China	Other	Total
Tangible fixed assets	\$559,405	\$163,935	\$156,607	\$252,351	\$49,735	\$1,182,054

Loss on impairment on property, plant and equipment by reportable segment

No loss on impairment was recognized for the year ended December 31, 2018.

	Millions of yen							
	Nine months ended December 31, 2017							
	Japan	The Americas	Europe	China	Other	Total	Adjustments	Consolidated
Loss on impairment	¥54	¥—	¥—	¥—	¥—	¥54	¥—	¥54

Amortization and unamortized balance of goodwill by reportable segment

	Millions of yen							
	Year ended December 31, 2018							
	Japan	The Americas	Europe	China	Other	Total	Adjustments	Consolidated
Amortization	¥—	¥ 159	¥ 728	¥—	¥—	¥ 887	¥—	¥ 887
Unamortized balance	—	1,841	8,162	—	—	10,003	—	10,003

	Millions of yen							
	Nine months ended December 31, 2017							
	Japan	The Americas	Europe	China	Other	Total	Adjustments	Consolidated
Amortization	¥—	¥ 161	¥ 692	¥—	¥—	¥ 854	¥—	¥ 854
Unamortized balance	—	2,064	9,385	—	—	11,449	—	11,449

	Thousands of U.S. dollars							
	Year ended December 31, 2018							
	Japan	The Americas	Europe	China	Other	Total	Adjustments	Consolidated
Amortization	\$—	\$ 1,449	\$ 6,635	\$—	\$—	\$ 8,084	\$—	\$ 8,084
Unamortized balance	—	16,779	74,389	—	—	91,168	—	91,168

23. Subsequent Events
Appropriation of retained earnings

The following appropriation of retained earnings as of December 31, 2018, was approved at the Company's shareholders' meeting held on March 16, 2019:

	Total amount Millions of yen (Thousands of U.S. dollars)	Per share amount Yen (U.S. dollar)	Dividend record date	Effective date
Common stock	¥4,809 million (\$43,829 thousand)	¥38.00 (\$0.34)	Dec. 31, 2018	Mar. 18, 2019

Issuance of domestic corporate bonds

The Company issued domestic corporate bonds on February 6, 2019, as follows based on the resolution made by the Board of Directors meeting held on May 25, 2018:

- 13th unsecured corporate bonds
 - (1) Total amount of issuance: ¥10,000 million (\$91,141 thousand)
 - (2) Issue price: ¥100 (\$0.91) per face value of ¥100 (\$0.91) of each corporate bond
 - (3) Interest rate: 0.170% per annum
 - (4) Redemption period: 5 years
 - (5) Redemption method: Bullet maturing on February 6, 2024
Retirement purchase is allowed at any time after the payment date.
 - (6) Payment date: February 6, 2019
 - (7) Use of fund: Fund for equipment
- 14th unsecured corporate bonds
 - (1) Total amount of issuance: ¥10,000 million (\$91,141 thousand)
 - (2) Issue price: ¥100 (\$0.91) per face value of ¥100 (\$0.91) of each corporate bond
 - (3) Interest rate: 0.290% per annum
 - (4) Redemption period: 7 years
 - (5) Redemption method: Bullet maturing on February 6, 2026
Retirement purchase is allowed at any time after the payment date.
 - (6) Payment date: February 6, 2019
 - (7) Use of fund: Fund for equipment