THK

ANNUAL REPORT 2019

Financial Section

Financial Section

CONTENTS

Management's Discussion & Analysis

Analysis of Operating Results

Voluntary Adoption of the International Financial Reporting Standards (IFRS)

In an effort to better facilitate the global comparison of financial information in the capital market and to strengthen its global financial management by standardizing accounting processes, the THK Group decided to adopt the International Financial Reporting Standards (IFRS) beginning with the 2019 fiscal year. To facilitate comparison with the 2019 fiscal year, the results from the 2018 fiscal year are also noted in accordance with IFRS.

Revenue

During the fiscal year under review, the signs of an economic slowdown spreading mainly in China due to trade friction with the United States strengthened fears of a global economic downturn. In Japan, factors such as sluggish exports and production due to reduced external demand from China have clouded the future of the economy with uncertainty.

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 the LM (Linear Motion) Guide. 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 revenue from both currently existing and newly developed products, buoyed by their growing applications in fields related to consumer goods, such as automobiles, medical equipment, aircraft, and robots, as well as fields related to the mitigation of risks from natural disasters and climate change, such as seismic isolation and damping systems and renewable energy. Additionally, to promote these strategies, the Company is making full use of technologies such as AI and robots in a variety of different ways, thereby expanding its business domains by realizing a *change in business style*.

Under these circumstances, even as the THK Group saw adjustments in overall demand due to the trade friction between the United States and China, the Company steadily achieved revenue through the high backlog of orders it accumulated during the previous period of accelerated movement in electronics, automation, and robotization. However, THK's consolidated revenue decreased ¥70,119 million to a total of ¥274,599 million, a 20.3% reduction from the strong results of the previous fiscal year.

Income and Expenses

In terms of cost, the THK Group strove to minimize its losses by continuing to promote initiatives aimed at boosting productivity along with other improvement activities. However, the magnitude of the reduction in revenue resulted in a cost-to-sales ratio of 75.4%, an increase of 5.0 percentage points compared with the previous fiscal year.

In terms of SG&A expenses, efforts to reduce various expenses and streamline operations, a decrease in revenue, and other factors resulted in SG&A expenses of ¥49,437 million, a year-on-year reduction of ¥2,074 million (4.0%). However, the ratio of SG&A expenses to revenue was 18.0%, an increase of 3.1 percentage points compared with the previous fiscal year.

As a result, operating income was ¥18,277 million, down ¥34,571 million (65.4%) compared to the previous fiscal year, and the operating margin fell to 6.7%, a decrease of 8.6 percentage points.

Financial income stood at ¥1,010 million, while financial costs totaled ¥1,119 million.

As a result, profit before tax decreased ¥34,094 million (65.2%), to ¥18,168 million, and profit for the year attributable to owners of the parent fell to ¥11,690 million, which was a decrease of ¥24,409 million (67.6%) compared with the previous fiscal year.

Segment Information

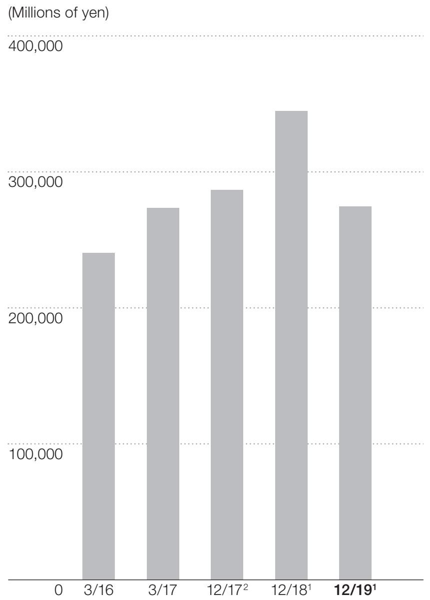
Japan

In Japan, despite the weakening of exports and production due to a slowdown in foreign demand in China and other regions that was influenced by the trade friction between the United States and China, the THK Group steadily achieved revenue from the strong overall demand of the prior period. However, revenue fell ¥40,109 million (25.4%) year-on-year, to ¥117,740 million. As a result of decreased revenue and other factors, segment income (operating income) decreased ¥30,218 million (74.2%) year-on-year, to ¥10,483 million.

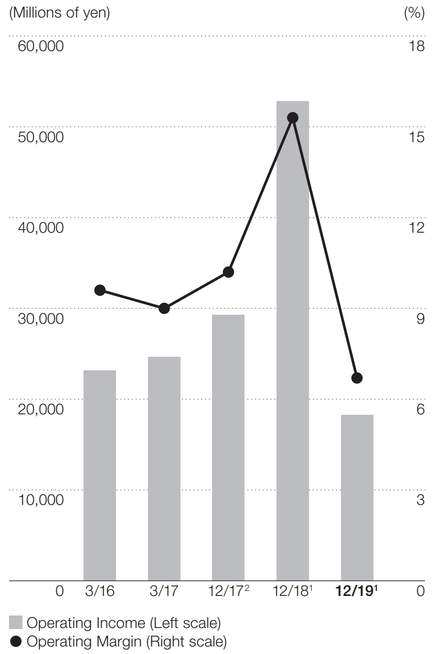
The Americas

In the midst of continued economic growth centered on domestic demand in the Americas, the THK Group worked diligently to expand transactions with existing customers through unified production and sales efforts while developing new business areas, including the automotive, medical equipment, and aircraft

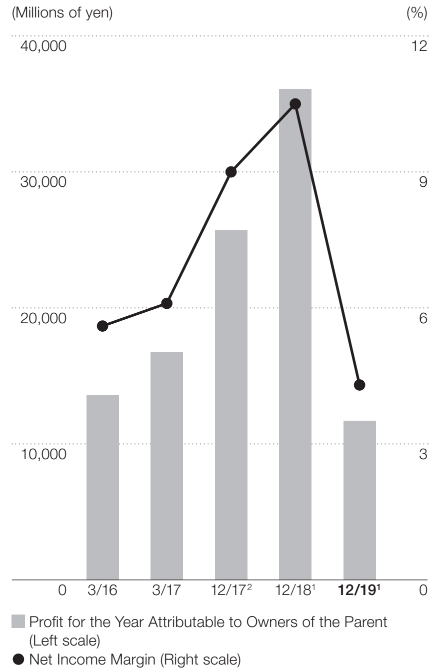
Revenue



Operating Income/ Operating Margin



Profit for the Year Attributable to Owners of the Parent/ Net Income Margin



[1] The THK Group decided to adopt IFRS beginning with the 2019 fiscal year. For the purposes of comparison, the results for the 2018 fiscal year are also noted in accordance with IFRS.
[2] 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.

fields as well as energy-related fields. However, revenue decreased ¥6,045 million (9.4%) year-on-year, to ¥58,480 million, primarily due to demand adjustments in the electronics field. Profitability suffered as a result of decreased revenue and, in the automotive and transportation business sector, a combination of higher raw material prices and unforeseen expenses associated with the launch of new aluminum forged products, leading to a segment loss (operating loss) of ¥1,012 million, a decrease of ¥1,434 million.

Europe

As exports and production in Europe weakened due to the influence of the trade friction between the United States and China, the THK Group worked to expand transactions with existing customers through unified production and sales efforts while developing new business areas, including the automotive, medical equipment, aircraft, and robotics fields. However, revenue decreased ¥4,339 million (7.3%) year-on-year, to ¥55,143 million. As a result of decreased revenue and other factors, segment income (operating income) decreased ¥1,249 million (81.2%) year-on-year, to ¥288 million.

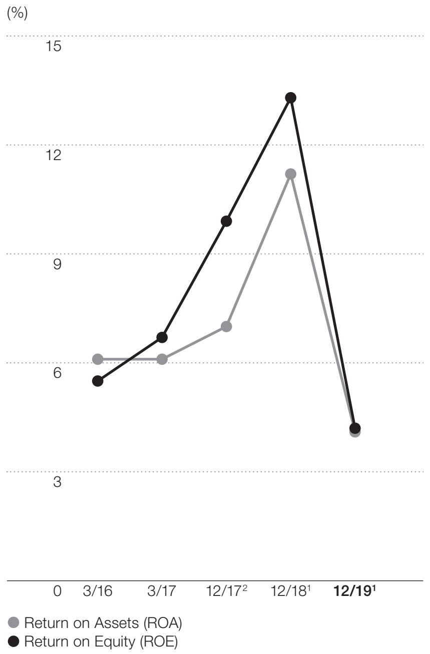
China

As China saw broad adjustments being made to capital investments due to trade friction with the United States, the THK Group achieved sales through the demand for electronics and products related to automation and robotization, which had been trending favorably. However, revenue decreased ¥16,254 million (35.2%) year-on-year, to ¥29,969 million. As a result of decreased revenue and other factors, segment income (operating income) decreased ¥6,122 million (70.7%) year-on-year, to ¥2,537 million.

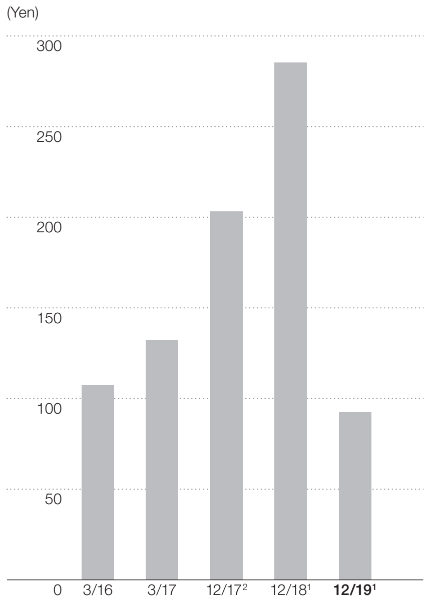
Other

As the range of demand for THK products is steadily growing in India, the ASEAN region, and other parts of the world, the Group bolstered its sales network and undertook aggressive sales activities to expand transactions with existing customers and acquire new customers. However, due to factors such as the reduced demand in China that impacted certain regions, revenue decreased ¥3,370 million (20.3%) year-on-year, to ¥13,265 million. As a result of decreased revenue and other factors, segment income (operating income) decreased ¥1,273 million (52.0%) year-on-year, to ¥1,175 million.

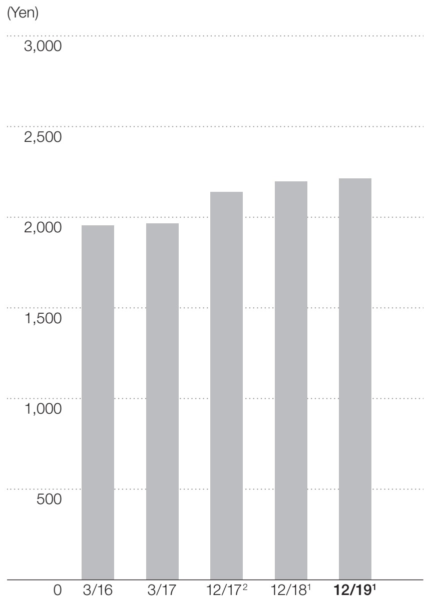
Return on Assets (ROA)/ Return on Equity (ROE)



Net Income per Share



Net Assets per Share



[1] The THK Group decided to adopt IFRS beginning with the 2019 fiscal year. For the purposes of comparison, the results for the 2018 fiscal year are also noted in accordance with IFRS.
[2] 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.

Financial Position

Assets, Liabilities, and Equity

▸ Assets

In terms of assets, while cash and cash equivalents rose ¥14,577 million and property, plant, and equipment increased ¥13,339 million, trade and other receivables decreased by ¥28,826 million; inventories by ¥1,944 million; and goodwill and intangible assets by ¥2,060 million. As a result of these and other factors, assets totaled ¥468,945 million, a decrease of ¥2,424 million from the end of the previous fiscal year.

▸ Liabilities

In terms of liabilities, while bonds and borrowings rose ¥27,700 million, trade and other payables decreased by ¥16,753 million, and income taxes payable fell by ¥11,561 million. As a result of these and other factors, liabilities totaled ¥177,813 million, a decrease of ¥4,278 million from the end of the previous fiscal year.

▸ Equity

In terms of equity, while retained earnings rose ¥4,568 million, other components of equity decreased by ¥2,433 million. As a result of these and other factors, equity totaled ¥291,132 million, an increase of ¥1,854 million from the end of the previous fiscal year.

Cash Flows

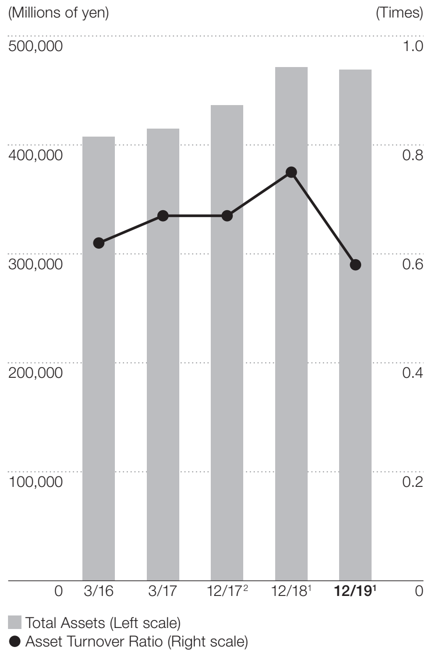
Net cash provided by operating activities came to ¥28,383 million (compared to ¥56,500 million the previous fiscal year). The major cash inflows were a profit before tax of ¥18,168 million, depreciation and amortization of ¥18,085 million, impairment losses of ¥678 million, a ¥28,588 million decrease in trade and other receivables, and a ¥1,615 million decrease in inventories. Net cash used in operating activities included a ¥19,887 million decrease in trade and other payables, as well as ¥18,933 million in income taxes paid.

Net cash used in investing activities totaled ¥30,040 million (compared to ¥32,971 million the previous fiscal year), primarily due to the purchase of property, plant, and equipment in the amount of ¥29,192 million.

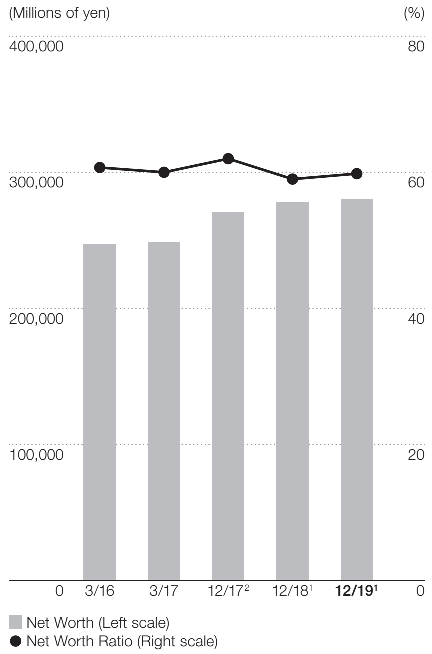
Net cash provided by financing activities came to ¥18,304 million (compared to a use of ¥13,053 million the previous fiscal year). The major cash inflows were proceeds from long-term borrowings totaling ¥20,000 million and proceeds from issuance of bonds totaling ¥20,000 million. Net cash used in financing activities included a ¥12,185 million repayment of long-term borrowings and ¥7,944 million of dividends paid.

As a result, cash and cash equivalents stood at ¥149,091 million as of December 31, 2019, an increase of ¥14,577 million compared with the previous fiscal year-end.

Total Assets/ Asset Turnover Ratio



Net Worth/ Net Worth Ratio



[1] The THK Group decided to adopt IFRS beginning with the 2019 fiscal year. For the purposes of comparison, the results for the 2018 fiscal year are also noted in accordance with IFRS.
[2] 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 23, 2020.

Effect of Changes in Demand Trends Within Specific Industries

The THK Group manufactures and sells the LM Guide, 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, the business results and financial position of the THK Group could be affected by drastic changes in demand trends in these specific industries in the future.

Business Expansion Outside of Japan

The THK Group has manufacturing and sales operations in the Americas, Europe, Asia, and other regions. Shifts in political and economic conditions in countries and regions where the THK Group manufactures or sells products could have an impact on the THK Group's business results and financial position. Any unexpected legal and regulatory changes could also have a similar effect.

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 with regard to importing and exporting, there is the possibility that the Group's business results and financial position could be affected by any 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 statements 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 the LM (Linear Motion) Guide, and automotive and transportation components, notably link balls. Between the two, linear motion systems account for the majority of revenue 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 sufficiently predict the needs of the industry and market and unable to develop appealing new products, if it presents new products to the market too late, or if another company develops a revolutionary new product that causes THK's machine components and automotive components to lose their positions within the market, it could reduce THK's growth and profitability, impacting the Group's business results and financial position.

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 stricter competition especially in terms of price 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, as a result of the heavy competition in terms of price, there is no guarantee that it can maintain its competitive edge in the future, which could impact the THK Group's business results and financial position.

Reliance on Specific Supply Sources

The THK Group procures some of its raw materials and parts from external supply sources. Therefore, the THK Group's business results and financial position could be affected in the event of a shortfall in raw materials and parts owing to factors such as insufficient production capacity, poor quality, or insolvency on the part of its suppliers or a natural disaster such as a fire or earthquake.

Furthermore, the Group demonstrates CSR in its purchasing activities, such as by appropriately handling conflict minerals and promoting eco-friendliness throughout its supply chain. However, any failure to do so on the part of its supply sources could affect THK's procurement activities, which could impact its business results and financial position.

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 possibility that raw material costs could rise more than anticipated and impact the THK Group's business results and financial position.

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 automobiles, seismic isolation and damping systems, medical equipment, amusement devices, and the aircraft industry.

Under these circumstances, the THK Group has worked to establish quality assurance systems to ensure that high product quality is maintained 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, thereby affecting the business results and financial position of the THK Group.

Although the THK Group possesses global 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 secures its intellectual property rights through domestic and overseas patents, thereby protecting its rights with regard to the expertise that is invaluable to its business activities and the technology it has accumulated through its production techniques and product development. The Company also pays meticulous attention to ensure that it does not infringe the intellectual property rights of others. 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 such an event could impact the Group's business cannot be entirely discounted.

Furthermore, if a third party were to infringe THK's intellectual property rights, or if the Company were to unintentionally infringe the intellectual property rights of another party, it could impact the THK Group's business results and financial position.

Information Security

The THK Group occasionally 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 by THK. 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 cause the destruction or alteration of important data or cause a system to go down, 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, thereby affecting the business results and financial position of the THK Group.

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 disasters, 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 measures 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 business results and financial position of the THK Group could ultimately be affected in the event of 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 strives to establish stable labor-management relations. However, labor-management customs vary in each country, and 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 particularly in emerging countries were to suddenly rise, it could affect the THK Group's business results and financial position.

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. The Group works to improve compliance awareness by notifying Group employees of the standard of conduct they must follow and by conducting required internal training.

In addition, the Company maintains an internal reporting system and works to prevent compliance risks. However, it is difficult to entirely avoid such risks while expanding business globally, so in the event of a legal violation, the THK Group could bear criminal, civil, or administrative liability, or experience a loss of trust among the general public, which could impact its business results and financial position.

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, 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 could affect the THK Group's business results and financial position.

Furthermore, if environmental regulations become stricter and result in additional obligations or expenses, it could affect the THK Group's business results and financial position.

THK CO., LTD. AND CONSOLIDATED SUBSIDIARIES
Consolidated Statement of Financial Position

December 31, 2019 and 2018

		Millions of yen			Thousands of U.S. dollars (Note 2)
	Note	December 31, 2019	December 31, 2018	January 1, 2018 (Date of Transition to IFRSs)	December 31, 2019
ASSETS					
Current Assets:					
Cash and cash equivalents	6	¥149,091	¥134,513	¥129,920	$1,371,834
Trade and other receivables	7	63,734	92,561	86,839	586,437
Inventories	9	48,120	50,065	43,802	442,767
Other financial assets	8	2	3	3	18
Other current assets	10	10,815	7,737	8,071	99,512
Total current assets		271,764	284,881	268,637	2,500,588
Non-current assets:					
Property, plant, and equipment	11	155,055	141,716	127,236	1,426,711
Goodwill and intangible assets	12	21,440	23,501	26,399	197,276
Investments accounted for using the equity method		5,280	5,825	5,290	48,582
Other financial assets	8	9,991	8,631	9,763	91,930
Deferred tax assets	14	3,407	5,112	3,249	31,348
Net defined benefit asset	18	1,869	1,569	2,295	17,197
Other non-current assets	10	135	131	176	1,242
Total non-current assets		197,180	186,488	174,411	1,814,317
Total assets		¥468,945	¥471,369	¥443,049	$4,314,915

The accompanying notes are an integral part of these statements.

		Millions of yen			Thousands of U.S. dollars (Note 2)
	Note	December 31, 2019	December 31, 2018	January 1, 2018 (Date of Transition to IFRSs)	December 31, 2019
LIABILITIES AND EQUITY					
Liabilities					
Current liabilities:					
Trade and other payables	17	¥ 42,825	¥ 59,578	¥ 54,915	$ 394,046
Bonds and borrowings	15	22,228	12,208	22,359	204,527
Other financial liabilities	15	2,417	2,962	3,694	22,239
Income taxes payable	14	709	12,271	1,673	6,523
Other current liabilities	20, 21	10,483	12,970	12,307	96,457
Total current liabilities		78,663	99,991	94,950	723,803
Non-current liabilities:					
Bonds and borrowings	15	73,041	55,360	48,088	672,073
Other financial liabilities	15	11,056	11,212	10,818	101,729
Net defined benefit liability	18	7,438	7,908	7,389	68,439
Provisions	19	176	307	291	1,619
Deferred tax liabilities	14	5,468	5,498	5,136	50,312
Other non-current liabilities	20, 21	1,968	1,811	1,654	18,108
Total non-current liabilities		99,149	82,100	73,378	912,302
Total liabilities		177,813	182,091	168,329	1,636,115
Equity:					
Equity attributable to owners of the parent:					
Common stock	22	34,606	34,606	34,606	318,421
Capital surplus	22	40,413	40,420	40,440	371,853
Retained earnings	22	230,927	226,358	200,069	2,124,834
Treasury stock	22	(14,004)	(14,002)	(13,998)	(128,855)
Other components of equity		(11,598)	(9,164)	2,847	(106,716)
Total equity attributable to owners of the parent		280,344	278,217	263,965	2,579,536
Non-controlling interests		10,787	11,060	10,754	99,254
Total equity		291,132	289,278	274,720	2,678,800
Total liabilities and equity		¥468,945	¥471,369	¥443,049	$4,314,915

The accompanying notes are an integral part of these statements.

Consolidated Statement of Profit or Loss

Years ended December 31, 2019 and 2018

	Note	Millions of yen 2019	Millions of yen 2018	Thousands of U.S. dollars (Note 2) 2019
Revenue	24	¥274,599	¥344,718	$2,526,674
Cost of sales		207,130	242,733	1,905,870
Gross profit		67,469	101,985	620,804
Selling, general, and administrative expenses	25	49,437	51,511	454,885
Other income	27	2,184	2,605	20,095
Other expenses	27	2,042	845	18,789
Share of profit in investments accounted for using the equity method		103	614	947
Operating profit		18,277	52,848	168,172
Financial income	28	1,010	875	9,293
Financial costs	28	1,119	1,461	10,296
Profit before tax		18,168	52,262	167,169
Income tax expense	14	6,301	15,545	57,977
Profit for the year		¥ 11,866	¥ 36,716	$ 109,182
Profit attributable to:				
Owners of the parent		¥ 11,690	¥ 36,100	$ 107,563
Non-controlling interests		175	616	1,610
		¥ 11,866	¥ 36,716	$ 109,182
Earnings per share attributable to owners of the parent (yen):				
Basic	30	¥ 92.37	¥ 285.23	$ 0.84
Diluted	30	—	—	—

The accompanying notes are an integral part of these statements.

Consolidated Statement of Comprehensive Income

Years ended December 31, 2019 and 2018

	Note	Millions of yen 2019	Millions of yen 2018	Thousands of U.S. dollars (Note 2) 2019
Profit for the year		¥11,866	¥ 36,716	$109,182
Other comprehensive income (losses), net of income tax:				
Items that may not be reclassified subsequently to profit or loss:				
Financial assets measured at fair value through other comprehensive income	29	778	(1,734)	7,158
Remeasurements of defined benefit plans	29	658	(455)	6,054
Share of other comprehensive income (losses) of an affiliate accounted for using the equity method	29	102	(104)	938
Total		1,539	(2,295)	14,160
Items that may be reclassified subsequently to profit or loss:				
Exchange differences on translating foreign operations	29	(2,789)	(11,257)	(25,662)
Share of other comprehensive (losses) income of an affiliate accounted for using the equity method	29	(499)	388	(4,591)
Total		(3,289)	(10,869)	(30,263)
Total other comprehensive losses, net of tax		(1,749)	(13,164)	(16,093)
Comprehensive income for the year		¥10,116	¥ 23,552	$ 93,080
Attributable to:				
Owners of the parent		9,982	23,517	91,847
Non-controlling interests		134	35	1,232
		¥10,116	¥ 23,552	$ 93,080

The accompanying notes are an integral part of these statements.

Consolidated Statement of Changes in Equity

Years ended December 31, 2019 and 2018

Millions of yen

	Note	Common stock	Capital surplus	Retained earnings	Treasury stock	Other components of equity: Exchange differences on translating foreign operations
		Equity attributable to owners of the parent				
Balance at January 1, 2018		¥34,606	¥40,440	¥200,069	¥(13,998)	¥ —
Profit for the year		—	—	36,100	—	—
Other comprehensive income	29	—	—	—	—	(10,267)
Total comprehensive income		—	—	36,100	—	(10,267)
Purchase of treasury stock	22	—	—	—	(4)	—
Dividends	23	—	—	(9,239)	—	—
Transfer from other components of equity to retained earnings		—	—	(572)	—	—
Other		—	(20)	—	—	—
Total transactions with owners		—	(20)	(9,811)	(4)	—
Balance at December 31, 2018		**¥34,606**	**¥40,420**	**¥226,358**	**¥(14,002)**	**¥(10,267)**
Profit for the year		—	—	11,690	—	—
Other comprehensive income	29	—	—	—	—	(3,212)
Total comprehensive income		—	—	11,690	—	(3,212)
Purchase of treasury stock	22	—	—	—	(1)	—
Payment of dividends	23	—	—	(7,847)	—	—
Transfer from other components of equity to retained earnings		—	—	725	—	—
Other		—	(6)	—	—	—
Total transactions with owners		—	(6)	(7,121)	(1)	—
Balance at December 31, 2019		**¥34,606**	**¥40,413**	**¥230,927**	**¥(14,004)**	**¥(13,479)**

Millions of yen

	Note	Other components of equity: Financial assets measured at fair value through other comprehensive income	Other components of equity: Remeasurements of defined benefit plans	Other components of equity: Total	Equity attributable to owners of the parent: Total	Non-controlling interests	Total
Balance at January 1, 2018		¥ 2,847	¥ —	¥ 2,847	¥263,965	¥10,754	¥274,720
Profit for the year		—	—	—	36,100	616	36,716
Other comprehensive income	29	(1,744)	(572)	(12,583)	(12,583)	(580)	(13,164)
Total comprehensive income		(1,744)	(572)	(12,583)	23,517	35	23,552
Purchase of treasury stock	22	—	—	—	(4)	—	(4)
Payment of dividends	23	—	—	—	(9,239)	—	(9,239)
Transfer from other components of equity to retained earnings		—	572	572	—	—	—
Other		—	—	—	(20)	270	249
Total transactions with owners		—	572	572	(9,265)	270	(8,994)
Balance at December 31, 2018		**1,102**	**—**	**(9,164)**	**278,217**	**11,060**	**289,278**
Profit for the year		—	—	—	11,690	175	11,866
Other comprehensive income	29	779	725	(1,708)	(1,708)	(41)	(1,749)
Total comprehensive income		779	725	(1,708)	9,982	134	10,116
Purchase of treasury stock	22	—	—	—	(1)	—	(1)
Payment of dividends	23	—	—	—	(7,847)	—	(7,847)
Transfer from other components of equity to retained earnings		—	(725)	(725)	—	—	—
Other		—	—	—	(6)	(406)	(413)
Total transactions with owners		—	(725)	(725)	(7,855)	(406)	(8,262)
Balance at December 31, 2019		**¥ 1,881**	**¥ —**	**¥(11,598)**	**¥280,344**	**¥10,787**	**¥291,132**

Thousands of U.S. dollars

	Note	Common stock	Capital surplus	Retained earnings	Treasury stock	Other components of equity: Exchange differences on translating foreign operations
		Equity attributable to owners of the parent				
Balance at December 31, 2018		**$318,421**	**$371,917**	**$2,082,793**	**$(128,836)**	**$ (94,470)**
Profit for the year		—	—	107,563	—	—
Other comprehensive income	29	—	—	—	—	(29,554)
Total comprehensive income		—	—	107,563	—	(29,554)
Purchase of treasury stock	22	—	—	—	(9)	—
Payment of dividends	23	—	—	(72,202)	—	—
Transfer from other components of equity to retained earnings		—	—	6,670	—	—
Other		—	(55)	—	—	—
Total transactions with owners		—	(55)	(65,522)	(9)	—
Balance at December 31, 2019		**$318,421**	**$371,853**	**$2,124,834**	**$(128,855)**	**$(124,024)**

Thousands of U.S. dollars

	Note	Other components of equity: Financial assets measured at fair value through other comprehensive income	Other components of equity: Remeasurements of defined benefit plans	Other components of equity: Total	Equity attributable to owners of the parent: Total	Non-controlling interests	Total
Balance at December 31, 2018		**$10,139**	**$ —**	**$ (84,320)**	**$2,559,965**	**$101,766**	**$2,661,740**
Profit for the year		—	—	—	107,563	1,610	109,182
Other comprehensive income	29	7,167	6,670	(15,715)	(15,715)	(377)	(16,093)
Total comprehensive income		7,167	6,670	(15,715)	91,847	1,232	93,080
Purchase of treasury stock	22	—	—	—	(9)	—	(9)
Payment of dividends	23	—	—	—	(72,202)	—	(72,202)
Transfer from other components of equity to retained earnings		—	(6,670)	(6,670)	—	—	—
Other		—	—	—	(55)	(3,735)	(3,800)
Total transactions with owners		—	(6,670)	(6,670)	(72,276)	(3,735)	(76,021)
Balance at December 31, 2019		**$17,307**	**$ —**	**$(106,716)**	**$2,579,536**	**$ 99,254**	**$2,678,800**

The accompanying notes are an integral part of these statements.

Consolidated Statement of Cash Flows

Years ended December 31, 2019 and 2018

	Note	Millions of yen 2019	Millions of yen 2018	Thousands of U.S. dollars (Note 2) 2019
Cash Flows from Operating Activities:				
Profit before tax		¥ 18,168	¥ 52,262	$ 167,169
Depreciation and amortization		18,085	16,600	166,405
Impairment losses		678	—	6,238
Change in net defined benefit assets and liability		(38)	(231)	(349)
Financial income		(1,010)	(875)	(9,293)
Financial costs		1,405	3,138	12,927
Share of profit in investments accounted for using the equity method		(103)	(614)	(947)
Decrease (increase) in trade and other receivables		28,588	(7,574)	263,047
Decrease (increase) in inventories		1,615	(7,958)	14,860
(Decrease) increase in trade and other payables		(19,887)	4,977	(182,986)
Other, net		(770)	2,151	(7,085)
Subtotal		46,731	61,875	429,987
Interests and dividends received		1,004	872	9,238
Interests paid		(419)	(357)	(3,855)
Income taxes paid		(18,933)	(5,888)	(174,208)
Net cash provided by operating activities		28,383	56,500	261,161
Cash Flows from Investing Activities:				
Purchase of property, plant, and equipment		(29,192)	(30,878)	(268,605)
Proceeds from sales of property, plant, and equipment		51	186	469
Purchases of other financial assets		(392)	(1,967)	(3,606)
Other, net		(507)	(311)	(4,665)
Net cash used in investing activities		(30,040)	(32,971)	(276,407)
Cash Flows from Financing Activities:				
Proceeds from long-term borrowings	31	20,000	—	184,026
Repayments of long-term borrowings	31	(12,185)	(2,185)	(112,118)
Proceeds from issuance of bonds	31	20,000	20,000	184,026
Payments for redemption of bonds	31	—	(20,000)	—
Purchase of treasury stock	22	(1)	(4)	(9)
Dividends paid	23	(7,944)	(9,326)	(73,095)
Dividends paid to non-controlling shareholders		(106)	(8)	(975)
Repayments of lease obligations	31	(1,498)	(1,444)	(13,783)
Other, net		40	(84)	368
Net cash provided by (used in) financing activities		18,304	(13,053)	168,421
Effects of exchange rate changes on cash and cash equivalents		(2,069)	(5,883)	(19,037)
Net increase in cash and cash equivalents		14,577	4,592	134,127
Cash and cash equivalents at the beginning of the year	6	134,513	129,920	1,237,697
Cash and cash equivalents at the end of the year	6	¥149,091	¥134,513	$1,371,834

The accompanying notes are an integral part of these statements.

Notes to Consolidated Financial Statements

1. Reporting Entity

THK CO., LTD. (the "Company") is an entity located in Japan. The consolidated financial statements of the Company as of December 31, 2019, and for the year then ended consist of the Company and its subsidiaries (collectively, "the Group") and the Group's share of investments in an affiliate. The business of the Group is described in Note 5, "Segment Information."

2. Basis of Preparation

Compliance with International Financial Reporting Standards ("IFRS") and First-Time Adoption

The accompanying consolidated financial statements of the Group have been prepared in accordance with International Financial Reporting Standards (IFRS) pursuant to the provisions of Article 93 of Regulations for Consolidated Financial Statements, as they meet the requirements for a "Specified Company Complying with Designated International Accounting Standards" as described in Article 1-2 of the Regulation on Terminology, Forms, and Preparation Methods of Consolidated Financial Statements (Ministry of Finance Order No. 28 of 1976).

The accompanying consolidated financial statements were authorized by Akihiro Teramachi, Representative Director and President of the Company on March 23, 2020.

The Group adopted IFRS for the first time as from the fiscal year ended December 31, 2019, with the date of transition to IFRS as of January 1, 2018. Effects of the transition to IFRS on the Group's consolidated financial position, operating results, and cash flows on the date of transition to IFRS and in the comparative years are presented in Note 37, "First-Time Adoption."

Except for IFRSs which have not been adopted early and exemptions permitted by IFRS 1, "First-time Adoption of International Financial Reporting Standards," the accounting policies adopted by the Group are compliant with IFRS effective as of December 31, 2019.

The exemptions adopted by the Group are presented in Note 37, "First-Time Adoption."

Basis of Measurement

Except for the items presented in Note 3, "Significant Accounting Policies," the Group's consolidated financial statements are prepared on a historical cost basis.

Functional Currency and Presentation Currency

The consolidated financial statements of the Group are prepared in Japanese yen, which is the Company's functional currency, and the yen amounts of less than one million yen have been omitted. 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 represent or could be converted into U.S. dollars at that or any other rate. For this purpose, the rate of ¥108.68 to U.S. $1, the approximate rate of exchange prevailing in Tokyo on December 31, 2019, has been used for the translation of the accompanying consolidated financial statements as of December 31, 2019, and for the year then ended.

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.

3. Significant Accounting Policies

Basis of Consolidation

(1) Subsidiaries

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

The financial statements of subsidiaries are included in the consolidated financial statements from the date when the Group obtains control over the subsidiary until the date when it loses control over the subsidiary.

Intercompany receivables and payables, internal transactions, and unrealized profit or loss arising from intercompany transactions are eliminated in the preparation of the consolidated financial statements.

Any change in ownership interests in a subsidiary that does not result in a loss of control over the subsidiary is accounted for as an equity transaction. The difference between adjustment of non-controlling interests and fair value of the consideration is directly recognized in equity as interest attributable to owners of the parent.

(2) Affiliate

An affiliate is an entity over which the Group has a significant influence over the decisions on financial and operating policy, but does not have control or joint control over those policies.

An affiliate is accounted for using the equity method from the date when the Group obtains significant influence until the date when the Group loses significant influence. Investments in an affiliate include goodwill, net of accumulated impairment losses, recognized in the acquisition.

Business Combinations

Business combinations are accounted for using the acquisition method. The consideration for acquisition is measured as the sum of the acquisition-date fair values of the assets transferred in exchange of the control over the acquiree, the liabilities assumed of the acquiree, and equity financial instruments issued by the Company. If the consideration for acquisition exceeds the fair value of identifiable assets and liabilities, the difference is recorded as goodwill in the consolidated statement of financial position. Otherwise, the difference is immediately credited to profit in the consolidated statement of profit or loss.

Whether non-controlling interests are measured at the fair value or at the proportional share of the recognized amount of identifiable net assets is determined for each business combination.

Additional acquisition of non-controlling interests after obtaining control is accounted for as the equity transaction, and accordingly, the goodwill is not recognized from the said transaction.

Identifiable assets and liabilities of the acquiree are measured at fair values at the date of acquisition except for the following:

— Deferred tax assets and liabilities and employee benefit contract-related assets and liabilities
— Share-based payment agreement using the shares of the acquiree
— Assets or disposal group classified as held for sale pursuant to IFRS 5, “Non-current assets held for sale and discontinued operations”

In case of business combinations achieved through step acquisition, its previously held interest equity in the acquiree is remeasured at its acquisition-date fair value, and the resulting gain or loss is recognized as profit or loss.

The Group adopts the exemption rule of IFRS 1 and does not retrospectively apply IFRS 3, “Business Combinations” to business combinations that occurred prior to the date of transition to IFRSs. Therefore, the amount of goodwill arising from acquisitions prior to the date of transition to IFRSs is recorded at the carrying amount based on the previously applied Japanese accounting standards (“JGAAP”) after implementing impairment tests at the date of transition to IFRSs.

Foreign Currency Translation

(1) Foreign currency transactions

Foreign currency transactions are translated into the functional currency of each company of the Group at the foreign exchange rate on the date of the transaction or at a rate that approximates the foreign exchange rate.

Monetary assets and monetary liabilities in foreign currency on the closing date are translated into the functional currency at the foreign exchange rate on the closing date.

Non-monetary assets and non-monetary liabilities in foreign currency that are measured at fair value are translated into the functional currency at the foreign exchange rate on the date of calculation of the fair value.

Exchange differences arising from translation or settlement are recognized as profit or loss. However, exchange differences arising from financial assets that are measured through other comprehensive income are recognized as other comprehensive income.

(2) Financial statements of foreign operations

Assets and liabilities of foreign operations are translated into Japanese yen using the foreign exchange rate on the closing date, and their revenue and expenses are translated into Japanese yen using an average foreign exchange rate. Exchange differences arising from the translation of financial statements of foreign operations are recognized as other comprehensive income. Exchange differences on translating foreign operations are recognized as profit or loss in the period when the foreign operation is disposed of.

The Group adopts the exemption rule of IFRS 1, and accumulated exchange differences on translating foreign operations prior to the date of transition to IFRS are deemed to be zero and fully transferred to retained earnings.

Financial Instruments

(1) Financial assets

i. Initial recognition and measurement

The Group classifies financial assets into those that are measured at fair value through profit or loss or other comprehensive income and those that are measured at amortized cost. This classification is decided at the time of initial recognition.

The Group recognizes relevant financial instruments when it becomes a party to the contract of the financial assets.

Unless financial assets are classified into the category in which they are measured at fair value through profit or loss, the Group measures all financial assets at an amount that is obtained by adding transaction costs to the fair value.

A financial asset is classified into the category in which it is measured at amortized cost if it satisfies both of the following requirements:

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

Financial assets other than those that are measured at amortized cost are classified into the category in which they are measured at fair value.

As for equity financial assets that are measured at fair value, except for equity financial assets held for trading purposes that must be measured at fair value through profit or loss, the Group designates each equity financial asset as a financial asset that is measured at fair value through profit or loss or measured at fair value through other comprehensive income and applies the designation continuously.

ii. Subsequent measurement

After initial recognition, financial assets are measured as follows according to their classification.

(a) Financial assets measured at amortized cost

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

(b) Financial assets measured at fair value

The amount of changes in the fair value of financial assets measured at fair value is recognized as profit or loss.

Of equity financial assets, however, the amount of changes in the fair value of those that are designated to be measured at fair value through other comprehensive income is recognized as other comprehensive income. Dividends from the said financial assets are recognized as profit or loss for the period as part of financial income.

iii. Derecognition of financial assets

The Group derecognizes a financial asset if the contractual rights to the cash flows from the financial asset expire, or if the Group transfers substantially all the risks and rewards of ownership of the financial asset. If the Group retains control over the transferred financial asset, the Group continues to recognize the asset and related liability to the extent of its continuing involvement in the financial asset.

iv. Impairment of financial assets

For financial assets measured at amortized cost, the Group recognizes an allowance for doubtful accounts on expected credit losses.

The Group assesses whether the credit risk of each financial asset has increased significantly from the time of initial recognition on each closing date and, if the credit risk has not increased significantly from the time of initial recognition, the Group recognizes an allowance for doubtful accounts on expected credit losses for 12 months. On the other hand, if the credit risk has increased significantly from the time of initial recognition, the Group recognizes an amount equal to the lifetime expected credit losses as an allowance for doubtful accounts.

If contractual payments are more than 30 days past due, the Group deems that the credit risk has increased significantly, in principle. However, when the Group assesses whether the credit risk has increased significantly, the Group takes into consideration reasonable and supportable information that is available (such as internal rating and external rating), in addition to information on payments past due.

If it is decided that the credit risk on a financial asset is low as of the closing date, the Group assesses that the credit risk on the financial asset has not increased significantly since initial recognition.

However, for trade receivables that do not contain a significant financial component, the Group always recognizes an allowance for doubtful accounts at an amount equal to the lifetime expected credit losses, regardless of whether the credit risk has increased significantly from the time of initial recognition.

Expected credit losses are measured at the present value of differences between all contractual cash flows to be paid to the entity pursuant to the contract and all cash flows expected to be received by the entity.

The Group estimates the expected credit losses of a financial asset in a manner that reflects the following:

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

If significant economic fluctuations have an impact, the necessary adjustments will be made to the expected credit losses measured in the manner stated above.

The Group directly reduces the gross carrying amount of a financial asset when the Group has no reasonable expectations of recovering a financial asset in its entirety or a portion thereof.

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

(2) Financial liabilities

i. Initial recognition and measurement

The Group classifies financial liabilities into those that are measured at fair value through profit or loss and those that are measured at amortized cost. This classification is decided at the time of initial recognition.

The Group initially recognizes debt instruments issued on the date of issuance. The Group initially recognizes all other financial liabilities on the date of transactions when the Group becomes a party to the contract of the relevant financial instruments.

While all financial liabilities are initially measured at fair value, financial liabilities that are measured at amortized cost are measured at an amount by deducting transaction costs directly attributable.

ii. Subsequent measurement

After initial recognition, financial liabilities are measured as follows according to their classification:

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

Financial liabilities measured at fair value through profit or loss are measured at fair value after initial recognition, and the changes thereof are recognized as profit or loss for the period.

(b) Financial liabilities measured at amortized cost

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

When the amortization and recognition by the effective interest method are discontinued, the resulting gains and losses are recognized as profit or loss for the period as part of financial costs.

iii. Derecognition of financial liabilities

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

(3) Presentation of financial assets and financial liabilities

Financial assets and financial liabilities are offset in the consolidated statement of financial position and are presented in a net amount only if the Group has a legal right to offset their balances and has the intention to settle them in a net amount or realize the assets and settle the liabilities at the same time.

(4) Derivatives

The Group uses derivatives of foreign exchange forward contracts and interest rate swap agreements to hedge the foreign exchange risk and interest rate risk, respectively. These derivatives are initially recognized at fair value when the contract is entered and are subsequently remeasured at fair value.

Cash and Cash Equivalents

Cash and cash equivalents consist of cash on hand and demand deposits withdrawable at any time.

Inventories

Inventories are measured at acquisition cost or net realizable value, whichever is lower. The net realizable value is an amount that is obtained by deducting the estimated costs required until completion and the estimated selling expenses from an estimated selling price in the normal course of business. The acquisition cost is calculated primarily based on the gross average method and includes the cost of purchase, the processing cost, and all costs required to reach the present location and status.

Property, Plant, and Equipment

Property, plant, and equipment are presented at the values obtained by deducting accumulated depreciation and accumulated impairment losses from the acquisition cost.

The acquisition cost includes costs directly related to the acquisition of an asset, costs for demolition and removal, and restoration costs of land.

Depreciation of each asset other than land and construction in progress is posted using the straight-line method over its estimated useful life. The estimated useful life by major asset item is as follows:

- Buildings and structures 5–50 years
- Machinery and vehicles 4–12 years

The estimated useful life, the residual value, and the depreciation method are reviewed at the end of each fiscal year, and if there is a change, it is applied prospectively as a change in accounting estimates.

Goodwill

The Group initially measures goodwill at the fair value of transfer amounts including recognized non-controlling interests in the acquiree measured at the date of acquisition, less the net recognized value (usually, fair value) of identifiable acquired assets and assumed liabilities at the date of acquisition.

Goodwill is not amortized, but is tested for impairment annually, or whenever there is any indication of possible impairment.

Impairment losses on goodwill are recognized in the consolidated statement of profit or loss and not reversed subsequently.

Goodwill is presented at the acquisition cost less accumulated impairment losses in the consolidated statement of financial position.

Intangible Assets

Intangible assets acquired individually are measured at the acquisition cost at the time of initial recognition.

Intangible assets acquired through business combinations are measured at fair value at the time of acquisition. After the initial recognition, they are stated at the acquisition cost less accumulated depreciation and accumulated impairment losses. Intangible assets, except for those with non-identifiable useful life, are amortized by the straight-line method over their estimated useful life after initial recognition, and they are stated at the amount obtained by deducting accumulated amortization and accumulated impairment losses from the acquisition cost. The estimated useful life of a major intangible asset is as follows:

- Software (for in-house use) 5 years

The estimated useful life, the residual value and the amortization method are reviewed at the end of each fiscal year, and if there is a change, it is applied prospectively as a change in accounting estimates.

Lease

As a lessee, the Group measures right-of-use assets at the acquisition cost and lease liabilities at the present value of total lease payments at the inception date of leases and presents right-of-use assets under “Property, plant, and equipment” and lease liabilities under “Other financial liabilities” in the consolidated statement of financial position.

Right-of-use assets are depreciated by the straight-line method over the earlier years of the useful life or the lease term.

Lease charges are allocated to financial costs and repayment of lease liabilities based on the interest method and financial costs are recognized in the consolidated statement of profit or loss.

However, for short-term leases with a lease term of 12 months or less and leases of low-value underlying assets, right-of-use assets, and lease liabilities are not recognized, and total lease payments are recognized using either the straight-line method or other systematic basis over the lease term.

Impairment of Non-financial Assets

For the carrying amount of non-financial assets of the Group other than inventories and deferred tax assets, the Group decides whether there is any indication of impairment on the closing date. If there is any indication of impairment, the Group estimates the recoverable amount of the assets. For goodwill and intangible assets whose useful life cannot be fixed or that are not yet available for use, the Group estimates the recoverable amount in the same period every year, regardless of whether there is any indication of impairment.

The recoverable amount of an asset or a cash-generating unit is set to be its value in use or its fair value after deducting the cost of sales, whichever is higher. In determining the value in use, estimated future cash flows are discounted to the present value by using a pre-tax discount rate that reflects the time value of money and risks inherent in the asset. Assets that are not tested individually in an impairment test are integrated into the minimal cash-generating unit that generates cash inflows that are largely independent from cash inflows from other assets or group of assets due to their continuous use. In impairment-testing goodwill, cash-generating units to which the goodwill is allocated are integrated so that the impairment-testing would be carried out reflecting the minimal unit related to the goodwill. Goodwill acquired through business combinations is allocated to the cash-generating units that are expected to obtain synergy effects from the business combination.

The company-wide assets of the Group do not generate independent cash inflows. If there is any indication of impairment in the company-wide assets, the Group determines the recoverable amounts of cash-generating units to which the company-wide assets are attributable.

If the carrying amount of an asset or a cash-generating unit exceeds the estimated recoverable amount, an impairment loss is recognized as profit or loss. An impairment loss recognized in relation to the cash-generating unit is first allocated in such a way as to reduce the carrying amount of goodwill allocated to the unit, and then the carrying amount of other assets in the cash-generating unit is reduced proportionally.

Employee Benefits

(1) Post-retirement benefits

The Group manages defined benefit plans and defined contribution plans as retirement benefit plans for employees.

For defined benefit plans, the amounts of defined benefit plan obligations computed by discounting the estimated future benefits vested as consideration for services rendered by the employees in the past and current years by each plan, less the fair value of plan assets, are recognized in the consolidated statement of financial position.

The Group determines the present value of defined benefit plan obligations and the related current service cost and past service cost using the projected unit credit method.

The discount rate is determined based on the market yield of high-grade corporate bonds at the closing date corresponding to discount periods that are set up based on the period through the future expected payment date each year.

Liabilities or assets related to the defined benefit plans are determined at the present value of defined benefit plan obligations, less the fair value of plan assets.

Remeasurements of the defined benefit plans are recognized collectively as other comprehensive income in the period incurred and immediately transferred from other equity components to retained earnings.

Past service costs resulting from a plan amendment or curtailment are recognized as profit or loss in the earlier period when the plan was amended, or related restructuring costs and termination benefits were recognized.

For defined contribution plans, the amounts to be contributed to the said plan for the period are recognized as profit or loss when the employees rendered related services.

(2) Short-term employee benefits

Short-term employee benefits including wages are recognized as profit or loss when an employee has rendered related services.

Bonuses are recognized as a liability in case that the employer has legal obligation or constructive obligation and reliable estimation is possible.

Unused paid absences are recognized as a liability when an employee has rendered services that will entitle to accumulate future paid absences.

Provisions

Provisions are recognized if the Group has a current legal or constructive obligation as a result of past events, if an outflow of economic resources is likely to settle the obligation, and if the amount of the obligation can be reasonably estimated. If the time value of money is significant, estimated future cash flows are discounted to the present value by using a pre-tax interest rate that reflects the time value of money and risks inherent in the obligation. The rebate of the discounted amount associated with the passage of time is recognized as a financial cost.

Revenue

The Group recognizes revenue from contracts with customers, except for interest and dividend income based on IFRS 9, "Financial Instruments," by applying the following steps:

Step 1: Identify a contract with a customer.
Step 2: Identify the performance obligation in the contract.
Step 3: Determine the transaction price.
Step 4: Allocate the transaction price to the performance obligation in the contract.
Step 5: Recognize revenue when the performance obligation has been satisfied (or as the performance obligation is satisfied).

Financial Income and Financial Costs

Financial income consists of mainly interest income, dividends received, foreign exchange gains, and changes in fair value of financial assets measured at fair value through profit or loss. Interest income is recognized when incurred by the effective interest method. Dividends received are recognized when the right to receive dividends has been vested.

Financial costs consist of mainly interest expenses, foreign exchange losses, and changes in fair value of financial assets measured at fair value through profit or loss. Interest expenses are recognized when incurred by the effective interest method.

Government Subsidies

Government subsidies are recognized at fair value when the incidental conditions for the grant of the subsidies have been met and when reasonable assurance of receiving subsidies has been obtained.

If government subsidies are related to expense items, they are recognized systematically as revenue over the period when the related costs that are intended to be covered by the subsidies are recognized as an expense. Subsidies related to assets are recognized as deferred income and are recognized systematically as profit or loss over the estimated useful life of the related assets.

Income Taxes

Income tax expenses consist of current tax and deferred tax. These taxes are recognized as profit or loss unless they arise from an item that is directly recognized in other comprehensive income or equity, or unless they arise from a business combination.

Current tax is measured at an amount in which a payment to or refund from tax authorities is expected. A tax rate and tax law used for determining the tax amount are those that have been enacted or substantially enacted by the closing date.

Deferred tax is recognized for temporary differences, which are differences between the carrying amount of an asset or a liability and its tax base on the closing date, the tax loss carryforwards, and unused tax credits.

A deferred tax asset or a deferred tax liability is not recorded for the following temporary differences.

- Temporary differences arising from initial recognition of goodwill
- Temporary differences arising from initial recognition of an asset or a liability that arises from a transaction that affects neither accounting profit nor taxable income (loss), except for business combinations.
- As for deductible temporary differences associated with investments in subsidiaries and affiliates, in cases where the said temporary differences are unlikely to be recovered in the foreseeable future, or in cases where taxable income that will be subject to the use of the said temporary differences is unlikely to be realized.
- As for taxable temporary differences associated with investments in subsidiaries and affiliates, in cases where the said temporary differences are unlikely to be realized in the foreseeable future because it is possible to control the timing for realizing temporary differences.

A deferred tax liability is recognized for all taxable temporary differences, in principle, and the Group recognizes a deferred tax asset for all deductible temporary differences to the extent that enough taxable income to use deductible temporary differences is likely to be realized.

The carrying amount of deferred tax assets is reviewed every fiscal year, and the carrying amount is reduced for the portion for which it cannot be decided that enough taxable income to use all or part of deferred tax assets is likely to be realized. Unrecognized deferred tax assets are reviewed every fiscal year, and the Group recognizes a deferred tax asset to the extent that the deferred tax asset becomes likely to be recovered by future taxable income.

Deferred tax assets and liabilities are measured based on a tax rate and tax law that are expected to be applied to the period when the assets will be realized or liabilities will be settled based on the tax rate and tax law that have been enacted or substantially enacted on the closing date.

Deferred tax assets and liabilities are offset if there is a legally enforceable right to offset tax assets for the period and tax liabilities for the period and taxes are imposed on the same taxable entity by the same tax authority, or if it is intended to settle tax assets for the period and tax liabilities for the period in a net amount or intended to realize assets and settle liabilities at the same time even if the taxable entities are different.

Earnings per Share

Basic earnings per share are calculated by dividing profit or loss attributable to common shareholders of the parent by the weighted-average number of outstanding common stock adjusted for treasury stock for the period. Diluted earnings per share are not determined, since there exist no potential shares.

Segment Information

A business segment is a constituent unit of business activities that will earn revenue and give rise to expenses, including transactions with other business segments. Financial information for the outcome of the businesses of all business segments is available individually and is reviewed by the Board of Directors of the Company regularly to allocate management resources to each segment and evaluate their performances.

Treasury Stock

Treasury stock is valued at acquisition cost and deducted from equity. Gains or losses are not recognized in the purchase, sale, or cancellation of treasury stock of the Company. Differences between the carrying amount and consideration at the time of sale are recognized as equity.

4. Significant Accounting Estimates and Judgments

In the preparation of consolidated financial statements in compliance with IFRS, the management is required to apply accounting policies and make decisions, estimates, and assumptions that could have an impact on the amount of assets, liabilities, revenue, and expenses. Actual results may differ from these estimates.

Estimates and assumptions that form the basis for estimates are reviewed on a continuing basis. The impact of the review of accounting estimates will be recognized in the accounting period when the estimates are reviewed and subsequent accounting periods.

Major decisions and estimates made by the management that could have a significant impact on the amounts in the consolidated financial statements are as follows:

- Scope of consolidation (Note 3, "Significant Accounting Policies – *Basis of Consolidation*")
- Revenue recognition (Note 3, "Significant Accounting Policies – *Revenue*")
- Matters concerning financial instruments (Note 3, "Significant Accounting Policies – *Financial Instruments*"; Note 8, "Other Financial Assets"; and Note 32, "Financial Instruments")
- Valuation of inventories (Note 9, "Inventories")
- Impairment of non-financial assets (Note 13, "Impairment of Non-financial Assets")
- Recoverability of deferred tax assets (Note 14, "Income Taxes")
- Accounting and valuation of provisions (Note 19, "Provisions")
- Measurement of defined benefit plan obligations (Note 18, "Employee Benefits")

5. Segment Information

Summary of Reportable Segments

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 management resources and evaluate their performances.

The Group's main products are machinery parts such as the LM (Linear Motion) Guide 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, Japan, the Americas, Europe, China, and Other based on the Group's production/sales structure.

Information about Reportable Segments

The accounting policies for the reportable segments are the same as the Group's accounting policies stated in Note 3, "Significant accounting policies."

Inter-segment revenues are based on market prices.

	Millions of yen							
	As of December 31, 2019, or for the year then ended							
	Japan	The Americas	Europe	China	Other	Total	Adjustments (Note) 3	Consolidated
Revenue:								
Sales to customers	¥117,740	¥58,480	¥55,143	¥29,969	¥13,265	¥274,599	¥ —	¥274,599
Inter-segment	48,470	146	269	4,635	1,695	55,217	(55,217)	—
Total	166,210	58,627	55,413	34,604	14,961	329,817	(55,217)	274,599
Segment profit (loss)	10,483	(1,012)	288	2,537	1,175	13,473	4,803	18,277
Financial income	4,048	1,228	1,089	1,880	470	8,718	(7,707)	1,010
Financial costs	1,148	1,162	707	1,527	369	4,914	(3,794)	1,119
Profit before tax	13,383	(946)	671	2,891	1,277	17,276	891	18,168
Segment assets	¥414,049	¥68,513	¥98,861	¥66,692	¥24,815	¥672,931	¥(203,985)	¥468,945
Other items:								
Depreciation and amortization	¥ 7,526	¥ 2,872	¥ 2,892	¥ 3,539	¥ 615	¥ 17,447	¥ (74)	¥ 17,373
Impairment losses	—	678	—	—	—	678	—	678
Investments accounted for using the equity method	5,280	—	—	—	—	5,280	—	5,280
Share of profit of investments accounted for using the equity method	103	—	—	—	—	103	—	103
Capital expenditures	648	938	1,882	1,843	363	5,677	—	5,677

	Millions of yen							
	As of December 31, 2018, or for the year then ended							
	Japan	The Americas	Europe	China	Other	Total	Adjustments	Consolidated
Revenue:								
Sales to customers	¥157,849	¥64,526	¥ 59,482	¥46,223	¥16,636	¥344,718	¥ —	¥344,718
Inter-segment	58,600	225	161	7,502	1,898	68,388	(68,388)	—
Total	216,450	64,751	59,644	53,726	18,534	413,107	(68,388)	344,718
Segment profit (Note) 4	40,701	421	1,538	8,660	2,449	53,771	(923)	52,848
Financial income	1,759	1,374	983	2,021	452	6,592	(5,716)	875
Financial costs	1,035	1,593	840	1,849	409	5,727	(4,266)	1,461
Profit before income taxes	41,424	203	1,682	8,832	2,493	54,636	(2,374)	52,262
Segment assets	¥414,660	¥69,790	¥100,233	¥66,496	¥21,303	¥672,484	¥(201,114)	¥471,369
Other items:								
Depreciation and amortization	¥ 6,443	¥ 2,719	¥ 2,923	¥ 3,524	¥ 477	¥ 16,088	¥ (63)	¥ 16,024
Impairment losses	—	—	—	—	—	—	—	—
Investments accounted for using the equity method	5,825	—	—	—	—	5,825	—	5,825
Share of profit of investments accounted for using the equity method	614	—	—	—	—	614	—	614
Capital expenditures	1,381	2,111	2,041	758	1,225	7,518	—	7,518

	Thousands of U.S. dollars							
	As of December 31, 2019, or for the year then ended							
	Japan	The Americas	Europe	China	Other	Total	Adjustments	Consolidated
Revenue:								
Sales to customers	$1,083,364	$538,093	$507,388	$275,754	$122,055	$2,526,674	$ —	$2,526,674
Inter-segment	445,988	1,343	2,475	42,648	15,596	508,069	(508,069)	—
Total	1,529,352	539,446	509,873	318,402	137,661	3,034,753	(508,069)	2,526,674
Segment profit	96,457	(9,311)	2,649	23,343	10,811	123,969	44,193	168,172
Financial income	37,246	11,299	10,020	17,298	4,324	80,217	(70,914)	9,293
Financial costs	10,563	10,691	6,505	14,050	3,395	45,215	(34,909)	10,296
Profit before income taxes	123,141	(8,704)	6,174	26,601	11,750	158,962	8,198	167,169
Segment assets	$3,809,799	$630,410	$909,652	$613,654	$228,330	$6,191,856	$(1,876,932)	$4,314,915
Other items:								
Depreciation and amortization	$ 69,249	$ 26,426	$ 26,610	$ 32,563	$ 5,658	$ 160,535	$ (680)	$ 159,854
Impairment losses	—	6,238	—	—	—	6,238	—	6,238
Investments accounted for using the equity method	48,582	—	—	—	—	48,582	—	48,582
Share of profit of investments accounted for using the equity method	947	—	—	—	—	947	—	947
Capital expenditures	5,962	8,630	17,316	16,958	3,340	52,235	—	52,235

Notes:
1. Segmentation by country or area is determined based on geographical proximity.
2. The main countries or areas that belong to the reportable segments other than Japan and China are as follows:
   (1) "The Americas": The United States of America and others
   (2) "Europe": Germany, France, and others
   (3) "Other": Taiwan, Singapore, and others
3. "Adjustments" are as follows:
   (1) Adjustments of "Segment profit (loss)" in an amount of ¥4,803 million ($44,193 thousand) and ¥(923) million for the years ended December 31, 2019 and 2018, respectively, represent elimination of inter-segment transactions.
   (2) Adjustments of "Segment assets" in an amount of ¥(203,985) million ($(1,876,932) thousand) and ¥(201,114) million for the years ended December 31, 2019 and 2018, respectively, are all elimination of inter-segment transactions.
   (3) Adjustments of "Depreciation and amortization" in an amount of ¥(74) million ($(680) thousand) and ¥(63) million for the years ended December 31, 2019 and 2018, respectively, are all elimination of inter-segment transactions.
4. "Segment profit (loss)" is reconciled with operating income in the consolidated statements of profit or loss.

Information about Products and Services

Sales to customers by products and services are as follows:

Years ended December 31	Millions of yen		Thousands of U.S. dollars
	2019	2018	2019
Industrial equipment	¥179,116	¥239,836	$1,648,104
Transportation equipment	95,483	104,882	878,570
Total	¥274,599	¥344,718	$2,526,674

Geographic Information

Information about sales and non-current assets is as follows:

Years ended December 31	Millions of yen		Thousands of U.S. dollars
	2019	2018	2019
Japan	¥109,424	¥145,238	$1,006,845
The Americas	58,390	59,792	537,265
Europe	53,766	57,540	494,718
China	30,996	48,554	285,204
Other	22,021	33,592	202,622
Total	¥274,599	¥344,718	$2,526,674

(Note) Sales is based on the location of the sales destination.

Non-current assets	Millions of yen			Thousands of U.S. dollars
	December 31		Date of transition (January 1, 2018)	December 31
	2019	2018		2019
Japan	¥ 78,569	¥ 70,689	¥ 59,360	$ 722,938
The Americas	25,238	23,729	23,904	232,223
Europe	21,534	22,197	24,029	198,141
China	29,820	29,868	30,858	274,383
Other	9,812	5,644	3,230	90,283
Total	¥164,976	¥152,129	¥141,382	$1,517,997

(Note) Non-current assets are based on the location of the assets and do not include financial instruments, deferred tax assets, and net defined benefit asset.

Information about Major Customers

There is no applicable matter to be noted, since any single external customer does not account for more than 10% of consolidated sales.

6. Cash and Cash Equivalents

Cash and cash equivalents comprise the following:

Non-current assets	Millions of yen			Thousands of U.S. dollars
	December 31		Date of transition (January 1, 2018)	December 31
	2019	2018		2019
Cash and cash equivalents	¥149,091	¥134,513	¥129,920	$1,371,834

7. Trade and Other Receivables

Trade and other receivables comprise the following:

	Millions of yen			Thousands of U.S. dollars
	December 31		Date of transition (January 1, 2018)	December 31
	2019	2018		2019
Notes and accounts receivable	¥49,413	¥69,722	¥71,543	$454,665
Electronically recorded receivables	14,400	22,973	15,514	132,499
Allowance for doubtful accounts	(79)	(134)	(218)	(726)
Total	¥63,734	¥92,561	¥86,839	$586,437

Trade and other receivables are classified as financial assets measured at amortized cost.

8. Other Financial Assets

Components of Other Financial Assets

Other financial assets comprise the following:

	Millions of yen			Thousands of U.S. dollars
	December 31		Date of transition (January 1, 2018)	December 31
	2019	2018		2019
Financial assets measured at amortized cost:				
Key deposits	¥ 11	¥ 41	¥ 78	$ 101
Guarantee deposits	1,307	1,359	1,492	12,026
Long-term loans	1,578	1,574	72	14,519
Other	1,244	1,187	983	11,446
Financial assets measured at fair value through profit or loss:				
Derivative assets	330	498	919	3,036
Other	747	599	413	6,873
Financial assets measured at fair value through other comprehensive income:				
Equity securities	4,641	3,240	5,673	42,703
Other	132	134	133	1,214
Total	¥9,993	¥8,635	¥9,767	$91,948
Current assets	¥ 2	¥ 3	¥ 3	$ 18
Non-current assets	9,991	8,631	9,763	91,930
Total	¥9,993	¥8,635	¥9,767	$91,948

Financial Assets Measured at Fair Value through Other Comprehensive Income

Main issues and their fair values of financial assets measured at fair value through other comprehensive income are as follows:

Issues	Millions of yen			Thousands of U.S. dollars
	December 31		Date of transition (January 1, 2018)	December 31
	2019	2018		2019
NITTOKU	**¥1,141**	¥605	¥1,432	**$10,498**
KOMATSU	**364**	323	555	**3,349**
TSUGAMI	**335**	192	435	**3,082**
NACHI-FUJIKOSHI	**301**	239	472	**2,769**
OKUMA	**289**	262	373	**2,659**
TOKYO SEIMITSU	**221**	144	231	**2,033**

Equity securities are designated as financial assets measured at fair value through other comprehensive income since they are held for strategic investment purposes.

Derecognition of Financial Assets Measured at Fair Value through Other Comprehensive Income

There is no applicable matter.

9. Inventories

Inventories comprise the following:

	Millions of yen			Thousands of U.S. dollars
	December 31		Date of transition (January 1, 2018)	December 31
	2019	2018		2019
Merchandise and finished goods	**¥20,108**	¥18,625	¥14,357	**$185,020**
Work in process	**9,156**	10,815	10,104	**84,247**
Raw material and supplies	**18,855**	20,624	19,340	**173,490**
Total	**¥48,120**	¥50,065	¥43,802	**$442,767**

The amounts of devaluated inventories recognized as expenses are ¥1,823 million ($16,774 thousand) and ¥1,498 million for the years ended December 31, 2019 and 2018, respectively.

10. Other Assets

Other assets comprise the following:

	Millions of yen			Thousands of U.S. dollars
	December 31		Date of transition (January 1, 2018)	December 31
	2019	2018		2019
Other current assets:				
Prepaid expenses	**¥ 1,638**	¥1,326	¥1,324	**$15,071**
Advance payments	**651**	749	759	**5,990**
Other receivables	**5,759**	2,330	2,696	**52,990**
Other	**2,766**	3,330	3,291	**25,450**
Total	**¥10,815**	¥7,737	¥8,071	**$99,512**
Other non-current assets:				
Long-term prepaid expenses	**¥ 135**	¥ 131	¥ 176	**$ 1,242**
Total	**¥ 135**	¥ 131	¥ 176	**$ 1,242**

11. Property, Plant, and Equipment

Table of Changes

Changes in acquisition costs, accumulated depreciation, and accumulated impairment losses and carrying amounts are as follows:

Carrying amount	Millions of yen					
	Land	Buildings and structures	Machinery and vehicles	Construction in progress	Other	Total
At January 1, 2018	¥15,137	¥41,820	¥55,961	¥10,452	¥ 3,864	¥127,236
Acquisition	—	1,888	1,633	29,488	1,048	34,059
Depreciation	(34)	(3,281)	(9,233)	—	(1,593)	(14,143)
Impairment losses	—	—	—	—	—	—
Sales or disposal	(27)	(271)	(520)	419	(2)	(402)
Transfer	33	1,722	17,019	(19,913)	1,027	(110)
Translation difference of foreign operations	(276)	(1,322)	(2,270)	(527)	(147)	(4,544)
Other	—	(125)	(28)	(199)	(25)	(379)
At December 31, 2018	14,832	40,431	62,561	19,720	4,170	141,716
Acquisition	59	709	1,699	27,715	750	30,935
Depreciation	(32)	(3,686)	(10,320)	—	(1,719)	(15,760)
Impairment losses	—	—	(631)	—	(2)	(633)
Sales or disposal	—	(46)	(282)	312	(22)	(39)
Transfer	—	11,231	18,804	(31,671)	1,556	(78)
Translation difference of foreign operations	(51)	(260)	(497)	(147)	(44)	(1,001)
Other	747	(25)	35	(803)	(36)	(82)
At December 31, 2019	¥15,553	¥48,354	¥71,369	¥15,126	¥ 4,651	¥155,055

(Note) Depreciation of property, plant, and equipment is included in “Cost of sales” and “Selling, general, and administrative expenses” in the consolidated statement of profit or loss.

Carrying amount	Thousands of U.S. dollars					
	Land	Buildings and structures	Machinery and vehicles	Construction in progress	Other	Total
At December 31, 2018	$136,474	$372,018	$575,644	$ 181,450	$ 38,369	$1,303,974
Acquisition	542	6,523	15,633	255,014	6,900	284,642
Depreciation	(294)	(33,916)	(94,957)	—	(15,817)	(145,012)
Impairment losses	—	—	(5,806)	—	(18)	(5,824)
Sales or disposal	—	(423)	(2,594)	2,870	(202)	(358)
Transfer	—	103,340	173,021	(291,415)	14,317	(717)
Translation difference of foreign operations	(469)	(2,392)	(4,573)	(1,352)	(404)	(9,210)
Other	6,873	(230)	322	(7,388)	(331)	(754)
At December 31, 2019	$143,108	$444,920	$656,689	$ 139,179	$ 42,795	$1,426,711

Acquisition costs	Millions of yen					
	Land	Buildings and structures	Machinery and vehicles	Construction in progress	Other	Total
At January 1, 2018	¥15,384	¥86,560	¥192,671	¥10,452	¥21,276	¥326,345
At December 31, 2018	15,057	86,516	199,609	19,720	22,023	342,927
At December 31, 2019	15,867	97,454	215,606	15,126	23,618	367,673

Acquisition costs	Thousands of U.S. dollars					
	Land	Buildings and structures	Machinery and vehicles	Construction in progress	Other	Total
At December 31, 2019	$145,997	$896,705	$1,983,860	$139,179	$217,316	$3,383,078

Acquisition costs	Millions of yen					
	Land	Buildings and structures	Machinery and vehicles	Construction in progress	Other	Total
At January 1, 2018	¥246	¥44,739	¥136,710	¥—	¥17,411	¥199,108
At December 31, 2018	225	46,085	137,047	—	17,853	201,211
At December 31, 2019	313	49,100	144,237	—	18,966	212,617

Acquisition costs	Thousands of U.S. dollars					
	Land	Buildings and structures	Machinery and vehicles	Construction in progress	Other	Total
At December 31, 2019	$2,880	$451,785	$1,327,171	$—	$174,512	$1,956,358

12. Goodwill and Intangible Assets

Table of Changes

Acquisition costs, accumulated amortization, and accumulated impairment losses and carrying amounts of goodwill and intangible assets are as follows:

Carrying amount	Millions of yen			
	Goodwill	Intangible assets		
		Software	Other	Total
At January 1, 2018	¥6,895	¥2,280	¥17,223	¥26,399
Acquisition	—	518	15	533
Amortization	—	(767)	(1,627)	(2,394)
Impairment losses	—	—	—	—
Sales or disposal	—	22	—	22
Translation differences of foreign operations	(293)	(35)	(772)	(1,101)
Other	—	37	4	41
At December 31, 2018	6,602	2,055	14,843	23,501
Acquisition	—	458	7	465
Amortization	—	(747)	(1,565)	(2,313)
Impairment losses	—	(44)	—	(44)
Sales or disposal	—	47	76	123
Translation differences of foreign operations	28	(6)	(196)	(174)
Other	—	56	(174)	(117)
At December 31, 2019	¥6,630	¥1,819	¥12,989	¥21,440

Carrying amount	Thousands of U.S. dollars			
	Goodwill	Intangible assets		
		Software	Other	Total
At December 31, 2018	$60,747	$18,908	$136,575	$216,240
Acquisition	—	4,214	64	4,278
Amortization	—	(6,873)	(14,400)	(21,282)
Impairment losses	—	(404)	—	(404)
Sales or disposal	—	432	699	1,131
Translation differences of foreign operations	257	(55)	(1,803)	(1,601)
Other	—	515	(1,601)	(1,076)
At December 31, 2019	$61,004	$16,737	$119,516	$197,276

(Note) Amortization of intangible assets is included in “Cost of sales” and “Selling, general, and administrative expenses” in the consolidated statement of profit or loss.

Acquisition costs	Millions of yen			
	Goodwill	Intangible assets		
		Software	Other	Total
At January 1, 2018	¥13,698	¥5,919	¥21,042	¥40,660
At December 31, 2018	12,840	6,320	20,732	39,893
At December 31, 2019	12,780	6,777	20,523	40,081

Acquisition costs	Thousands of U.S. dollars			
	Goodwill	Intangible assets		
		Software	Other	Total
At December 31, 2019	$117,592	$62,357	$188,838	$368,798

Accumulated amortization and impairment losses	Millions of yen			
	Goodwill	Intangible assets		
		Software	Other	Total
At January 1, 2018	¥6,802	¥3,638	¥3,819	¥14,260
At December 31, 2018	6,237	4,264	5,889	16,391
At December 31, 2019	6,149	4,957	7,533	18,641

Accumulated amortization and impairment losses	Thousands of U.S. dollars			
	Goodwill	Intangible assets		
		Software	Other	Total
At December 31, 2019	$56,578	$45,610	$69,313	$171,521

The carrying amounts of "Other" in each reporting period include customer-related assets of THK RHYTHM AUTOMOTIVE MICHIGAN CORPORATION in the amounts of ¥4,169 million ($38,360 thousand), ¥4,952 million, and ¥5,867 million, and customer-related assets of THK RHYTHM AUTOMOTIVE CZECH a.s. in the amounts of ¥7,502 million ($69,028 thousand), ¥8,347 million, and ¥9,583 million at December 31, 2019; December 31, 2018; and January 1, 2018, respectively. Their residual amortization period is 5 to 11 years.

Research and development activities recognized as expenses in the years ended December 31, 2019 and 2018, amounted to ¥5,739 million ($52,806 thousand) and ¥5,718 million, respectively. These are included in "Cost of sales" and "Selling, general, and administrative expenses" in the consolidated statement of profit or loss.

13. Impairment of Non-current Assets

Impairment Losses

The Group is grouping non-current assets based on the minimum unit of asset group distinguished to generate independent cash inflows in determining impairment losses. Impairment losses are recorded under "Other expenses" in the consolidated statement of profit or loss. The components of impairment losses by asset type are as follows:

Years ended December 31	Millions of yen		Thousands of U.S. dollars
	2019	2018	2019
Property, plant, and equipment:			
Machinery and vehicles	**¥631**	¥—	**$5,806**
Other	**2**	—	**18**
Intangible assets:			
Software	**44**	—	**404**
Total	**¥678**	¥—	**$6,238**

With respect to impairment losses recognized on property, plant, and equipment for the year ended December 31, 2019, the Group recorded impairment losses of ¥678 million ($6,238 thousand) since the profitability of business assets of THK RHYTHM AUTOMOTIVE CANADA LIMITED declined and the carrying amount of those assets was written down to the recoverable amount. The recoverable amount of the assets is measured at their fair values less costs of disposal based on the real estate appraisal value and other factors. The fair value hierarchy is Level 3.

Impairment of Goodwill

Goodwill arising from business combinations is allocated to cash-generating units that will benefit from the business combination at the date of acquisition.

The breakdown of the carrying amount of goodwill by segment is as follows:

	Millions of yen			Thousands of U.S. dollars
	December 31		Date of transition (January 1, 2018)	December 31
	2019	2018		2019
The Americas	**¥1,932**	¥1,953	¥2,012	**$17,776**
Europe	**4,698**	4,648	4,883	**43,227**
Total	**¥6,630**	¥6,602	¥6,895	**$61,004**

The Group tests goodwill for impairment every year or whenever there is any indication of impairment. The recoverable amount used in the impairment test is determined based on the value in use.

The value in use, reflecting past experiences and external information, is computed by discounting the estimated cash flows based on the next five-year business plan authorized by the management and the growth rate at the discount rates of 9.74%–9.77% (8.34%–9.12% and 7.34%–9.12% on December 31, 2018, and January 1, 2018, respectively) based on the weighted-average capital cost before tax of the applicable cash-generating unit or cash-generating unit group. The growth rate has been determined at 0% (0% on December 31, 2018, and January 1, 2018) considering the long-term average growth rate of the industry or the country to which the cash-generating unit or cash-generating unit group belongs and does not exceed the long-term average growth rate of the market.

If the future cash flows that are major assumptions used in the impairment test were reduced or the discount rates rose, respectively, additional impairment losses may be incurred.

14. Income Taxes

Deferred Tax Assets and Deferred Tax Liabilities

The breakdown of the deferred tax assets and liabilities by major cause and their changes are as follows:

	Millions of yen			
	January 1, 2019	Recognition through profit or loss	Recognition at other comprehensive income	December 31, 2019
Deferred tax assets:				
Net defined benefit liability	¥1,087	¥ 21	¥(222)	¥ 886
Inventories (unrealized profit)	1,203	(340)	—	862
Accrued bonuses to employees	966	(93)	—	873
Tax loss carryforwards	344	367	—	711
Loss on devaluation of inventories	234	(20)	—	213
Enterprise tax payable	668	(668)	—	—
Unrealized gain on intercompany sales of property, plant, and equipment	496	(28)	—	468
Accumulated depreciation	389	(60)	—	328
Accrued expenses	225	(37)	—	188
Allowance for doubtful accounts	20	(11)	—	9
Unused paid absences	415	(27)	—	387
Derivatives	—	35	—	35
Other	467	(72)	—	394
Total	¥6,519	¥(937)	¥(222)	¥5,359
Deferred tax liabilities:				
Depreciation	¥1,776	¥ 457	¥ —	¥2,234
Adjustment to book value of a subsidiary due to fair value measurement at the inception of consolidation	1,712	(189)	—	1,523
Financial assets measured at fair value through other comprehensive income	1,677	—	329	2,007
Unrealized gains on land revaluation	1,175	(3)	—	1,172
Special depreciation reserve for tax purpose	2	(2)	—	0
Derivatives	140	(140)	—	—
Other	419	62	—	482
Total	¥6,905	¥ 184	¥ 329	¥7,420

	Millions of yen			
	January 1, 2018	Recognition through profit or loss	Recognition at other comprehensive income	December 31, 2018
Deferred tax assets:				
Net defined benefit liability	¥ 968	¥ (19)	¥ 138	¥1,087
Inventories (unrealized profit)	852	351	—	1,203
Accrued bonuses to employees	775	190	—	966
Tax loss carryforwards	376	(32)	—	344
Loss on devaluation of inventories	267	(33)	—	234
Enterprise tax payable	111	557	—	668
Unrealized gain on intercompany sales of property, plant, and equipment	464	32	—	496
Accumulated depreciation	280	109	—	389
Accrued expenses	344	(118)	—	225
Impairment losses	29	(29)	—	—
Allowance for doubtful accounts	23	(2)	—	20
Unused paid absences	352	62	—	415
Other	673	(205)	—	467
Total	¥5,521	¥ 860	¥ 138	¥6,519
Deferred tax liabilities:				
Depreciation	¥1,318	¥ 458	¥ —	¥1,776
Adjustment to book value of a subsidiary due to fair value measurement at the inception of consolidation	1,989	(276)	—	1,712
Financial assets measured at fair value through other comprehensive income	2,399	—	(722)	1,677
Unrealized gains on land revaluation	1,179	(4)	—	1,175
Special depreciation reserve for tax purpose	6	(4)	—	2
Derivatives	268	(128)	—	140
Other	245	173	—	419
Total	¥7,408	¥ 219	¥(722)	¥6,905

	Thousands of U.S. dollars			
	January 1, 2019	Recognition through profit or loss	Recognition at other comprehensive income	December 31, 2019
Deferred tax assets:				
Net defined benefit liability	$10,001	$ 193	$(2,042)	$ 8,152
Inventories (unrealized profit)	11,069	(3,128)	—	7,931
Accrued bonuses to employees	8,888	(855)	—	8,032
Tax loss carryforwards	3,165	3,376	—	6,542
Loss on devaluation of inventories	2,153	(184)	—	1,959
Enterprise tax payable	6,146	(6,146)	—	—
Unrealized gain on intercompany sales of property, plant, and equipment	4,563	(257)	—	4,306
Accumulated depreciation	3,579	(552)	—	3,018
Accrued expenses	2,070	(340)	—	1,729
Allowance for doubtful accounts	184	(101)	—	82
Unused paid absences	3,818	(248)	—	3,560
Derivatives	—	322	—	322
Other	4,297	(662)	—	3,625
Total	$59,983	$(8,621)	$(2,042)	$49,309
Deferred tax liabilities:				
Depreciation	$16,341	$ 4,205	$ —	$20,555
Adjustment to book value of a subsidiary due to fair value measurement at the inception of consolidation	15,752	(1,739)	—	14,013
Financial assets measured at fair value through other comprehensive income	15,430	—	3,027	18,467
Unrealized gains on land revaluation	10,811	(27)	—	10,783
Special depreciation reserve for tax purpose	18	(18)	—	0
Derivatives	1,288	(1,288)	—	—
Other	3,855	570	—	4,435
Total	$63,535	$ 1,693	$ 3,027	$68,273

Tax loss carryforwards for which deferred tax assets are not recognized and future deductible temporary differences are as follows:

	Millions of yen			Thousands of U.S. dollars
	December 31		Date of transition (January 1, 2018)	December 31
	2019	2018		2019
Tax loss carryforwards	¥11,132	¥ 8,647	¥ 9,566	$102,249
Deductible temporary differences	9,427	9,478	8,403	86,740
Total	¥20,559	¥18,126	¥17,970	$189,170

Tax loss carryforwards for which deferred tax assets are not recognized will expire as follows:

	Millions of yen			Thousands of U.S. dollars
	December 31		Date of transition (January 1, 2018)	December 31
	2019	2018		2019
Within 1 year	¥ —	¥ —	¥ —	$ —
After 1 to 2 years	—	—	—	—
After 2 to 3 years	61	—	564	561
After 3 to 4 years	388	59	1,129	3,570
After 5 years	10,682	8,588	7,872	98,288
Total	¥11,132	¥8,647	¥9,566	$102,429

The aggregate amounts of future taxable temporary differences relating to investments in subsidiaries for which deferred tax liabilities are not recognized are ¥2,480 million ($22,819 thousand), ¥2,360 million, and ¥1,878 million at December 31, 2019 and 2018, and January 1, 2018, respectively.

The deferred tax liabilities are not recognized, since it is possible for the Group to control the timing of realization of temporary differences and it is likely that temporary differences may not be realized within foreseeable periods.

Income Tax Expenses

The components of income tax expenses are as follows:

Years ended December 31	Millions of yen		Thousands of U.S. dollars
	2019	2018	2019
Current income taxes	¥5,176	¥16,097	$47,626
Deferred income taxes	1,125	(551)	10,351
Total	¥6,301	¥15,545	$57,977

The causes of the differences between the statutory tax rate and the average effective tax rate are as follows:

Years ended December 31	2019	2018
Statutory tax rate	30.6%	30.9%
Non-deductible items such as entertainment expenses	1.1	0.5
Non-taxable items such as dividends received	(9.9)	(2.5)
Equity in earnings of an affiliate accounted for using the equity method	(0.2)	(0.4)
Inhabitant per capita tax	0.4	0.2
Statutory tax rate difference between parent and subsidiaries	(2.7)	(1.6)
Difference from effective tax rate applied	(1.7)	(0.3)
Special tax credit for research and development	(2.4)	(0.9)
Valuation allowance	8.9	0.7
Investments in consolidated subsidiaries	10.1	2.3
Other	0.5	0.7
Average effective tax rate	34.7	29.6

The Group is subject to mainly corporate income tax, inhabitant taxes, and enterprise tax, and the statutory tax rate computed based on these taxes is 30.6% and 30.9% for the years ended December 31, 2019 and 2018, respectively. Foreign subsidiaries are subject to income taxes applicable in each jurisdiction.

15. Bonds and Borrowings

Components of Financial Liabilities

The components of "Bonds and borrowings" and "Other financial liabilities" are as follows:

	Millions of yen			Thousands of U.S. dollars	Average interest rate (%)	Due
	December 31		Date of transition (January 1, 2018)	December 31		
	2019	2018		2019		
Short-term borrowings	¥ 54	¥ 14	¥ 98	$ 496	0.000	
Current portion of long-term borrowings	2,173	12,194	2,261	19,994	(0.177)	
Current portion of bonds	20,000	—	20,000	184,026	0.478	
Long-term borrowings	33,041	15,360	28,088	304,020	0.225	2012–2029
Bonds	40,000	40,000	20,000	368,052	0.217	2023–2026
Short-term lease liabilities	1,621	1,837	1,806	14,915	—	
Long-term lease liabilities	9,756	10,317	9,909	89,768	—	2021–2036
Other	2,096	2,020	2,797	19,285	—	
Total	¥108,743	¥81,744	¥84,960	$1,000,579	—	
Current liabilities	¥ 24,645	¥15,171	¥26,053	$ 226,766	—	
Non-current liabilities	84,097	66,573	58,906	773,803	—	
Total	¥108,743	¥81,744	¥84,960	$1,000,579	—	

(Note) The average interest rate is stated at the weighted-average interest rate applicable to the year-end closing balance.

Summary of the issuance conditions of bonds issued by the Company is as follows:

Issue	Date of issuance	Millions of yen		Date of transition (January 1, 2018)	Thousands of U.S. dollars	Interest rate (%)	Due
		December 31			December 31		
		2019	2018		2019		
7th unsecured bonds	Oct. 27, 2011	¥ —	¥ —	¥ 10,000 (10,000)	$ —	0.850	Oct. 26, 2018
8th unsecured bonds	Apr. 25, 2013	—	—	10,000 (10,000)	—	0.430	Apr. 25, 2018
9th unsecured bonds	Apr. 25, 2013	10,000 (10,000)	10,000	10,000	92,013 (92,013)	0.660	Apr. 24, 2020
10th unsecured bonds	Oct. 23, 2015	10,000 (10,000)	10,000	10,000	92,013 (92,013)	0.296	Oct. 23, 2020
11th unsecured bonds	Feb. 7, 2018	10,000	10,000	—	92,013	0.140	Feb. 7, 2023
12th unsecured bonds	Feb. 7, 2018	10,000	10,000	—	92,013	0.270	Feb. 7, 2025
13th unsecured bonds	Feb. 6, 2019	10,000	—	—	92,013	0.170	Feb. 6, 2024
14th unsecured bonds	Feb. 6, 2019	10,000	—	—	92,013	0.290	Feb. 6, 2026
		¥ 60,000 (20,000)	¥40,000	¥ 40,000 (20,000)	$ 552,079 (184,026)	—	

(Note) The amounts in the parentheses represent the redeemable amounts within one year.

16. Leases

The Group mainly leases buildings and vehicles under the contractual terms from 5 years through 15 years. There are no significant purchase options, escalation clauses, and restrictions imposed by lease agreements (restrictions on dividends, additional borrowings, and additional leases).

The components of profit or loss on leases are as follows:

Years ended December 31	Millions of yen		Thousands of U.S. dollars
	2019	2018	2019
Depreciation of the right-of-use assets:			
Land	¥ 32	¥ 34	$ 294
Buildings and structures	1,192	1,011	10,967
Machinery and vehicles	316	259	2,907
Other	117	90	1,076
Total	¥1,658	¥1,396	$15,255
Interest expenses on lease liabilities	¥ 133	¥ 77	$ 1,223
Short-term lease expenses	1,338	1,008	12,311
Low-value asset lease expenses	65	255	598
Variable lease charges (Note)	1	29	9

(Note) Variable lease charges not included in measurement of lease liabilities

The components of carrying amounts of the right-of-use assets are as follows:

	Millions of yen			Thousands of U.S. dollars
	December 31		Date of transition (January 1, 2018)	December 31
	2019	2018		2019
Right-of-use assets:				
Land	¥ 1,718	¥ 1,035	¥ 1,181	$ 15,807
Buildings and structures	10,024	10,906	10,568	92,234
Machinery and vehicles	764	767	804	7,029
Other	461	432	319	4,241
Total	¥12,968	¥13,141	¥12,874	$119,322

The right-of-use assets increased by ¥786 million ($7,232 thousand) and ¥2,137 million in the years ended December 31, 2019 and 2018, respectively.

Total amounts of cash flows related to leases for the years ended December 31, 2019 and 2018, are ¥1,612 million ($14,832 thousand) and ¥1,548 million, respectively.

Maturity analysis of lease liabilities is presented in Note 32, "Financial Instruments — Liquidity Risk Management."

17. Trade and Other Payables

The components of "Trade and other payables" are as follows:

	Millions of yen			Thousands of U.S. dollars
	December 31		Date of transition (January 1, 2018)	December 31
	2019	2018		2019
Notes and accounts payable	¥17,842	¥22,084	¥22,330	$164,170
Electronically recorded payables	16,181	26,938	23,923	148,886
Other	8,801	10,554	8,661	80,980
Total	¥42,825	¥59,578	¥54,915	$394,046

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

18. Employee Benefits

The Company and certain consolidated subsidiaries adopt contributory and non-contributory defined benefit plans and defined contribution plans to provide for retirement benefits of employees.

These pension plans are exposed to general investment risk, interest rate risk, inflation risk, etc., but the management considers that they are not immaterial.

Contributory defined benefit plans are managed by the pension funds legally separated from the Group. The Board of pension funds and pension management trustees are required by laws and regulations to act with the objective of maximizing the benefits for the plan participants and responsible for managing the plan assets in accordance with the predetermined policies.

Defined Benefit Plans

(1) Reconciliation of defined benefit plan obligations and plan assets

Reconciliation between defined benefit plan obligations and plan assets and net defined benefit liability and asset recorded in the consolidated statement of financial position is as follows:

	Millions of yen			Thousands of U.S. dollars
	December 31		Date of transition (January 1, 2018)	December 31
	2019	2018		2019
Present value of contributory defined benefit plan obligations	¥ 26,275	¥ 24,406	¥ 25,414	$ 241,764
Fair value of plan assets	(23,259)	(20,390)	(21,530)	(214,013)
Subtotal	3,016	4,016	3,883	27,751
Present value of non-contributory defined benefit plan obligations	2,553	2,323	1,210	23,490
Net defined benefit liability and asset	5,569	6,339	5,093	51,242
Amounts recorded in the consolidated statement of financial position				
Net defined benefit liability	7,438	7,908	7,389	68,439
Net defined benefit asset	(1,869)	(1,569)	(2,295)	(17,197)
Net defined benefit liability and asset recorded in the consolidated statement of financial position	¥ 5,569	¥ 6,339	¥ 5,093	$ 51,242

(2) Reconciliation of present value of defined benefit plan obligations

Changes in the present value of the defined benefit plan obligations are as follows:

Years ended December 31	Millions of yen		Thousands of U.S. dollars
	2019	2018	2019
Beginning balance of fair value of defined benefit plan obligations	¥26,729	¥26,624	$245,942
Current service cost	1,307	1,213	12,026
Interest cost	372	358	3,422
Remeasurements			
Actuarial difference arising from changes in financial assumptions	865	(427)	7,959
Past service cost	—	315	—
Retirement benefits paid	(754)	(591)	(6,937)
Exchange differences of translating foreign operations	309	(763)	2,843
Ending balance of fair value of defined benefit plan obligations	¥28,828	¥26,729	$265,255

The weighted-average duration of the defined benefit plan obligations is 13.2 years, 13.5 years, and 13.9 years at December 31, 2019; December 31, 2018; and January 1, 2018, respectively.

(3) Reconciliation of fair value of plan assets

Changes in the fair value of plan assets are as follows:

Years ended December 31	Millions of yen		Thousands of U.S. dollars
	2019	2018	2019
Beginning balance of fair value of plan assets	¥20,390	¥21,530	$187,615
Interest income	391	413	3,597
Remeasurements			
Income from plan assets	1,597	(1,213)	14,694
Contribution from employers	1,071	857	9,854
Retirement benefits paid	(540)	(434)	(4,968)
Exchange differences on translating foreign operations	349	(763)	3,211
Ending balance of fair value of plan assets	¥23,259	¥20,390	$214,013

The Group plans to contribute premiums of ¥1,127 million ($10,369 thousand) in the year ending December 31, 2020.

(4) The components of plan assets
Major components of plan assets are as follows:

	Millions of yen								
	December 31						Date of transition (January 1, 2018)		
	2019			2018					
	Assets with positive market prices	Assets without positive market prices	Total	Assets with positive market prices	Assets without positive market prices	Total	Assets with positive market prices	Assets without positive market prices	Total
Cash and cash equivalents	¥ 49	¥ —	¥ 49	¥ 41	¥ —	¥ 41	¥ 38	¥ —	¥ 38
Equity financial instruments:									
Domestic equity securities	1,730	—	1,730	1,424	—	1,424	2,930	—	2,930
Foreign equity securities	6,521	—	6,521	5,319	—	5,319	6,624	—	6,624
Debt financial instruments:									
Domestic bonds	3,093	—	3,093	2,973	—	2,973	2,499	—	2,499
Foreign bonds	5,911	—	5,911	5,003	—	5,003	5,184	—	5,184
Life insurance general account	—	4,446	4,446	—	4,246	4,246	—	3,994	3,994
Other	—	1,505	1,505	—	1,381	1,381	—	258	258
Total	¥17,307	¥5,951	¥23,259	¥14,762	¥5,627	¥20,390	¥17,278	¥4,252	¥21,530

	Thousands of U.S. dollars		
	December 31		
	2019		
	Assets with positive market prices	Assets without positive market prices	Total
Cash and cash equivalents	$ 450	$ —	$ 450
Equity financial instruments:			
Domestic equity securities	15,918	—	15,918
Foreign equity securities	60,001	—	60,001
Debt financial instruments:			
Domestic bonds	28,459	—	28,459
Foreign bonds	54,389	—	54,389
Life insurance general account	—	40,909	40,909
Other	—	13,847	13,847
Total	$159,247	$54,757	$214,013

The Group's investment policy of plan assets aims to secure constant profits for the medium- to long-term to ensure the payments of defined benefit plan obligations for the future in accordance with the internal rule. Specifically, investment is managed by setting target profitability and asset portfolio ratio by investment asset within the acceptable risk determined every year and maintaining the asset portfolio ratio. In reviewing the asset portfolio ratio, the management timely considers the introduction of plan assets that are highly linked with the changes in defined benefit plan obligations.

In addition, in compliance with the corporate defined benefit pension law, the Group reviews the amount of contribution by recalculating the premium every fifth year so that the fiscal balance could be maintained in the future.

(5) Major actuarial assumptions
Major actuarial assumptions used are as follows:

	%		
	December 31		Date of transition (January 1, 2018)
	2019	2018	
Discount rate	0.5	0.5	0.5

(6) Sensitivity Analysis
The impact on the present value of the defined benefit plan obligations when the discount rate used in actuarial calculation changed by 0.5% is as follows: This analysis assumes that all other parameters are constant, but practically the changes in other parameters may impact the sensitivity analysis.

Years ended December 31	Millions of yen		Thousands of U.S. dollars
	2019	2018	2019
In case that the discount rate increased by 0.5%	¥(2,048)	¥(1,953)	$(18,844)
In case that the discount rate decreased by 0.5%	2,412	2,233	22,193

Defined Contribution Plans
The amount recognized as an expense related to defined contribution plans is ¥529 million ($4,867 thousand) and ¥570 million for the years ended December 31, 2019 and 2018, respectively.

19. Provisions

The components and changes of provisions are as follows:

	Millions of yen		
	Asset retirement obligations	Other provisions	Total
At December 31, 2018	¥64	¥ 243	¥ 307
Increase during the year	—	52	52
Interest expenses on discounting	0	—	0
Decrease (purpose use) during the period	—	(38)	(38)
Decrease (reversal) during the period	—	(145)	(145)
At December 31, 2019	¥64	¥ 111	¥ 176

	Thousands of U.S. dollars		
	Asset retirement obligations	Other provisions	Total
At December 31, 2018	$588	$ 2,235	$ 2,824
Increase during the period	—	478	478
Interest expenses on discounting	0	—	0
Decrease (purpose use) during the period	—	(349)	(349)
Decrease (reversal) during the period	—	(1,334)	(1,334)
At December 31, 2019	$588	$ 1,021	$ 1,619

The components of provisions in the consolidated statement of financial position are as follows:

	Millions of yen			Thousands of U.S. dollars
	December 31		Date of transition (January 1, 2018)	December 31
	2019	2018		2019
Non-current liabilities	¥176	¥307	¥291	$1,619
Total	¥176	¥307	¥291	$1,619

The asset retirement obligation is stated at the amount expected to be paid in the future based on the past restoration experience to provide for the restoration obligations related to the rental buildings and others that are used by the Group. These costs are estimated to be paid after the estimated period to be used, which were determined considering the useful life of improvements added to the rented buildings, etc., but it will be subject to the future business plan and others.

20. Other Liabilities

The components of other liabilities are as follows:

	Millions of yen			Thousands of U.S. dollars
	December 31		Date of transition (January 1, 2018)	December 31
	2019	2018		2019
Other current liabilities:				
Consumption taxes payable	**¥ 253**	¥ 522	¥ 446	**$ 2,327**
Accrued bonuses	**3,306**	3,899	2,971	**30,419**
Other accrued expenses	**6,659**	8,149	8,651	**61,271**
Other	**264**	399	238	**2,429**
Total	**¥10,483**	¥12,970	¥12,307	**$96,457**
Other non-current liabilities:				
Unused paid absences	**¥ 1,442**	¥ 1,330	¥ 1,147	**$13,268**
Other	**525**	481	507	**4,830**
Total	**¥ 1,968**	¥ 1,811	¥ 1,654	**$18,108**

21. Deferred Revenue

The components of deferred revenue are as follows:

	Millions of yen			Thousands of U.S. dollars
	December 31		Date of transition (January 1, 2018)	December 31
	2019	2018		2019
Current liabilities:				
Government subsidies	**¥ 1**	¥ —	¥ —	**$ 9**
Other	**0**	—	—	**0**
Total	**¥ 1**	¥ —	¥ —	**$ 9**
Non-current liabilities:				
Government subsidies	**¥277**	¥248	¥273	**$2,548**
Other	**5**	11	23	**46**
Total	**¥282**	¥259	¥297	**$2,594**

Deferred revenue related to government subsidies represents the money received on mainly the purchase of property, plant, and equipment.

There is no executory condition incidental to government subsidies recognized as deferred revenue, nor other contingent event.

22. Equity and Other Equity Items

Authorized Number of Shares and Outstanding Number of Shares Issued

Changes in authorized number of shares and outstanding number of shares issued are as follows:

Years ended December 31	Shares	
	2019	2018
Authorized number of shares:		
Common stock	**465,877,700**	465,877,700
Outstanding number of shares issued:		
Beginning balance	**133,856,903**	133,856,903
Increase (decrease)	**—**	—
Ending balance	**133,856,903**	133,856,903

Treasury Stock

Number of treasury stock and changes in the balance are as follows:

	Number of shares	Millions of yen	Thousands of U.S. dollars
		Amount	Amount
January 1, 2018	7,287,650	¥13,998	
Increase (decrease) during the period	1,196	4	
December 31, 2018	7,288,846	14,002	$128,836
Increase (decrease) during the period	615	1	9
December 31, 2019	7,289,461	¥14,004	$128,855

(Notes) 1. Main reasons for increase (decrease) during the period are due to the purchase or selling requisition of shares of less than one unit.
2. The number of shares issued by the Company and held by an affiliate is 10,000 shares at December 31, 2019 and 2018, and January 1, 2018.

Capital Surplus

In the Companies Act of Japan ("Companies Act"), it is stipulated that one half or more of the amounts pertaining to payment or benefits for the issuance of shares shall be included in common stock, and the remainder shall be included in capital reserve under capital surplus. Capital reserve can be transferred to common stock with a resolution of the shareholders' meeting.

Retained Earnings

The Companies Act requires that an amount equal to 10% of the dividends from surplus be appropriated as capital reserve included in capital surplus or legal reserve included in retained earnings until the aggregated amount of capital reserve and the legal reserve equals 25% of common stock. Legal reserve may be appropriated to cover deficit or reversed with a resolution of the shareholders' meeting.

23. Dividends

Dividends paid for the years ended December 31, 2019 and 2018, are as follows:

2019					
Resolution		Amount of dividends (Millions of yen)	Dividend per share (Yen)	Record date	Effective date
March 16, 2019	Shareholders' meeting	¥4,809	¥38	December 31, 2018	March 18, 2019
August 7, 2019	Board of Directors' meeting	3,037	24	June 30, 2019	September 9, 2019

2018					
Resolution		Amount of dividends (Millions of yen)	Dividend per share (Yen)	Record date	Effective date
March 17, 2018	Shareholders' meeting	¥3,290	¥26	December 31, 2017	March 19, 2018
August 9, 2018	Board of Directors' meeting	5,948	47	June 30, 2018	September 10, 2018

2019					
Resolution		Amount of dividends (Thousands of U.S. dollars)	Dividend per share (U.S. dollars)	Record date	Effective date
March 16, 2019	Shareholders' meeting	$44,249	$349	December 31, 2018	March 18, 2019
August 7, 2019	Board of Directors' meeting	27,944	220	June 30, 2019	September 9, 2019

Dividends with an effective date in the following year are as follows:

2019					
Resolution		Amount of dividends (Millions of yen)	Dividend per share (Yen)	Record date	Effective date
March 20, 2020	Shareholders' meeting	¥1,012	¥8	December 31, 2019	March 23, 2020

2018					
Resolution		Amount of dividends (Millions of yen)	Dividend per share (Yen)	Record date	Effective date
March 16, 2019	Shareholders' meeting	¥4,809	¥38	December 31, 2018	March 18, 2019

2019					
Resolution		Amount of dividends (Thousands of U.S. dollars)	Dividend per share (U.S. dollars)	Record date	Effective date
March 20, 2020	Shareholders' meeting	$9,311	$73	December 31, 2019	March 23, 2020

24. Revenue

Components of Revenue

The components of major products and services and their reportable segments are as follows:

	Millions of yen					
	Reportable segment					
Year ended December 31, 2019	Japan	The Americas	Europe	China	Other	Total
Product and service						
Industrial machinery	¥106,792	¥18,445	¥21,708	¥23,670	¥ 8,499	¥179,116
Transportation equipment	10,947	40,035	33,434	6,299	4,766	95,483
Total	¥117,740	¥58,480	¥55,143	¥29,969	¥13,265	¥274,599
Timing of recognition of sales						
Date of transfer	¥117,740	¥58,480	¥55,143	¥29,969	¥13,265	¥274,599
Total	¥117,740	¥58,480	¥55,143	¥29,969	¥13,265	¥274,599

	Millions of yen					
	Reportable segment					
Year ended December 31, 2018	Japan	The Americas	Europe	China	Other	Total
Product and service						
Industrial machinery	¥145,138	¥22,057	¥23,113	¥38,188	¥11,339	¥239,836
Transportation equipment	12,711	42,469	36,369	8,035	5,296	104,882
Total	¥157,849	¥64,526	¥59,482	¥46,223	¥16,636	¥344,718
Timing of recognition of sales						
Date of transfer	¥157,849	¥64,526	¥59,482	¥46,223	¥16,636	¥344,718
Total	¥157,849	¥64,526	¥59,482	¥46,223	¥16,636	¥344,718

	Thousands of U.S. dollars					
	Reportable segment					
Year ended December 31, 2019	Japan	The Americas	Europe	China	Other	Total
Product and service						
Industrial machinery	$ 982,627	$169,718	$199,742	$217,795	$ 78,202	$1,648,104
Transportation equipment	100,726	368,375	307,637	57,959	43,853	878,570
Total	$1,083,364	$538,093	$507,388	$275,754	$122,055	$2,526,674
Timing of recognition of sales						
Date of transfer	$1,083,364	$538,093	$507,388	$275,754	$122,055	$2,526,674
Total	$1,083,364	$538,093	$507,388	$275,754	$122,055	$2,526,674

Major products and services of the Group are industrial machinery and transportation equipment. The revenue is recognized when the control over the products has been transferred to the customer based on the contract with the customer. Revenue is measured at the amount of the consideration promised in the contract with the customer, less the amount of discount and rebates, and sales return is reduced from the revenue.

Outstanding contracts

Receivables, contract assets, and contract liabilities arising from contracts with customers are as follows:

	Millions of yen			Thousands of U.S. dollars
	December 31		Date of transition (January 1, 2018)	December 31
	2019	2018		2019
Contract liabilities:	¥263	¥282	¥427	$2,419

Revenue recognized in the years ended December 31, 2019 and 2018, which was included in contract liabilities at the beginning of the year, amounted to ¥282 million ($2,594 thousand) and ¥427 million, respectively.

25. Selling, General, and Administrative Expenses

The components of selling, general, and administrative expenses are as follows:

Years ended December 31	Millions of yen		Thousands of U.S. dollars
	2019	2018	2019
Packing and transportation expense	¥ 4,732	¥ 5,044	$ 43,540
Promotion and advertising expense	1,461	1,387	13,443
Personnel expense	22,319	22,936	205,364
Depreciation and amortization	4,152	4,040	38,203
Research and development expense	5,182	5,149	47,681
Other	11,588	12,953	106,624
Total	¥49,437	¥51,511	$454,885

26. Personnel Expense

The components of personnel expense are as follows:

Years ended December 31	Millions of yen		Thousands of U.S. dollars
	2019	2018	2019
Salary and allowances	¥46,781	¥48,767	$430,447
Bonuses	3,548	5,198	32,646
Retirement benefits	1,769	1,743	16,277
Other	16,556	17,424	152,337
Total	¥68,656	¥73,134	$631,726

(Note) Personnel expense is included in "Cost of sales" and "Selling, general, and administrative expenses" in the consolidated statement of profit or loss.

27. Other Income and Expenses

Other Income

Years ended December 31	Millions of yen		Thousands of U.S. dollars
	2019	2018	2019
Gain on sales of property, plant, and equipment	¥ 34	¥ 88	$ 312
Rental income	374	390	3,441
Other	1,775	2,126	16,332
Total	¥2,184	¥2,605	$20,095

Other Expenses

Years ended December 31	Millions of yen		Thousands of U.S. dollars
	2019	2018	2019
Loss on sales of property, plant, and equipment	¥ 289	¥285	$ 2,659
Impairment losses	678	—	6,238
Other	1,074	560	9,882
Total	¥2,042	¥845	$18,789

28. Financial Income and Financial Costs

Financial Income

Years ended December 31	Millions of yen		Thousands of U.S. dollars
	2019	2018	2019
Interest income			
Financial assets measured at amortized cost	¥ 907	¥772	$8,345
Dividends income			
Financial assets measured at fair value through other comprehensive income	102	102	938
Total	¥1,010	¥875	$9,293

Financial Costs

Years ended December 31	Millions of yen		Thousands of U.S. dollars
	2019	2018	2019
Interest expense			
Financial liabilities measured at amortized cost	¥ 274	¥ 283	$ 2,521
Lease liabilities	133	77	1,223
Foreign exchange loss	28	569	257
Other	683	531	6,284
Total	¥1,119	¥1,461	$10,296

29. Other Comprehensive Income

The amount recognized during the year on each item of other comprehensive income (loss), reclassification adjustments to profit or loss, and tax effects are as follows:

Years ended December 31	Millions of yen		Thousands of U.S. dollars
	2019	2018	2019
Financial assets measured at fair value through other comprehensive income			
Amount recognized during the period	¥ 1,103	¥ (2,456)	$ 10,149
Tax effect	(324)	722	(2,981)
Financial assets measured at fair value through other comprehensive income	778	(1,734)	7,158
Remeasurements of defined benefit plans			
Amount recognized during the period	881	(593)	8,106
Tax effect	(222)	138	(2,042)
Remeasurements of defined benefit plans	658	(455)	6,054
Exchange differences on translating foreign operations			
Amount recognized during the period	(2,789)	(11,257)	(25,662)
Reclassification adjustments	—	—	
Before tax effects	(2,789)	(11,257)	(25,662)
Tax effect	—	—	
Exchange differences on translating foreign operations	(2,789)	(11,527)	(25,662)
Share of other comprehensive income of investments accounted for using the equity method			
Amount recognized during the period	(397)	284	(3,652)
Reclassification adjustments	—	—	—
Share of other comprehensive income of investments accounted for using the equity method	(397)	284	(3,652)
Total other comprehensive income	¥(1,749)	¥(13,164)	$(16,093)

30. Earnings per Share

Basic earnings per share are computed as follows: There is no potential common stock which has a dilutive effect.

Years ended December 31	2019	2018	2019
Profit for the year attributable to owners of the parent	¥11,690 million	¥36,100 million	$107,563 thousand
Weighted-average number of outstanding shares issued	126,567 thousand	126,568 thousand	—
Basic earnings per share (Yen, U.S. dollar)	¥92.37	¥285.23	$0.84

31. Cash Flow Information

Changes of Liabilities Arising from Financing Activities

Changes of liabilities arising from financing activities are as follows:

	Millions of yen Year ended December 31, 2019					
	January 1, 2019	Changes involving cash flows	Changes not involving cash flows: Exchange rate	New leases	Other	December 31, 2019
Short-term borrowings	¥ 14	¥ 40	¥ —	¥ —	¥ —	¥ 54
Long-term borrowings	27,555	7,814	(154)	—	—	35,215
Bonds	40,000	20,000	—	—	—	60,000
Lease liabilities	12,154	(1,498)	(34)	898	(143)	11,377
Derivatives	(455)	—	—	—	569	114
Total	¥79,268	¥26,357	¥(189)	¥898	¥ 426	¥106,761

	Millions of yen Year ended December 31, 2018					
	January 1, 2018	Changes involving cash flows	Changes not involving cash flows: Exchange rate	New leases	Other	December 31, 2018
Short-term borrowings	¥ 98	¥ 84	¥ —	¥ —	¥ —	¥ 14
Long-term borrowings	30,349	(2,185)	(608)	—	—	27,555
Bonds	40,000	—	—	—	—	40,000
Lease liabilities	11,715	(1,444)	(115)	2,199	(199)	12,154
Derivatives	(871)	—	—	—	416	(455)
Total	¥81,291	¥ (3,713)	¥(724)	¥2,199	¥ 216	¥79,268

	Thousands of U.S. dollars Year ended December 31, 2019					
	January 1, 2019	Changes involving cash flows	Changes not involving cash flows: Exchange rate	New leases	Other	December 31, 2019
Short-term borrowings	$ 128	$ 368	$ —	$ —	$ —	$ 496
Long-term borrowings	253,542	71,899	(1,417)	—	—	324,024
Bonds	368,052	184,026	—	—	—	552,079
Lease liabilities	111,832	(13,783)	(312)	8,262	(1,315)	104,683
Derivatives	(4,186)	—	—	—	5,235	1,048
Total	$729,370	$242,519	$(1,739)	$8,262	$ 3,919	$982,342

Derivatives are held for the purpose of hedging foreign currency-denominated trade receivables and payables and long-term borrowings.

32. Financial Instruments

Capital Management

The Group implements capital management aiming to maximize corporate value through sustainable growth.

The Group is using ROE, EPS, etc. as major indicators for capital management.

These indicators are periodically reported to the management and monitored.

The Group is not subject to significant capital restrictions.

Financial Risk Management

In the course of its management activities, the Group is exposed to financial risk including credit risk, liquidity risk, foreign exchange risk, interest rate risk, and market price fluctuation risk, and conducts risk management based on definite policies to reduce the applicable financial risk. In addition, the Group is using derivatives to avoid foreign exchange risk or interest rate risk and does not hold or issue derivatives for speculative purposes.

(1) Credit risk management

The Group implements credit control on trade receivables and secures receivables from customers in accordance with the customer credit management rule. In addition, the applicable divisions are periodically monitoring the customers' financial position for major customers and timely identify doubtful receivables arising from deterioration of financial position to reduce the risk.

The Group is engaged in derivative contracts only with financial institutions with a high credit rating and when the management believes the associated credit risk is minimized.

The carrying amounts of financial assets presented in the consolidated financial statements represent the maximum value of exposure to credit risk of the Group's financial assets.

The Group determines allowance for doubtful accounts by classifying the applicable receivables into trade receivables and other receivables. Any receivables, if all or a part of receivables are not collected, or considered to be extremely difficult to collect, are regarded as defaults.

When the delayed payment is not caused by a temporary need for funds, but caused from significant financial difficulties of the debtors and collectibility of receivables is judged to be particularly doubtful, the management makes judgement that the credit impairment is incurred.

The Group is always setting allowance for doubtful accounts at the amount corresponding to projected credit losses throughout the period on the trade receivables which do not include significant financial elements.

Changes in allowance for doubtful accounts are as follows:

Years ended December 31	Millions of yen		Thousands of U.S. dollars
	2019	2018	2019
Beginning balance	¥218	¥ 293	$2,005
Increase during the period	36	63	331
Decrease during the period (purpose use)	(44)	(8)	(404)
Decrease during the period (reversal)	(59)	(117)	(542)
Other changes	(9)	(12)	(82)
Ending balance	¥141	¥ 218	$1,297

There are no financial assets written down in the year ended December 31, 2019, for which collection activities are continued.

Credit risk exposures on trade receivables are as follows:

Lapsed days overdue	Millions of yen			Thousands of U.S. dollars
	December 31		Date of transition (January 1, 2018)	December 31
	2019	2018		2019
No delayed	¥60,935	¥88,898	¥83,191	$560,682
Within 30 days	2,089	2,812	2,818	19,221
After 30 days within 60 days	253	398	522	2,327
After 60 days within 90 days	241	313	188	2,217
After 90 days	294	273	338	2,705
Total	¥63,814	¥92,695	¥87,058	$587,173

With respect to receivables other than trade receivables, there are no receivables of which credit risk is remarkably increased, and there is no material credit risk on their carrying amount.

(2) Liquidity risk management

Liquidity risk is a risk that the Group may not be able to execute payment on the payment due date in performing its repayment obligations of financial liabilities that have become due.

The Group is managing liquidity risk by preparing and updating the cash-flow plan on a timely basis.

Financial liabilities (including derivative financial instruments) by due dates are as follows:

At December 31, 2019	Millions of yen				
	Carrying amount	Contractual cash flows	Within 1 year	After 1 year within 5 years	After 5 years
Non-derivative financial liabilities:					
Short-term borrowings	¥ 54	¥ 54	¥ 54	¥ —	¥ —
Trade and other payables	42,825	42,825	42,825	—	—
Long-term borrowings	35,215	36,147	2,271	9,085	24,790
Bonds	60,000	60,601	20,182	20,334	20,085
Lease liabilities	11,377	11,962	1,553	4,691	5,717
Derivative financial liabilities:					
Interest rate and currency swaps	128	128	18	73	36
Interest rate swaps	316	316	—	—	316
Total	¥149,917	¥152,036	¥66,905	¥34,184	¥50,946

At December 31, 2018	Millions of yen				
	Carrying amount	Contractual cash flows	Within 1 year	After 1 year within 5 years	After 5 years
Non-derivative financial liabilities:					
Short-term borrowings	¥ 14	¥ 14	¥ 14	¥ —	¥ —
Trade and other payables	59,578	59,578	59,578	—	—
Long-term borrowings	27,555	27,607	12,246	8,777	6,583
Bonds	40,000	40,450	136	30,259	10,054
Lease liabilities	12,154	12,813	1,310	5,030	6,472
Derivative financial liabilities:					
Interest rate and currency swaps	27	27	3	13	10
Interest rate swaps	16	16	16	—	—
Total	¥139,346	¥140,506	¥73,305	¥44,080	¥23,120

At January 1, 2018 (Date of transition)	Millions of yen				
	Carrying amount	Contractual cash flows	Within 1 year	After 1 year within 5 years	After 5 years
Non-derivative financial liabilities:					
Short-term borrowings	¥ 98	¥ 98	¥ 98	¥ —	¥ —
Trade and other payables	54,915	54,915	54,915	—	—
Long-term borrowings	30,349	30,452	2,312	19,095	9,044
Bonds	40,000	40,414	20,223	20,191	—
Lease liabilities	11,715	12,261	1,821	4,139	6,299
Derivative financial liabilities:					
Interest rate swaps	48	48	—	48	—
Total	¥137,126	¥138,191	¥79,372	¥43,474	¥15,343

At December 31, 2019	Thousands of U.S. dollars				
	Carrying amount	Contractual cash flows	Within 1 year	After 1 year within 5 years	After 5 years
Non-derivative financial liabilities:					
Short-term borrowings	$ 496	$ 496	$ 496	$ —	$ —
Trade and other payables	394,046	394,046	394,046	—	—
Long-term borrowings	324,024	332,600	20,896	83,594	228,100
Bonds	552,079	557,609	185,701	187,099	184,808
Lease liabilities	104,683	110,066	14,289	43,163	52,603
Derivative financial liabilities:					
Interest rate and currency swaps	1,177	1,177	165	671	331
Interest rate swaps	2,907	2,907	—	—	2,907
Total	$1,379,435	$1,398,932	$615,614	$314,538	$468,770

(Note) Net receivables and payables arising from derivatives are presented in a net amount.

(3) Foreign currency exchange risk

The Group is engaged in foreign currency-denominated transactions since it is developing global businesses, and its profit or loss and cash-flows are exposed to a risk associated with foreign currency exchange rate changes.

In order to avoid such risk, forward foreign exchange contracts are utilized as hedging derivatives for foreign currency-denominated trade receivables and payables. The derivative contracts are executed and controlled by the Finance and Accounting Department of the Corporate Strategy Headquarters and the senior manager is reporting the transaction status to the regular Board of Directors every month.

Foreign exchange sensitivity analysis

Regarding unhedged exposures of foreign currency-denominated assets and liabilities, when Japanese yen appreciates 1% against USD, Euro, and Yuan, the impacts therefrom on profit before tax in the consolidated statement of profit or loss in each reporting period are as follows.

In this analysis, however, it is assumed that other factors for changes (outstanding balance, interest rate, etc.) are constant.

Years ended December 31	Currency	Millions of yen 2019	Millions of yen 2018	Thousands of U.S. dollars 2019
Profit before tax	U.S. dollars	¥(44)	¥(62)	$(404)
	Euro	(34)	(22)	(312)
	Chinese yuan	(2)	(4)	(18)

(4) Interest Rate Risk Management

The Group is paying interests arising from raising funds required for working capital and capital investment in proceeding business activities. The Group is exposed to interest rate risk that future cash flows on interests may be changed, since the interest amounts are subject to the fluctuations of market interest rates when the Group borrows at the floating interest rates.

The Group is utilizing interest rate swaps to control the interest rate fluctuation risk associated with borrowings and interest rate and currency swaps to control the foreign currency exchange rate fluctuation risk and the interest rate fluctuation risk associated with foreign currency-denominated borrowings.

Interest rate sensitivity analysis

When the interest rates rise 1%, the impacts therefrom on profit before tax in the consolidated statement of profit or loss in each reporting period are as follows:

Years ended December 31	Millions of yen 2019	Millions of yen 2018	Thousands of U.S. dollars 2019
Profit before tax	¥1,309	¥1,150	$12,044

(5) Market price fluctuation risk management

Certain equity financial instruments held by the Group are exposed to market price fluctuation risk. The Group holds equity financial instruments for management strategy purposes, and not for short-term trading purposes.

Equity financial instruments include listed and non-listed equity securities, and the management identifies market prices and financial position of the issuers (customers or suppliers) on a regular basis.

The management believes the market price fluctuation risk at December 31, 2019, is not material.

Fair Value of Financial Instruments

For financial instruments measured at fair value, the amount of fair value measurement is classified into three levels from Level 1 through Level 3 according to the observability and significance of the inputs used for the measurement.

Level 1: Market prices (unadjusted) in active markets for identical assets or liabilities
Level 2: Fair value determined using observable prices other than those in Level 1, either directly or indirectly
Level 3: Fair value determined using an assessment technique that includes unobservable inputs

(1) Method of determining the fair value

The method of determining the fair value is as follows:

(Cash and cash equivalents, trade and other receivables, trade and other payables)

As these items are settled within a short period and have the fair values approximately equal to the carrying amounts, they are stated at the carrying amounts.

(Other financial assets, other financial liabilities)

The fair values of listed equity securities are determined based on the market price at the closing date. For the fair values of unlisted equity securities, the fair values are determined using the assessment techniques based on the discounted future cash flows, the assessment techniques based on the market price of similar companies, and assessment techniques based on the net asset value.

Derivatives are determined based on the prices provided by the counterpart financial institutions as financial assets or financial liabilities measured at fair value through profit or loss.

The fair values of lease obligations are determined based on the present value of future cash flows discounted at the rate considering the lease term and credit risk. As the fair values approximate the carrying amounts, they are stated at the carrying amounts.

(Bonds and borrowings)

The fair values of bonds are determined based on the market prices or the prices provided by the counterpart financial institutions.

For the long-term borrowings with the floating interest rates, as the market interest rate is reflected within a short period and the fair values approximate the carrying amounts, they are stated at the carrying amounts.

(2) Financial instruments measured at amortized cost

The carrying amounts and fair values of financial instruments measured at amortized cost are as follows:

	Millions of yen						Thousands of U.S. dollars	
	December 31				Date of transition (January 1, 2018)		December 31	
	2019		2018				2019	
	Carrying amount	Fair value	Carrying amount	Fair value	Carrying amount	Fair value	Carrying amount	Fair value
Financial liabilities measured at amortized cost								
Bonds	¥60,000	¥60,029	¥40,000	¥40,208	¥40,000	¥40,319	$552,079	$552,346
Total	¥60,000	¥60,029	¥40,000	¥40,208	¥40,000	¥40,319	$552,079	$552,346

(Note) Fair values of bonds are classified into Level 2.

(3) Financial instruments measured at fair value

The fair value hierarchy of financial instruments measured at fair value is as follows:

At December 31, 2019	Millions of yen			
	Level 1	Level 2	Level 3	Total
Assets:				
Financial assets measured at fair value through profit or loss				
Other financial assets				
Derivatives	¥ —	¥330	¥ —	¥ 330
Equity securities, etc.	—	—	747	747
Financial assets measured at fair value through other comprehensive income				
Other financial assets				
Equity securities, etc.	4,164	—	477	4,641
Other	—	—	132	132
Total	¥4,164	¥330	¥1,357	¥5,852
Liabilities:				
Financial liabilities measured at fair value through profit or loss				
Other financial liabilities				
Derivatives	¥ —	¥445	¥ —	¥ 445
Total	¥ —	¥445	¥ —	¥ 445

At December 31, 2018	Millions of yen			
	Level 1	Level 2	Level 3	Total
Assets:				
Financial assets measured at fair value through profit or loss				
Other financial assets				
Derivatives	¥ —	¥498	¥ —	¥ 498
Equity securities, etc.	—	—	599	599
Financial assets measured at fair value through other comprehensive income				
Other financial assets				
Equity securities, etc.	3,034	—	205	3,240
Other	—	—	134	134
Total	¥3,034	¥498	¥939	¥4,472
Liabilities:				
Financial liabilities measured at fair value through profit or loss				
Other financial liabilities				
Derivatives	¥ —	¥ 43	¥ —	¥ 43
Total	¥ —	¥ 43	¥ —	¥ 43

At January 1, 2018	Millions of yen			
	Level 1	Level 2	Level 3	Total
Assets:				
Financial assets measured at fair value through profit or loss				
Other financial assets				
Derivatives	¥ —	¥919	¥ —	¥ 919
Equity securities, etc.	—	—	413	413
Financial assets measured at fair value through other comprehensive income				
Other financial assets				
Equity securities, etc.	5,480	—	193	5,673
Other	—	—	133	133
Total	¥5,480	¥919	¥740	¥7,140
Liabilities:				
Financial liabilities measured at fair value through profit or loss				
Other financial liabilities				
Derivatives	¥ —	¥ 48	¥ —	¥ 48
Total	¥ —	¥ 48	¥ —	¥ 48

At December 31, 2019	Thousands of U.S. dollars			
	Level 1	Level 2	Level 3	Total
Assets:				
Financial assets measured at fair value through profit or loss				
Other financial assets				
Derivatives	$ —	$3,036	$ —	$ 3,036
Equity securities, etc.	—	—	6,873	6,873
Financial assets measured at fair value through other comprehensive income				
Other financial assets				
Equity securities, etc.	38,314	—	4,389	42,703
Other	—	—	1,214	1,214
Total	$38,314	$3,036	$12,486	$53,846
Liabilities:				
Financial liabilities measured at fair value through profit or loss				
Other financial liabilities				
Derivatives	$ —	$4,094	$ —	$ 4,094
Total	$ —	$4,094	$ —	$ 4,094

Transfers among the levels of the fair value hierarchy are recognized on the date when any events causing transfers or changes in conditions were incurred. In each reporting period, there is no significant transfer between Level 1 and Level 2.

(4) Valuation process

For financial instruments classified as Level 3, external valuation professionals or appropriate valuation responsible persons are implementing analysis on their valuation and valuation results pursuant to the valuation policy and procedures authorized by the responsible person of the Finance and Accounting Department. The valuation results are reviewed and authorized by the senior manager of the Finance and Accounting Department of the Corporate Strategy Headquarters.

(5) Reconciliation between the beginning balance and the ending balance of the financial instruments classified as Level 3

Changes from the beginning balance to the ending balance of the financial instruments classified as Level 3 are as follows:

Years ended December 31	Millions of yen		Thousands of U.S. dollars
	2019	2018	2019
Beginning balance	¥ 939	¥740	$ 8,640
Total gains and losses			
Net losses (Note 1)	(62)	(18)	(570)
Purchase	309	235	2,843
Other	170	(17)	1,564
Ending balance	¥1,357	¥939	$12,486
Changes during the period of unrealized gains (losses) recorded in net profit or loss on the assets held at the end of the reporting period (Note 1)	¥ (62)	¥ (18)	$ (570)

(Notes) 1. These are included in "Financial income" and "Financial costs" in the consolidated statement of profit or loss.
2. These are included in "Financial assets measured at fair value through other comprehensive income" in the consolidated statement of comprehensive income.

33. Significant Subsidiaries

Major consolidated subsidiaries are disclosed in "Subsidiaries & Affiliate" on page 68 of this report.

34. Related Parties

Remuneration to main management

Years ended December 31	Millions of yen		Thousands of U.S. dollars
	2019	2018	2019
Fixed remuneration and performance-based remuneration	¥545	¥640	$5,014
Total	¥545	¥640	$5,014

35. Commitment

Commitment related to payments after the closing date is as follows:

	Millions of yen			Thousands of U.S. dollars
	December 31		Date of transition (January 1, 2018)	December 31
	2019	2018		2019
Acquisition of property, plant, and equipment	¥5,172	¥6,447	¥1,833	$47,589
Total	¥5,172	¥6,447	¥1,833	$47,589

36. Subsequent Events

There is no applicable subsequent event.

37. First-Time Adoption of IFRSs (disclosure regarding the transition to IFRSs)

The Company has prepared its consolidated financial statements in accordance with IFRS from the year ended December 31, 2019. The date of transition to IFRSs from Japanese GAAP (hereinafter, "JGAAP") was January 1, 2018.

Exemptions under IFRS 1

A first-time adopter of IFRSs is, in principle, required to retrospectively apply each IFRS standard effective at the end of its first IFRS reporting period. However, IFRS 1 provides two types of exceptions to this principle: those subject to mandatory application of the exemptions and those subject to voluntary application. The effects of applying these exemptions are adjusted to retained earnings or other components of equity on the date of transition. The exemptions voluntarily applied by the Group are as follows:

(a) Business combinations

Under IFRS 1, an entity may elect not to apply IFRS 3 "Business Combinations" retrospectively to business combinations that occurred before the date of transition. The Company has elected not to apply IFRS 3 retrospectively to the business combinations that occurred prior to the date of transition. Therefore, the amount of goodwill associated with the business combinations that occurred prior to the date of transition was recognized at the carrying amount based on JGAAP. Such goodwill was tested for impairment on the date of transition, regardless of whether there was any indication of impairment.

(b) Exchange differences on translating foreign operations

An entity may elect to reset cumulative exchange differences on translating foreign operations to zero as of the date of transition. The Group has reset its cumulative exchange differences on translating foreign operations to zero as of the transition date.

(c) Leases

The exemptions for leases are as follows:

1) An entity (a lessee) may elect to determine whether any arrangement contains a lease based on the facts and circumstances existing at the date of transition.

2) The lessee may measure that lease liability at the present value of the total remaining lease payments, discounted using the lessee's incremental borrowing rate at the date of transition.

3) The lessee may measure and recognize a right-of-use asset at its carrying amount as if IFRS 16 had been applied since the commencement date of the lease, but discounted using the lessee's incremental borrowing rate at the date of transition.

4) The lessee may elect not to recognize right-of-use assets or lease liabilities for leases of low-value assets and leases with a lease term of 12 months or less from the date of transition.

THK Group has recognized and measured leases by applying the above exemptions.

(d) Designation of financial instruments recognized before the transition date

An entity may elect to make designations in accordance with IFRS 9 "Financial Instruments" based on the facts and circumstances existing at the date of transition. An entity may designate an investment in an equity instrument as measured at fair value through other comprehensive income based on the facts and circumstances that exist at the date of transition.

The Group has applied the above exemptions and has made designations based on the facts and circumstances existing at the date of transition. Some investments in equity investments have been designated as measured at fair value through other comprehensive income.

Mandatory exceptions to the retrospective application under IFRS 1

IFRS 1 prohibits retrospective applications of IFRSs to some items including "estimates," "derecognition of financial assets and financial liabilities," "hedge accounting," "non-controlling interests," and "classification and measurement of financial instruments." The Group applies these items prospectively from the date of transition.

Reconciliations

Reconciliations based on IFRS 1 are as follows. In these reconciliations, the amounts under "Reclassification" include adjustments that affect neither retained earnings nor comprehensive income, whereas the amounts under "Difference in recognition and measurement" include adjustments that affect retained earnings and comprehensive income.

Reconciliation of equity on the date of transition (January 1, 2018)

Millions of yen

Presentation under JGAAP	JGAAP	Reclassification	Difference in recognition and measurement	IFRS	Notes	Presentation under IFRS
Assets:						**Assets:**
Current assets:						Current assets:
Cash and bank deposits	129,920	—	—	129,920		Cash and cash equivalents
Accounts and notes receivable	71,543	15,295	—	86,839	(1), (2)	Trade and other receivables
Electronically recorded receivables	15,514	(15,514)	—	—	(1)	
		3	—	3		Other financial assets
Merchandise and finished goods	14,357	29,445	—	43,802	(3)	Inventories
Work in process	10,104	(10,104)	—	—	(3)	
Raw materials and supplies	19,340	(19,340)	—	—	(3)	
Deferred tax assets	2,337	(2,337)	—	—	(5)	
Short-term loans receivable	3	(3)	—	—		
Other current assets	8,071	—	—	8,071		Other financial assets
Allowance for doubtful accounts	(218)	218	—	—	(2)	
Total current assets	270,975	(2,337)	—	268,637		Total current assets
Fixed assets:						Non-current assets:
Property, plant, and equipment	115,934	1,181	10,121	127,236	(6), (7)	Property, plant, and equipment
Intangibles	32,395	(1,181)	(4,814)	26,399	(7)	Goodwill and intangible assets
Long-term investments in securities	11,377	(6,087)	—	5,290	(4), (8)	Investments accounted for using the equity method
	—	8,842	920	9,763	(4), (11)	Other financial assets
Net defined benefit asset	2,295	—	—	2,295		Net defined benefit asset
Deferred tax assets	754	2,337	156	3,249	(5)	Deferred tax assets
Other	3,007	(2,831)	—	176		Other non-current assets
Allowance for doubtful accounts	(75)	75	—	—		
Total fixed assets	165,689	2,337	6,384	174,411		Total non-current assets
Total assets	436,664	—	6,384	443,049		Total assets

Millions of yen

Presentation under JGAAP	JGAAP	Reclassification	Difference in recognition and measurement	IFRS	Notes	Presentation under IFRS
						Liabilities and equity:
Liabilities:						**Liabilities:**
Current liabilities:						Current liabilities:
Accounts and notes payable	22,330	32,585	—	54,915	(9)	Trade and other payables
Electronically recorded payables	23,923	(21,909)	1,679	3,694	(4), (6), (9)	Other financial liabilities
Current portion of long-term bonds	20,000	2,283	75	22,359	(10), (11)	Bonds and borrowings
Current portion of long-term bank loans	2,185	(2,185)	—	—	(10)	
Lease obligation	126	(126)	—	—	(4)	
Income taxes payable	1,673	—	—	1,673		Income taxes payable
Accrued bonuses to employees	2,971	(2,971)	—	—	(12)	
Other	19,986	(7,679)	—	12,307	(5), (9), (12)	Other current liabilities
Total current liabilities	93,196	(1)	1,755	94,950		Total current liabilities
Long-term liabilities:						Non-current liabilities:
Bonds	20,000	27,480	607	48,088	(10), (11)	Bonds and borrowings
Long-term bank loans	27,480	(27,480)	—	—	(10)	
Lease obligation	114	(114)	—	—	(4)	
	—	975	9,843	10,818	(4), (6), (11)	Other financial liabilities
Deferred tax liabilities	5,134	1	—	5,136	(5)	Deferred tax liabilities
Reserve for retirement benefits for directors and corporate auditors	108	118	64	291		Provisions
Reserve for product warranty	118	(118)	—	—		
Net defined benefit liability	7,389	—	—	7,389		Net defined benefit liability
Other	1,368	(861)	1,147	1,654	(13)	Other non-current liabilities
Total long-term liabilities	61,713	1	11,663	73,378		Total non-current liabilities
Total liabilities	154,910	—	13,419	168,329		**Total liabilities**

Millions of yen

Presentation under JGAAP	JGAAP	Reclassification	Difference in recognition and measurement	IFRS	Notes	Presentation under IFRS
Net assets:						**Equity:**
Common stock	34,606	—	—	34,606		Common stock
Additional paid-in capital	40,440	—	—	40,440		Capital surplus
Treasury stock	(13,998)	—	—	(13,998)		Treasury stock
Total accumulated other comprehensive income	15,272	—	(12,425)	2,847	(14), (15)	Other components of equity
Retained earnings	194,626	—	5,443	200,069	(14), (15)	Retained earnings
	—	—	—	263,965		Total equity attributable to owners of the parent
Non-controlling interests	10,806	—	(52)	10,754		Non-controlling interests
Total net assets	281,754	—	(7,034)	274,720		Total equity
Total liabilities and net assets	436,664	—	6,384	443,049		**Total liabilities and equity**

Reconciliation of equity on the previous fiscal year-end (December 31, 2018)

Millions of yen

Presentation under JGAAP	JGAAP	Reclassification	Difference in recognition and measurement	IFRS	Notes	Presentation under IFRS
Assets:						**Assets:**
Current assets:						Current assets:
Cash and bank deposits	134,513	—	—	134,513		Cash and cash equivalents
Accounts and notes receivable	69,722	22,838	—	92,561	(1), (2)	Trade and other receivables
Electronically recorded receivables	22,973	(22,973)	—	—	(1)	
	—	3	—	3		Other financial assets
Merchandise and finished goods	18,625	31,439	—	50,065	(3)	Inventories
Work in process	10,815	(10,815)	—	—	(3)	
Raw materials and supplies	20,624	(20,624)	—	—	(3)	
Deferred tax assets	3,459	(3,459)	—	—	(5)	
Short-term loans receivable	3	(3)	—	—		
Other current assets	7,737	—	—	7,737		Other financial assets
Allowance for doubtful accounts	(134)	134	—	—	(2)	
Total current assets	288,340	(3,459)	—	284,881		Total current assets
Fixed assets:						Non-current assets:
Property, plant, and equipment	129,695	1,035	10,985	141,716	(6), (7)	Property, plant, and equipment
Intangibles	28,106	(1,035)	(3,569)	23,501	(7)	Goodwill and intangible assets
Long-term investments in securities	9,665	(3,839)	—	5,825	(4), (8)	Investments accounted for using the equity method
	—	8,127	504	8,631	(4), (11)	Other financial assets
Net defined benefit asset	1,569	—	—	1,569		Net defined benefit asset
Deferred tax assets	1,554	3,459	99	5,112	(5)	Deferred tax assets
Other	4,502	(4,371)	—	131		Other non-current assets
Allowance for doubtful accounts	(83)	83	—	—		
Total fixed assets	175,009	3,459	8,019	186,488		Total non-current assets
Total assets	463,350	—	8,019	471,369		Total assets

Millions of yen

Presentation under JGAAP	JGAAP	Reclassification	Difference in recognition and measurement	IFRS	Notes	Presentation under IFRS
						Liabilities and equity:
Liabilities:						**Liabilities:**
Current liabilities:						Current liabilities:
Accounts and notes payable	22,084	37,493	—	59,578	(9)	Trade and other payables
Electronically recorded payables	26,938	(25,728)	1,752	2,962	(4), (6), (9)	Other financial liabilities
Current portion of long-term bonds	—	12,199	9	12,208	(10), (11)	Bonds and borrowings
Current portion of long-term bank loans	12,185	(12,185)	—	—	(10)	
Lease obligation	85	(85)	—	—	(4)	
Income taxes payable	12,271	—	—	12,271		Income taxes payable
Accrued bonuses to employees	3,899	(3,899)	—	—	(12)	
Other	20,771	(7,801)	—	12,970	(5), (9), (12)	Other current liabilities
Total current liabilities	98,237	(7)	1,761	99,991		Total current liabilities
Long-term liabilities:						Non-current liabilities:
Bonds	40,000	15,295	65	55,360	(10), (11)	Bonds and borrowings
Long-term bank loans	15,295	(15,295)	—	—	(10)	
Lease obligation	121	(121)	—	—	(4)	
	—	974	10,238	11,212	(4), (6), (11)	Other financial liabilities
Deferred tax liabilities	5,491	7	—	5,498	(5)	Deferred tax liabilities
Reserve for retirement benefits for directors and corporate auditors	131	112	64	307		Provisions
Reserve for product warranty	112	(112)	—	—		
Net defined benefit liability	7,908	—	—	7,908		Net defined benefit liability
Other	1,334	(852)	1,330	1,811	(13)	Other non-current liabilities
Total long-term liabilities	70,394	7	11,698	82,100		Total non-current liabilities
Total liabilities	168,631	—	13,460	182,091		**Total liabilities**

Millions of yen

Presentation under JGAAP	JGAAP	Reclassification	Difference in recognition and measurement	IFRS	Notes	Presentation under IFRS
Net assets:						**Equity:**
Common stock	34,606	—	—	34,606		Common stock
Additional paid-in capital	40,420	—	—	40,420		Capital surplus
Treasury stock	(14,002)	—	—	(14,002)		Treasury stock
Total accumulated other comprehensive income	1,794	—	(10,958)	(9,164)	(14), (15)	Other components of equity
Retained earnings	220,787	—	5,570	226,358	(14), (15)	Retained earnings
	—	—	—	278,217		Total equity attributable to owners of the parent
Non-controlling interests	11,113	—	(53)	11,060		Non-controlling interests
Total net assets	294,719	—	(5,441)	289,278		Total equity
Total liabilities and net assets	463,350	—	8,019	471,369		**Total liabilities and equity**

Notes to the reconciliation of equity

Electronically Recorded Receivables
Electronically recorded receivables, which were presented separately under JGAAP, are included in trade and other receivables under IFRS.

Allowance for doubtful accounts
Allowance for doubtful accounts (current) were presented separately under JGAAP. Under IFRS, trade and other receivables are presented at an amount after deducting allowances. Allowance for doubtful accounts (non-current) are presented after offsetting against other financial assets (non-current).

Inventories
Merchandise and finished goods, work in process, and raw materials and supplies, which were presented separately under JGAAP, are included in inventories under IFRS.

Other Financial Assets and Liabilities
Long-term investments in securities, which were presented separately under JGAAP, are included in other financial assets (non-current) under IFRS. Lease obligation (current) and lease obligation (non-current), which were presented separately under JGAAP, are included in other financial liabilities (current) and other financial liabilities (non-current), respectively, under IFRS.

Deferred Tax Assets and Liabilities, including reevaluation of the recoverability of deferred tax assets
Current deferred tax assets under JGAAP were reclassified to non-current deferred tax assets because all deferred taxes and liabilities shall not be classified as current assets or liabilities under IFRS. In adopting IFRS, the Group reevaluated the recoverability of all deferred tax assets.

Property, Plant, and Equipment and Leases
Under JGAAP, an entity as a lessee classifies its leases into either finance leases or operating leases. Operating leases of the Group were accounted for by the same method as applied to ordinary rental transactions. Under IFRS, because there is no such classification for a lessee's lease, the Group recognizes right-of-use assets and lease obligations.

Goodwill and Impairment of Non-financial Assets
Goodwill was amortized under JGAAP. Under IFRS, it is not amortized on or after the date of transition but tested for impairment annually. The accumulated amortization up to the date of transition was reversed.

In testing for impairment as of the date of transition, because the recoverable amount of assets was less than their carrying amount, the Company recorded impairment losses for the following items:

(a) ¥1,621 million of assets of THK RHYTHM AUTOMOTIVE CANADA LIMITED (goodwill: ¥52 million; property, plant, and equipment: ¥1,363 million; and intangible assets: ¥205 million)
(b) ¥4,501 million of goodwill of THK RHYTHM AUTOMOTIVE CZECH a.s. and THK RHYTHM AUTOMOTIVE GmbH

The recoverable amount of the assets of (a) above was measured at their fair values less costs of disposal based on the real estate appraisal value and other factors. The recoverable amounts of (b) above were measured at their value in use determined based on the discount rates ranging from 7.83% to 8.34%. Considering the long-term average growth rate of the industry or country to which the cash-generating unit or group of cash-generating units belong, the growth rate is zero and does not exceed the long-term average growth rate of the market.

Investments Accounted for Using the Equity Method
Investments accounted for using the equity method, which were included in long-term investments in securities under JGAAP, are presented separately under IFRS.

Electronically Recorded Payables and Other Payables
Under JGAAP, electronically recorded payables were presented separately, and other payables were included in other (current). Under IFRS, they are included in trade and other payables.

Bonds and Borrowings
Current portion of long-term bonds and current portion of long-term bank loans, which were presented separately in the current liability section under JGAAP, are included in bonds and borrowings (current) under IFRS. Long-term bonds and long-term bank loans, which were presented separately in the long-term liability section under JGAAP, are included in bonds and borrowings (non-current) under IFRS.

Derivatives and Borrowings
Under JGAAP, interest rate swap contracts and interest rate and currency swap contracts that qualify for hedge accounting and meet specific matching criteria were not remeasured at their fair values. Under IFRS, as hedge accounting is not applied to such derivatives, they are measured at fair value through profit or loss.

Other Current Liabilities
Accrued bonuses to employees, which were presented separately under JGAAP, are included in other current liabilities under IFRS.

Unused Paid Absences
Unused paid absences, which are not recognized under JGAAP, are accounted as a liability and included in other non-current liabilities under IFRS.

Retirement Benefit
Under JGAAP, actuarial gains and losses as well as prior service costs were recognized in other comprehensive income as incurred and were amortized on a straight-line basis over a certain number of years no longer than the average remaining service period of employees. Under IFRS, actuarial gains and losses are recognized in other comprehensive income as incurred, and immediately reclassified to retained earnings. Prior service costs are recognized in profit or loss as incurred under IFRS.

Retained Earnings

Millions of yen

	As of January 1, 2018 (Date of Transition to IFRSs)	As of December 31, 2018
Property, plant, and equipment	¥ (1,363)	¥ (1,075)
Goodwill and intangible assets	(4,814)	(3,582)
Unused paid absence	(1,147)	(1,330)
Retirement benefit	(1,033)	(2,086)
Cumulative exchange differences on translating foreign operations	13,459	13,459
Other	133	33
Subtotal	5,234	5,418
Tax effect	156	99
Non-controlling interests	52	53
Total	¥ 5,443	¥ 5,570

Exchange Differences on Translating Foreign Operations
In adopting the exemption provision for the first-time adoption of IFRSs, cumulative exchange differences on translating foreign operations as of the date of transition are transferred to retained earnings.

Reconciliation of comprehensive income for the previous year (from January 1, 2018, to December 31, 2018)

Millions of yen

Presentation under JGAAP	JGAAP	Reclassification	Difference in recognition and measurement	IFRS	Notes	Presentation under IFRS
Net sales	353,479	—	(8,760)	344,718	(1)	Revenue
Cost of sales	251,181	—	(8,448)	242,733	(1), (3), (4)	Cost of sales
Gross profit	102,298	—	(312)	101,985		Gross profit
Selling, general, and administrative expenses	52,465	—	(954)	51,511	(1), (2), (3), (4)	Selling, general, and administrative expenses
	—	614	—	614	(6)	Share of profit in investments accounted for using the equity method
	—	2,601	3	2,605	(6)	Other income
	—	845	—	845	(6)	Other expenses
Operating income	49,832	2,370	644	52,848		Operating income
Non-operating income	4,003	(4,003)	—	—	(6)	
Non-operating expenses	2,078	(2,078)	—	—	(6)	
Extraordinary gains	88	(88)	—	—	(6)	
Extraordinary losses	316	(316)	—	—	(6)	
	—	875	—	875	(5), (6)	Financial income
	—	1,549	(88)	1,461	(5), (6)	Financial costs
Income before income taxes	51,529	—	732	52,262		Profit before tax
Income taxes-current	16,097	(585)	34	15,545	(7)	Income tax expense
Income taxes-deferred	(585)	585	—	—	(7)	
Net income	36,017	—	698	36,716		Profit for the year
Other comprehensive income	—	—	—	—		Other comprehensive income
						Items that may not be reclassified subsequently to profit or loss:
Net unrealized gain (loss) on available-for-sale securities	(1,734)	—	—	(1,734)		Financial assets measured at fair value through other comprehensive income
Remeasurements of defined benefit plans	(935)	—	479	(455)	(3)	Remeasurements of defined benefit plans
	—	(104)	—	(104)		Share of other comprehensive income (losses) of associates accounted for under the equity method
						Items that may be reclassified subsequently to profit or loss:
Foreign currency translation adjustments	(11,376)	—	118	(11,257)		Exchange differences on translating foreign operations
Share of other comprehensive income (losses) of affiliates accounted for under the equity method	284	104	—	388		Share of other comprehensive income (losses) of associates
Total other comprehensive loss	(13,762)	—	598	(13,164)		Other comprehensive income, net of tax
Comprehensive income	22,255	—	1,296	23,552		Comprehensive income

Notes to the reconciliation of comprehensive income

Revenue

In a resale (buy-sell) contract where the Group purchases materials from a customer and resells the processed product after manufacturing the materials to the customer, sales and corresponding cost of sales were recorded at the time of resale under JGAAP. Under IFRS, revenue is recognized at the time of resale at a net amount equivalent to the processing fee. Certain rebates, which were included in selling, general, and administrative expenses under JGAAP, are offset against revenue under IFRS.

Goodwill

Amortization of goodwill was recognized under JGAAP; however, it is discontinued as of the date of transition because goodwill is not amortized under IFRS.

Retirement Benefit

Under JGAAP, actuarial gains and losses as well as prior service costs were recognized in other comprehensive income as incurred and were amortized on a straight-line basis over a certain number of years no longer than the average remaining service period of employees. Under IFRS, actuarial gains and losses are recognized in other comprehensive income as incurred, and immediately reclassified to retained earnings. Prior service costs are recognized in profit or loss as incurred under IFRS.

Paid Absences

Paid absences, which are not recognized under JGAAP, are recognized as personnel expenses under IFRS.

Derivatives and Borrowings

Under JGAAP, interest rate swap contracts and interest rate and currency swap contracts that qualify for hedge accounting and meet specific matching criteria were not remeasured at their fair values. Under IFRS, as hedge accounting is not applied to such derivatives, they are measured at fair value through profit or loss.

Presentation

Financial-related items included in non-operating income, non-operating expenses, extraordinary gains, and extraordinary losses under JGAAP are reclassified and presented as financial income or financial costs under IFRS. Items other than financial-related items are included in other income, other expenses, or share of profit in investments accounted for using the equity method under IFRS.

Income Tax Expense

Income taxes—current and income taxes—deferred, which were presented separately under JGAAP, are collectively presented as income tax expense under IFRS. In adopting IFRS, the Group revaluated the recoverability of all deferred tax assets.

Reconciliation of cash flows (from January 1, 2018, to December 31, 2018)

Lease payments for operating lease contracts, which were included in cash flows from operating activities under JGAAP, are presented as repayments for lease obligations in cash flows from financing activities under IFRS.

Subsidiaries & Affiliate

As of December 31, 2019

Subsidiaries	Main Operations	Head Office	Percentage Owned by the Company, Directly or Indirectly (%)
THK INTECHS CO., LTD.	Manufacture and sale of vital machinery components and machinery	Tokyo, Japan	100.00
TALK SYSTEM CO., LTD.	Sale of machinery parts and various types of equipment	Tokyo, Japan	99.00
THK NIIGATA CO., LTD.	Manufacture of ball splines	Niigata, Japan	100.00
THK RHYTHM CO., LTD.	Transportation equipment-related business	Shizuoka, Japan	70.00
NIPPON SLIDE CO., LTD.	Manufacture and sale of slide rails	Tokyo, Japan	100.00
TRA Holdings, CO., LTD.	Holding and management company	Tokyo, Japan	70.00
THK Holdings of America, L.L.C.	Holding and management company	Illinois, U.S.A.	100.00
THK America, Inc.	Sale of the LM Guide, ball screws	Illinois, U.S.A.	100.00
THK Manufacturing of America, Inc.	Manufacture of the LM Guide	Ohio, U.S.A.	100.00
THK RHYTHM NORTH AMERICA CO., LTD.	Transportation equipment-related business	Tennessee, U.S.A.	70.00
THK RHYTHM MEXICANA, S.A. DE C.V.	Transportation equipment-related business	Guanajuato, Mexico	99.99
THK RHYTHM AUTOMOTIVE MICHIGAN CORPORATION	Transportation equipment-related business	Michigan, U.S.A.	100.00
THK RHYTHM AUTOMOTIVE CANADA LIMITED	Transportation equipment-related business	Ontario, Canada	100.00
THK Europe B.V.	Holding and management company	Amsterdam, Netherlands	100.00
THK GmbH	Sale of the LM Guide, ball screws	Ratingen, Germany	100.00
THK France S.A.S.	Sale of the LM Guide, ball screws	Tremblay-en-France, France	100.00
THK Manufacturing of Europe S.A.S.	Manufacture of the LM Guide, ball screws	Ensisheim, France	100.00
THK Manufacturing of Ireland Ltd.	Manufacture and sale of ball screws	Dublin, Ireland	100.00
THK RHYTHM AUTOMOTIVE GmbH	Transportation equipment-related business	Dusseldorf, Germany	100.00
THK RHYTHM AUTOMOTIVE CZECH a.s.	Transportation equipment-related business	Dacice, Czech	100.00
THK CAPITAL UNLIMITED COMPANY	Financing and loan management for affiliated companies in the Americas	Dublin, Ireland	100.00
THK FINANCE UNLIMITED COMPANY	Financing and loan management for affiliated companies in Europe	Dublin, Ireland	100.00
THK (CHINA) CO., LTD.	Holding and management company, sale of the LM Guide	Dalian, China	100.00
THK (SHANGHAI) CO., LTD.	Sale of the LM Guide, ball screws	Shanghai, China	100.00
DALIAN THK CO., LTD.	Manufacture and sale of ball screws, actuators	Dalian, China	70.00
THK MANUFACTURING OF CHINA (WUXI) CO., LTD.	Manufacture of the LM Guide	Wuxi, China	100.00
THK MANUFACTURING OF CHINA (LIAONING) CO., LTD.	Manufacture of the LM Guide	Dalian, China	100.00
THK RHYTHM GUANGZHOU CO., LTD.	Transportation equipment-related business	Guangzhou, China	70.00
THK RHYTHM CHANGZHOU CO., LTD.	Transportation equipment-related business	Changzhou, China	75.00
THK MANUFACTURING OF CHINA (CHANGZHOU) CO., LTD.	Manufacture of LM-related parts, unit products	Changzhou, China	100.00
THK TAIWAN CO., LTD.	Sale of the LM Guide, ball screws	Taipei, Taiwan	100.00
THK LM SYSTEM Pte. Ltd.	Sale of the LM Guide, ball screws	Kaki Bukit, Singapore	100.00
THK RHYTHM (THAILAND) CO., LTD.	Transportation equipment-related business	Rayong, Thailand	70.00
THK MANUFACTURING OF VIETNAM CO., LTD.	Manufacture of the LM Guide, slide rails	Bac Ninh, Vietnam	100.00
THK RHYTHM MALAYSIA Sdn. Bhd.	Transportation equipment-related business	Penang, Malaysia	56.00
THK India Pvt. Ltd.	Sale of the LM Guide, ball screws	Karnataka, India	99.97

SAMICK THK CO., LTD.	Manufacture and sale of the LM Guide	Daegu, South Korea	33.82

Corporate Data

As of December 31, 2019

Company Profile

Headquarters	2-12-10 Shibaura, Minato-ku, Tokyo 108-8506, Japan Telephone: +81-3-5730-3911
Established	April 1971
Number of Employees	13,260 (consolidated); 3,891 (parent company)
Month of Ordinary General Meeting of Shareholders	March
URL	www.thk.com
Independent Auditors	Grant Thornton Taiyo LLC

Stock Information

Common Stock: Authorized	465,877,700 shares
Issued	133,856,903 shares
Stock Exchange Listing	Tokyo Stock Exchange (1st Section)
Stock Transfer Agent	Mitsubishi UFJ Trust and Banking Corporation
Number of Shareholders	20,463

Major Shareholders

Shareholders	Number of Issued Shares Held (Thousands of shares)	Shareholding Ratio (%)
Japan Trustee Services Bank, Ltd. (Trust Account)	12,604	9.95
The Master Trust Bank of Japan, Ltd. (Trust Account)	8,243	6.51
JP MORGAN CHASE BANK 385632	4,570	3.61
Akihiro Teramachi	3,398	2.68
FTC CO., LTD.	2,774	2.19
SSBTC CLIENT OMNIBUS ACCOUNT	2,709	2.14
SMBC Nikko Securities Inc.	2,459	1.94
Japan Trustee Services Bank, Ltd. (Trust Account 5)	2,358	1.86
OPPENHEIMER GLOBAL OPPORTUNITIES FUND	2,000	1.58
STATE STREET BANK WEST CLIENT - TREATY 505234	1,892	1.49

[1] The Company holds 7.286 million shares of treasury stock, but it is omitted from the above list of major shareholders.
[2] The calculation of the shareholding ratio does not include treasury stock.

Shareholder Composition

Shareholder Type	Number of Shareholders	Number of Issued Shares Held (Thousands of shares)	Shareholding Ratio (%)
Financial Institutions	70	41,859	31.27
Securities Companies	42	4,346	3.25
Other Corporations	290	4,828	3.61
Overseas Institutions	620	58,741	43.88
Individuals and Others	19,440	16,794	12.55
Treasury Stock	1	7,286	5.44

Stock Price and Trading Volume

THK CO., LTD.

URL: www.thk.com