

Business Risks

The MCHC Group (“the Group”) faces the following key risks, which could adversely affect its operating results and financial position. This section contains forward-looking statements based on information deemed relevant at March 31, 2020. The business risks presented are not all-encompassing. In recognition of exposure to risks such as those detailed below, the Group conducts risk assessments once a year. Based on these assessments, risk management systems are established and revised in consideration of the risks faced by specific businesses. In this manner, the Group is working to prevent the risks from occurring and minimize the impacts of such risks be realized.

1. Overcoming the COVID-19 Pandemic and its Risks

The COVID-19 pandemic has hit the world hard by causing a significant decline in economic activity. The MCHC Group responded to the Japanese government’s emergency declaration and requests from local governments by acting as needed at business sites to prevent infections and safeguard the health of employees, their families, and customers.

In principle, we have prohibited all office employees from going to work in locations that the declaration encompasses. These people either telework or take time off at home. We have endeavored to keep plants and other facilities running by functioning with skeleton crews, staggering working hours, and stepping up efforts to prevent infections, such as by mandating mask usage.

At all business sites, we have banned conferences, meetings, and dinners related to work, and as well as domestic and overseas business trips. We have also forbidden employees from attending or participating in events, seminars, or other heavily attended gatherings.

We set up protocols and channels for employees and their families to report to us if they suspect they are infected with COVID-19. We also produced and disseminated guidelines on self-isolation periods at home and prerequisites for resuming work.

In the Health Care business, we requested medical representatives to refrain from visiting existing or prospective customer institutions. We also strengthened IT systems so these people can deliver information online when visits are impossible.

We will encourage teleworking and social distancing among our people and formulate and share new work practice guidelines. These will be in keeping with requests from the Ministry of Health, Labour and Welfare to prevent workplace infections and strengthen health management. They will also reflect Japan Business Federation guidelines on preventing infections at manufacturing sites and in office. The ministry drew on the lifestyle recommendations of an advisory panel that the Japanese government set up to help ensure the people’s health, safety, and security in view of how long it might take to establish COVID-19 treatment methods and develop vaccines. In keeping with our social responsibilities as a materials and medical products supplier, we will keep providing products that help prevent infections and overcome the pandemic.

It remains difficult to predict when the COVID-19 pandemic will abate. Nonetheless, MCHC has produced the following results forecast for the fiscal year ending March 31, 2021, that assumes that performances should recover from the third quarter and factors in the exposure of each business to the pandemic.

(1) Performance Products Domain (Performance Products Segment)

In the Functional Products subsegment, we expect earnings to decline ¥16.8 billion owing to lower sales in the automotive, construction, and information electronics sectors. In the Performance Chemicals subsegment, we project a ¥12.8 billion drop in earnings owing to lower automotive materials sales and worsening inventory valuation differences as a result of fluctuating raw materials prices for polycarbonate resins.

We accordingly expect Performance Products Domain core operating income to decrease ¥29.6 billion owing to the COVID-19 pandemic.

(2) Industrial Materials Domain (Chemicals and Industrial Gases Segments)

In the Chemicals segment, lower methyl methacrylate sales revenues primarily in Asia, should cut earnings by ¥9.9 billion. A ¥15.9 billion earnings reduction would come from inventory valuation difference amid a decline in raw material prices in the petrochemical business, with a decrease in coke and carbon materials sales revenues in the carbon business decreasing earnings another ¥7.9 billion. Industrial Gases segment earnings should fall ¥10.6 billion amid lower sales revenues.

The downside core operating income impact of the pandemic on the Industrial Materials Domain should thus be ¥44.3 billion.

(3) Health Care Domain (Health Care Segment)

In the Health Care domain, we forecast a core operating income decline of ¥4.6 billion because the COVID-19 pandemic has constrained medical consultations.

Total core operating income should drop ¥78.5 billion owing to the impact of the pandemic. For the year ending March 31, 2021, the Group forecasts sales revenue of ¥3,334 billion, core operating income of ¥140 billion, operating income of ¥137 billion, income before taxes of ¥114 billion, net income of ¥77 billion, and net income attributable to owners of the parent of ¥49 billion. Factors affecting these forecasts would include the timing of the COVID-19 pandemic abatement in Japan and overseas, domestic and foreign demand and product market

conditions. They also encompass the prices of fuels and materials, including crude oil and naphtha, as well as of utilities, procurement volume, foreign exchange rates, and related laws and regulations.

If there is a delay in the pandemic abating, earnings would likely be even lower, depending on how long it takes. While the Group has taken steps to prevent infections, as described earlier, there is a risk that earnings would plunge in the unlikely event of a workplace infection cluster or other development necessitating an operational halt.

2. Other Risks

Key risks other than the impact of the COVID-19 pandemic include the following.

(a) Performance Products Domain (Performance Products Segment)

These products must satisfy high-quality and performance requirements, and the Group must develop and supply them at the appropriate times to meet market needs. Group business results (“results”) may be adversely affected if market needs change far more than the Group envisages, or if the Group is unable to ensure the timely supply of products that meet market needs, including issues with the availability of raw materials. If supply is interrupted for raw materials that can only be procured from certain areas or specific suppliers, then this could adversely affect results.

The Group outsources production of most information and electronics-related materials to other Asian manufacturers, so disasters or other issues with those facilities could disrupt the supply structure, adversely affecting results. Specifically, film and sheet products rely greatly on demand for liquid crystal display (LCD) panels, so drastic fluctuations in demand for LCD panels could adversely affect results.

(b) Industrial Materials Domain (Chemicals Segment and Industrial Gases Segment)

In this area, MCHC consumes large volumes of naphtha and other raw materials, and uses considerable amounts of electricity and steam in production processes. For those reasons, drastic fluctuations in the costs of naphtha, fuels, and other resources owing to changes in crude oil prices; the demand and supply balance for raw fuels or naphtha; or the impact of foreign exchange rates could adversely affect results if MCHC is not fully able to adjust its product prices, or if there are delays in such adjustments. MCHC relies on suppliers from certain areas for its raw fuels, and an inability to secure required fuels at the right times could adversely affect results. A worldwide recession or increased production capacity among rivals could adversely affect results if it becomes impossible to maintain the product demand and supply balance or MCHC is unable to generate revenues and earnings or reach goals that are commensurate with its capital expenditures.

MCHC relies heavily on certain business partners for some products in the Industrial Materials domain. For example, the coke business depends greatly on specific steelmakers, so if the steel output of those companies declines, such as because of dramatic fluctuations in the demand and supply of raw steel, the performances of such business partners could adversely affect MCHC’s results.

(c) Health Care Domain (Health Care Segment)

The results of the pharmaceuticals business are subject to the Group being unable to reach revenue and earnings targets by adequately expanding sales volumes of existing treatments or rationalizing operations in response to lower prices from periodic revisions in National Health Insurance prices of pharmaceuticals. Results are also subject to government policies in each country to constrain medical expenditures.

In general, lead times for drug research and development are far longer than in other industries, whereas the percentage of drugs receiving approval is not high. It is therefore difficult to produce accurate forecasts for the certainty or timing of commercialization. Results are thus subject to drugs not being commercialized as planned. Even where drugs are commercialized, results are subject to sales volumes being lower because of intensified competition with rival offerings, volumes declining on reports of new side effects when usage of these drugs becomes broad-based, generic drugs are commercialized after patents expire, or when approval is withdrawn.

Following its decision not to seek approval in the United States for MT-2271, a plant-based Virus Like Particle (VLP) vaccine for seasonal influenza, the Group posted an impairment loss of ¥24.1 billion on intangible assets (in-process research and development expenses) related to that vaccine for the year ended March 31, 2020. This factor should not significantly affect performance for the year ending March 31, 2021.

We undertake activities on commission in such fields as joint research and development, product derivations and introductions, manufacturing, and sales. Changes in or cancellations of contracts with business partner, operating downturns or business policy changes among business partners, or delays or slowdowns in pharmaceutical supplies from these enterprises could affect business results.

In the pharmaceutical intermediates and active pharmaceutical ingredients business and the capsules for pharmaceutical products, results are subject to lower sales volumes of customers’ pharmaceuticals following revisions in National Health Insurance prices or patent expiries on customer products.

(d) Service Business

The Group includes companies offering engineering and logistics services. Those companies secure some external orders. Significant fluctuations in demand within and outside the Group, or in market conditions worldwide, could adversely affect results.

(e) Overall Operations

The Group's broad overseas activities include exporting products and manufacturing around the world. In addition to pandemics, risks in countries or regions relating to Group businesses, notably of conflicts, terrorism, civil wars, riots, demonstrations, deteriorating security, and other international geopolitical problems, unforeseeable issues with regulations, taxation, working conditions, customs, and other country risks, large-scale natural disasters, difficulties hiring and retaining employees, inadequate supplies from utilities or other infrastructural shortfalls, changes in the economic and financial climates, or other risks impacting specific countries or regions could adversely affect results.

(f) Interest-Bearing Debt

The Group aims to balance its growth and innovation strategies with efforts to enhance its financial position. MCHC's results could be adversely affected in a situation where interest payments on interest-bearing debt rises, such as because interest-bearing debt increases, interest rates rise, or MCHC's credit rating declines owing to fluctuating Group performances. Results could also be adversely affected if it becomes essential to procure funds to upgrade facilities and the Group must obtain financing at unfavorable terms.

(g) Acquisitions, Mergers, or Restructuring

Results could be adversely affected if mergers, acquisitions, or joint ventures created in Japan or abroad to expand scale or overhaul MCHC's business portfolio fail to deliver anticipated synergies or other benefits, or if the Group's financial burden thereby increases or, if after mergers or acquisitions, the Group encounters new debt or other issues that it did not initially envisage. Other factors that could adversely affect results include reorganizations as part of business selection and concentration initiatives, through which MCHC withdraws from unprofitable businesses or liquidates affiliates.

(h) Deferred Tax Assets

Recoverability of Deferred Tax Assets

While incurring tax losses in previous fiscal years, the Group recognizes deferred tax assets only if likely able to offset future taxable income based on future taxable income forecasts as described in Note 3. Significant Accounting Policies 7. Income Taxes, in the Consolidated Financial Statements. This amount stood at ¥74 billion as of March 31, 2020, so the assessment of the recoverability of deferred tax assets is material in accounting estimates.

Key assumptions entailing management judgments shape future business plans that are the basis for future taxable income. Significant assumptions are primarily forecasts for sales revenue growth and market trend projections for raw material prices. Although management deems its assumptions reasonable, they could be affected by future uncertain fluctuations in economic conditions. If future taxable income differs from forecasts and assumptions, the recoverability of deferred tax assets could differ.

(i) Valuation of Securities

Fair Values of Financial Instruments

The Group mainly classifies stocks and investments as equity financial assets measured at fair value mainly through other comprehensive income. Assessments are based on unadjusted published prices or reasonably available inputs in active markets as described in Note 36. Financial Instruments 8. Fair Value of Financial Instruments, in the Consolidated Financial Statements. Calculations incorporate appropriate valuation techniques, such as comparable peer analyses.

Authorized officials approve these assessment methods, and management considers them reasonable. Nonetheless, but changes in such preconditions as observable market information and the financial positions of issuers could cause fair values to change, affecting other comprehensive income and the financial position.

(j) Impairment of Fixed Assets

Impairment of Non-Financial Assets

The Group conducts impairment tests on property, plant and equipment, goodwill, and intangible assets in accordance with Note 3. Significant Accounting Policies. 14. Impairment of Assets, in the Consolidated Financial Statements. When conducting these tests, the Group makes decisions about indications of impairment and about recognizing impairment losses and determines the value in use and fair value estimates.

The significant assumptions in measuring value in use of goodwill are estimates, discount rates, and growth rates for future cash flows under five-year business plans. The main factors shaping future cash flows are sales volume expansion and market growth rates.

The significant assumptions in measuring the usage value of intangible assets (in-process research and development) related to technology are prospects for obtaining regulatory approval of sales and post-launch sales forecasts and discount rates.

Management considers its judgments and assessments reasonable, although they are subject to fluctuations in future economic conditions that it has not envisaged. If assumptions change, calculations of recoverable

amount could differ. As of the date of submitting these business risks, there were no events necessitating a review of estimates.

In the year ended March 31, 2020, the Group posted impairment losses on intangible assets (in-process research and development) relating to technologies of Medicago Inc., which Mitsubishi Tanabe Pharma Corporation acquired, and goodwill on the pharmaceutical formulation materials business. For details of impairment losses, see Note 16 Impairment Losses in the Consolidated Financial Statements.

(k) Pension and Severance Plans

The measurement of defined benefit obligation is through actuarial calculations, and assumptions include discount rates and other estimates.

Management considers its assumptions reasonable, although changes in retirement benefit obligations and expenses owing to changes in the fair value of pension assets, as well as changes in the interest rate climate and the retirement benefits and pension systems could affect business performance and the financial position.

(l) Impact of Inventory Valuations

The Group states inventory assets principally at cost based on the weighted average method. Declines in the costs of naphtha or raw materials during the fiscal period could detract from earnings by affecting relatively expensive inventories at the start of a term, thereby increasing the cost of sales. Earnings would conversely rise if fuel costs rose during the fiscal period. Changes in fuel costs could therefore affect results. Any book value write-down based on lower profitability could adversely affect results.

(m) Changes in Foreign Exchange Rates

The Group endeavors to minimize the short-term impact of fluctuations in foreign currency transactions, primarily for exports and imports, notably by using forward foreign exchange contracts. Changes in exchange rates in the short, medium, and long terms may affect results.

The Group engages in production and sales in Asia, Europe, North America, and other locations overseas. It translates sales, expenses, assets, and other items denominated in foreign currencies in such regions into yen in its consolidated financial statements. Even if the foreign currency valuations of such items remain unchanged, the yen equivalents could change after conversion from other currencies, so foreign exchange rate fluctuations could affect the Group's results and financial position.

(n) Laws and Regulations

The Group's operations are subject to related laws and regulations in Japan and abroad. Such laws and regulations may govern security and safety, the environment and chemical substances, pharmaceutical safety policies, and other areas relating to Group operations.

The Group maintains voluntary rules that are stricter than legal provisions while pursuing thorough compliance to satisfy laws and regulations in engaging in business activities. Dramatic changes in laws and regulations or strengthened legislation could further restrict the Group's activities or increase its costs. Furthermore, should the Group violate laws or regulations, it could be ordered to halt operations at plants, and trust from society could be lost. All these factors have the possibility of influencing results.

When exporting products, for example, the Group must comply with the Foreign Exchange and Foreign Trade Act. The Group established a secure export control program, provides employee education through e-learning and training, and takes other measures to prevent legal and regulatory infringements. If an officer or employee of the Group nevertheless violates laws and regulations, the resulting fines, administrative dispositions (prohibitions on exports or cancellations of comprehensive permits), or stricter regulations could affect the Group's business progress and results.

(o) Product Liability

The Group manufactures and sells products that conform with standards as ISO 9001, the international standard for quality management systems. The Group endeavors to prevent product liability problems from arising when launching products or improving quality by previously evaluating such liability risks. The Group cannot guarantee, however, that all of its products will be free of defects. It therefore has product liability insurance to cover possible accidents. Regardless, product defects that could cause major product liability exposure with damages exceeding the range of such insurance could adversely affect results.

(p) Accidents and Disasters

The Group regularly inspects its plants and otherwise endeavors to prevent accidents at facilities. It cannot, however, completely prevent or mitigate accidents at such facilities, nor natural disasters such as earthquakes. Accidents that damage property, cause human suffering or loss of life, or create environmental pollution could adversely impact production activities and reduce social trust in the Group, thereby adversely affecting results. Natural disasters that damage property, cause human suffering or loss of life, or significantly damage or functionally degrade the social infrastructure and chronically affect the Group's activities could affect results.

The Group has prepared for these emergencies by establishing an information gathering system based on business continuity plans, through which it is endeavoring to maintain core businesses while restoring operations as swiftly as possible.

(q) Information Management

The Group strictly manages corporate and personal information in its possession. Problems resulting from leaks of such information could decrease competitiveness or reduce social trust in the Group, which may adversely affect results. Although the Group has taken various measures to safeguard against cyber attacks, if problems were to arise with the plant control systems of business sites, it would take steps that include adjusting production volumes to maintain safety, which could adversely affect results.

(r) Research and Development

The Group deems research and development as pivotal to supporting sustainable corporate growth, and has long undertaken solid R&D. It intends to deploy resources in a planned and sustainably stable manner from long-term perspectives. Results could be adversely affected, however, if the fruits of R&D are far less than anticipated.

(s) Intellectual Property

The Group takes ample precautions to avoid violating the intellectual property of third parties. Nonetheless, injunctions or damages claims by third parties on the basis of patent or other infringements could adversely affect results.

(t) Climate Change and Other Environmental Issues

Companies face increasing pressure to disclose such risks as global warming and environmental issues as financial information. The Group engages in environmental management companywide, and has expressed its support for the recommendations of the Task Force on Climate-related Financial Disclosures.

Impositions of carbon taxes and such greenhouse gas emission regulations as the emissions trading systems in countries in which the Group operates could affect business performance. Increases in natural disasters stemming from climate change and water resource shortages owing to droughts could affect Group manufacturing sites.

(u) Litigation

The Group maintains various businesses. In engaging in business, or in reorganizing or restructuring operations, the Group could face litigation from business partners or other third parties relating to intellectual property or the Group's products. It is impossible to predict or assess the results of such lawsuits, which could adversely affect results.

Some royalty revenue from Novartis Pharma AG for *Gilenya* multiple sclerosis treatment has not been recognized as sales revenue in accordance with IFRS 15 Revenue from Contracts with Customers, as arbitration proceedings are underway between the Group and that company, which has questioned the validity of a license agreement, and the royalty revenue does not meet a revenue recognition requirement, which is that parties to the contract have approved it and are committed to fulfilling their respective obligations.

Consolidated Statement of Income

Mitsubishi Chemical Holdings Corporation and Consolidated Subsidiaries
Years ended March 31

	Millions of yen	
	Year ended March 31, 2019	Year ended March 31, 2020
Continuing operations:		
Sales revenue (Notes 4 and 7)	¥ 3,840,341	¥ 3,580,510
Cost of sales	(2,765,813)	(2,593,247)
Gross profit	1,074,528	987,263
Selling, general and administrative expenses	(776,927)	(800,572)
Other operating income (Note 10)	21,311	27,571
Other operating expenses (Note 10)	(50,977)	(83,373)
Share of profit of associates and joint ventures (Note 4)	26,817	13,396
Operating income (Note 4)	294,752	144,285
Financial income (Note 11)	10,226	7,206
Financial expenses (Note 11)	(20,132)	(29,488)
Income before taxes	284,846	122,003
Income taxes (Note 12)	(70,589)	(52,335)
Net income from continuing operations	214,257	69,668
Discontinued operations:		
Net income from discontinued operations (Note 6)	2,472	16,892
Net income	¥ 216,729	¥ 86,560
Net income attributable to:		
Owners of the parent	¥ 169,530	¥ 54,077
Non-controlling interests	47,199	32,483
Net income	¥ 216,729	¥ 86,560
Earnings per share:		
		(Yen)
Basic earnings per share attributable to owners of the parent (Note 13)		
Continuing operations	¥ 117.49	¥ 26.19
Discontinued operations	1.73	11.89
Total	¥ 119.22	¥ 38.08
Diluted earnings per share attributable to owners of the parent (Note 13)		
Continuing operations	¥ 108.45	¥ 24.27
Discontinued operations	1.60	10.94
Total	¥ 110.05	¥ 35.21

The accompanying notes are an integral part of these consolidated financial statements.

Consolidated Statement of Comprehensive Income

Mitsubishi Chemical Holdings Corporation and Consolidated Subsidiaries
Years ended March 31

	Millions of yen	
	Year ended March 31, 2019	Year ended March 31, 2020
Net income	¥216,729	¥ 86,560
Other comprehensive income:		
Items that will not be reclassified to profit or loss:		
Net gain (loss) on revaluation of financial assets measured at fair value (Note 26)	4,743	(15,912)
Remeasurements of defined benefit pensions plans (Note 26)	(4,482)	(735)
Share of other comprehensive income (loss) of associates and joint ventures for using the equity method (Note 26)	107	(183)
Total items that will not be reclassified to profit or loss	368	(16,830)
Items that may be subsequently reclassified to profit or loss		
Exchange differences on translation of foreign operations (Note 26)	(5,751)	(63,517)
Net gain (loss) on derivatives designated as cash flow hedges (Note 26)	(3,152)	36
Share of other comprehensive income (loss) of associates and joint ventures for using the equity method (Note 26)	(2,296)	(5,774)
Total items that may be subsequently reclassified to profit or loss	(11,199)	(69,255)
Total other comprehensive income (net of tax)	(10,831)	(86,085)
Total comprehensive income	¥205,898	¥ 475
Total comprehensive income attributable to:		
Owners of the parent	¥161,655	¥(6,664)
Non-controlling interests	44,243	7,139

The accompanying notes are an integral part of these consolidated financial statements.

Consolidated Statement of Financial Position

Mitsubishi Chemical Holdings Corporation and Consolidated Subsidiaries

Assets	Millions of yen	
	March 31, 2019	March 31, 2020
Current assets:		
Cash and cash equivalents (Note 22)	¥ 321,541	¥ 228,211
Trade receivables (Note 21)	855,107	698,516
Inventories (Note 20)	623,049	606,505
Other financial assets (Note 18)	248,262	117,628
Other current assets (Note 19)	76,072	90,140
Subtotal	2,124,031	1,741,000
Assets held for sale (Note 23)	17,810	8,281
Total current assets	2,141,841	1,749,281
Non-current assets:		
Property, plant and equipment (Note 15)	1,683,354	1,742,216
Goodwill (Note 14)	648,806	616,769
Intangible assets (Note 14)	568,787	510,575
Investments accounted for using the equity method (Note 17)	183,067	169,958
Other financial assets (Note 18)	228,571	226,488
Other non-current assets (Note 19)	33,573	42,813
Deferred tax assets (Note 12)	84,509	74,049
Total non-current assets	3,430,667	3,382,868
Total assets (Note 4)	¥5,572,508	¥5,132,149

The accompanying notes are an integral part of these consolidated financial statements.

		Millions of yen	
		March 31, 2019	March 31, 2020
Liabilities and Equity			
Liabilities	Current liabilities:		
	Trade payables (Note 35)	¥ 492,404	¥ 398,061
	Bonds and borrowings (Note 30)	1,108,643	727,307
	Income tax payable	31,768	19,287
	Other financial liabilities (Note 32)	222,377	359,540
	Provisions (Note 29)	8,296	7,968
	Other current liabilities (Note 34)	138,089	122,575
	Subtotal	2,001,577	1,634,738
	Liabilities directly associated with assets held for sale (Note 23)	11,723	1,761
	Total current liabilities	2,013,300	1,636,499
	Non-current liabilities:		
	Bonds and borrowings (Note 30)	1,138,108	1,555,947
	Other financial liabilities (Note 32)	26,755	88,533
	Retirement benefit liabilities (Note 28)	120,816	125,611
	Provisions (Note 29)	28,294	31,893
	Other non-current liabilities (Note 34)	41,971	80,840
	Deferred tax liabilities (Note 12)	177,410	161,997
	Total non-current liabilities	1,533,354	2,044,821
	Total liabilities	3,546,654	3,681,320
Equity			
	Common stock: (Note 24)	50,000	50,000
	Additional paid-in capital (Note 24)	321,477	176,715
	Treasury stock (Note 24)	(63,560)	(63,485)
	Retained earnings (Note 24)	1,073,873	1,071,260
	Other components of equity (Note 24)	(3,843)	(64,268)
	Equity attributable to owners of the parent	1,377,947	1,170,222
	Non-controlling interests	647,907	280,607
	Total equity	2,025,854	1,450,829
	Total liabilities and equity	¥5,572,508	¥5,132,149

The accompanying notes are an integral part of these consolidated financial statements.

Consolidated Statement of Changes in Equity

Mitsubishi Chemical Holdings Corporation and Consolidated Subsidiaries

Year ended March 31, 2019

		Millions of yen							
		Common stock	Additional paid-in capital	Treasury stock	Retained earnings				
Balance at April 1, 2018		¥50,000	¥ 321,111	¥ (43,569)	¥956,946				
Cumulative effects of changes in accounting policies		—	—	—	(85)				
Restated balance at April 1, 2018		50,000	321,111	(43,569)	956,861				
Net income		—	—	—	169,530				
Other comprehensive income (Note 26)		—	—	—	—				
Total comprehensive income		—	—	—	169,530				
Purchase of treasury stock (Note 24)		—	—	(20,033)	—				
Disposal of treasury stock (Note 24)		—	(39)	42	—				
Cash dividends (Note 25)		—	—	—	(52,867)				
Share-based payment transactions (Note 27)		—	609	—	—				
Share-based payment transactions of subsidiaries (Note 27)		—	—	—	—				
Changes in interests in subsidiaries		—	(204)	—	—				
Business combinations or business divestitures		—	—	—	—				
Changes in scope of consolidation		—	—	—	(24)				
Transfer from other components of equity to retained earnings		—	—	—	373				
Transfer from other components of equity to non-financial assets, etc.		—	—	—	—				
Total transactions with owners		—	366	(19,991)	(52,518)				
Balance at March 31, 2019		¥50,000	¥321,477	¥(63,560)	¥1,073,873				
		Other components of equity							
		Net gain (loss) on revaluation of financial assets measured at fair value	Remeasurements of defined benefit pensions plans	Exchange differences on translation of foreign operations	Net gain (loss) on derivatives designated as cash flow hedges	Total	Equity attributable to owners of the parent	Non-controlling interests	Total equity
Balance at April 1, 2018		¥51,544	¥ —	¥(50,455)	¥173	¥1,262	¥1,285,750	¥633,740	¥1,919,490
Cumulative effects of changes in accounting policies		—	—	—	—	—	(85)	(61)	(146)
Restated balance at April 1, 2018		51,544	—	(50,455)	173	1,262	1,285,665	633,679	1,919,344
Net income		—	—	—	—	—	169,530	47,199	216,729
Other comprehensive income (Note 26)		4,152	(3,823)	(5,075)	(3,129)	(7,875)	(7,875)	(2,956)	(10,831)
Total comprehensive income		4,152	(3,823)	(5,075)	(3,129)	(7,875)	161,655	44,243	205,898
Purchase of treasury stock (Note 24)		—	—	—	—	—	(20,033)	—	(20,033)
Disposal of treasury stock (Note 24)		—	—	—	—	—	3	—	3
Cash dividends (Note 25)		—	—	—	—	—	(52,867)	(38,025)	(90,892)
Share-based payment transactions (Note 27)		—	—	—	—	—	609	—	609
Share-based payment transactions of subsidiaries (Note 27)		—	—	—	—	—	—	25	25
Changes in interests in subsidiaries		—	—	—	—	—	(204)	5,796	5,592
Business combinations or business divestitures		—	—	—	—	—	—	2,265	2,265
Changes in scope of consolidation		—	—	—	—	—	(24)	(76)	(100)
Transfer from other components of equity to retained earnings		(4,196)	3,823	—	—	(373)	—	—	—
Transfer from other components of equity to non-financial assets, etc.		—	—	—	3,143	3,143	3,143	—	3,143
Total transactions with owners		(4,196)	3,823	—	3,143	2,770	(69,373)	(30,015)	(99,388)
Balance at March 31, 2019		¥51,500	¥ —	¥(55,530)	¥187	¥(3,843)	¥1,377,947	¥647,907	¥2,025,854

Year ended March 31, 2020

	Millions of yen			
	Common stock	Additional paid-in capital	Treasury stock	Retained earnings
Balance at April 1, 2019	¥50,000	¥ 321,477	¥ (63,560)	¥1,073,873
Net income	—	—	—	54,077
Other comprehensive income (Note 26)	—	—	—	—
Total comprehensive income	—	—	—	54,077
Purchase of treasury stock (Note 24)	—	—	(27)	—
Disposal of treasury stock (Note 24)	—	(100)	102	—
Cash dividends (Note 25)	—	—	—	(56,804)
Share-based payment transactions (Note 27)	—	194	—	—
Share-based payment transactions of subsidiaries (Note 27)	—	—	—	—
Changes in interests in subsidiaries (Note 24)	—	(146,638)	—	—
Business combinations or business divestitures	—	1,782	—	—
Changes in scope of consolidation	—	—	—	430
Transfer from other components of equity to retained earnings	—	—	—	(316)
Total transactions with owners	—	(144,762)	75	(56,690)
Balance at March 31, 2020	¥50,000	¥176,715	¥(63,485)	¥1,071,260

Other components of equity

	Net gain (loss) on revaluation of financial assets measured at fair value	Remeasurements of defined benefit pensions plans	Exchange differences on translation of foreign operations	Net gain (loss) on derivatives designated as cash flow hedges	Total	Equity attributable to owners of the parent	Non-controlling interests	Total equity
Balance at April 1, 2019	¥51,500	¥ —	¥(55,530)	¥187	¥(3,843)	¥1,377,947	¥647,907	¥2,025,854
Net income	—	—	—	—	—	54,077	32,483	86,560
Other comprehensive income (Note 26)	(11,737)	(1,744)	(47,243)	(17)	(60,741)	(60,741)	(25,344)	(86,085)
Total comprehensive income	(11,737)	(1,744)	(47,243)	(17)	(60,741)	(6,664)	7,139	475
Purchase of treasury stock (Note 24)	—	—	—	—	—	(27)	—	(27)
Disposal of treasury stock (Note 24)	—	—	—	—	—	2	—	2
Cash dividends (Note 25)	—	—	—	—	—	(56,804)	(31,111)	(87,915)
Share-based payment transactions (Note 27)	—	—	—	—	—	194	—	194
Share-based payment transactions of subsidiaries (Note 27)	—	—	—	—	—	—	(14)	(14)
Changes in interests in subsidiaries (Note 24)	—	—	—	—	—	(146,638)	(347,666)	(494,304)
Business combinations or business divestitures	—	—	—	—	—	1,782	3,737	5,519
Changes in scope of consolidation	—	—	—	—	—	430	615	1,045
Transfer from other components of equity to retained earnings	(1,428)	1,744	—	—	316	—	—	—
Total transactions with owners	(1,428)	1,744	—	—	316	(201,061)	(374,439)	(575,500)
Balance at March 31, 2020	¥38,335	¥ —	¥(102,773)	¥170	¥(64,268)	¥1,170,222	¥280,607	¥1,450,829

The accompanying notes are an integral part of these consolidated financial statements.

Consolidated Statement of Cash Flows

Mitsubishi Chemical Holdings Corporation and Consolidated Subsidiaries

Millions of yen

	Year ended March 31, 2019	Year ended March 31, 2020
Cash flows from operating activities:		
Income before taxes	¥284,846	¥122,003
Income before taxes from discontinued operations	3,210	25,585
Depreciation and amortization	199,332	239,824
Share of profit of associates and joint ventures	(26,850)	(13,401)
Impairment loss	17,340	48,647
Loss on sales and retirement of property, plant and equipment	13,824	15,797
Loss on sales of shares of subsidiaries and associates	34	1,567
Provision for loss on business liquidation	5,169	—
Gain on share exchanges	—	(23,922)
Gain on sales of non-current assets	(3,839)	(8,533)
Gain on reversal of impairment loss	—	(1,720)
Gain on sales of shares of subsidiaries and associates	(7,546)	(530)
Interest and dividend income	(9,627)	(6,886)
Interest expense	18,868	24,515
(Increase) decrease in trade receivables	25,149	122,281
(Increase) decrease in inventories	(13,193)	7,139
Increase (decrease) in trade payables	(20,090)	(79,540)
Increase (decrease) in retirement benefit assets and liabilities, net	(1,324)	(719)
Others	8,261	34,960
Subtotal	493,564	507,067
Interest received	4,816	3,040
Dividends received	27,781	25,310
Interest paid	(18,114)	(21,847)
Income tax (paid) received, net	(92,472)	(61,567)
Net cash provided by (used in) operating activities	415,575	452,003
Cash flows from investing activities:		
Purchase of property, plant and equipment	(225,740)	(223,478)
Proceeds from sales of property, plant and equipment	7,170	14,995
Purchase of intangible assets	(4,839)	(12,601)
Purchase of other financial assets	(453,070)	(348,240)
Proceeds from sales/redemption of other financial assets	438,748	453,694
Purchase of investments in subsidiaries	(655,629)	(5,490)
Proceeds from sales of investments in subsidiaries	16,619	2,836
Proceeds from loss of control due to share exchange (Note 6)	—	14,432
Payments for transfer of businesses	(50,900)	(3,000)
Net (increase) decrease in time deposits	31,581	25,236
Others	992	(5,947)
Net cash provided by (used in) investing activities	(895,068)	(87,563)
Cash flows from financing activities:		
Net increase (decrease) in short-term borrowings	428,298	(330,088)
Net increase (decrease) in commercial papers	44,000	2,000
Proceeds from long-term borrowings	213,182	490,580
Repayment of long-term borrowings	(122,954)	(183,865)
Proceeds from issuance of bonds	132,036	149,185
Redemption of bonds	(65,000)	(60,000)
Repayment of lease liabilities	(3,893)	(30,555)
Net (increase) decrease in treasury stock	(20,030)	(25)
Dividends paid to owners of the parent	(52,867)	(56,804)
Dividends paid to non-controlling interests	(38,011)	(31,070)
Proceeds from stock issuance to non-controlling interests	6,548	3
Payment for acquisition of subsidiaries' interests from non-controlling interests	(1,418)	(399,834)
Others	(829)	(50)
Net cash provided in (used in) financing activities	519,062	(450,523)

Effect of exchange rate changes on cash and cash equivalents	6,207	(10,184)
Net increase (decrease) in cash and cash equivalents	45,776	(96,267)
Cash and cash equivalents at the beginning of the period	277,624	321,541
Net increase (decrease) in cash and cash equivalents resulting from transfer to assets held for sale	(1,899)	2,103
Net increase (decrease) in cash and cash equivalents resulting from change in scope of consolidation	40	834
Cash and cash equivalents at the end of the period (Note 22)	¥321,541	¥228,211

The accompanying notes are an integral part of these consolidated financial statements.

Notes to Consolidated Financial Statements

Mitsubishi Chemical Holdings Corporation and Consolidated Subsidiaries

Note 1

Reporting Entity

Mitsubishi Chemical Holdings Corporation (the "Company") is a corporation domiciled in Japan, whose shares are listed on the First Section of the Tokyo Stock Exchange. The registered address of its Head Office is presented on its website (<https://www.mitsubishichem-hd.co.jp/>). The Company's Consolidated Financial Statements for the year ended March 31, 2020 comprise those of the Company, its subsidiaries and associates, and interests under joint arrangements (collectively, the "Group"). The Group's three principal domains are Performance Products, Industrial Materials, and Health Care. Further details are presented in Note 4 Segment Information.

Note 2

Basis of Presentation 1. Compliance with IFRS

The accompanying consolidated financial statements of the Group have been prepared in accordance with International Financial Reporting Standards (IFRS) issued by the International Accounting Standards Board. The provisions of Article 93 of the Ordinance on Terminology, Forms, and Preparation Methods of Consolidated Financial Statements apply, as the Company meets the requirements for a "Specified Company applying Designated International Financial Reporting Standards" prescribed in Article 1-2 of said ordinance.

2. Approval of Consolidated Financial Statements

The Group's consolidated financial statements were approved on June 24, 2020, by Hitoshi Ochi, Representative Corporate Executive Officer, President and Chief Executive Officer, and Hidefumi Date, Managing Corporate Executive Officer and Chief Financial Officer.

3. Basis of Measurement

The consolidated financial statements are prepared on a historical cost basis, except for certain financial instruments measured at fair value presented in Note 3 Significant Accounting Policies.

4. Presentation Currency

The consolidated financial statements are presented in Japanese yen, which is the Company's functional currency, rounded to the nearest million yen.

5. Use of Judgments, Estimates and Assumptions

Management has made a number of judgments, estimates and assumptions relating to the application of accounting policies, reporting of revenues and expenses and assets and liabilities in the preparation of these consolidated financial statements in accordance with IFRS. Actual results may differ from these estimates.

Estimates and underlying assumptions are continually evaluated. The effect of changes to accounting estimates is recognized in the reporting period in which the revision was made and in future periods.

Information regarding judgments, estimates, and assumptions used in applying accounting policies that could materially affect the Company's consolidated financial statements is included in the following notes:

- Impairment of Non-Financial Assets (Note 14, Goodwill and Intangible Assets, Note 15, Property, Plant and Equipment and Note 16, Impairment Losses)
- Recoverability of Deferred Tax Assets (Note 12, Income Taxes)
- Measurement of Defined Benefit Obligations (Note 28, Retirement Benefits)
- Fair Value of Financial Instruments (Note 36, Financial Instruments)

Significant assumptions used in making estimates for the year ended March 31, 2020 include the following.

(Assumptions relating to impacts of COVID-19 pandemic)
The COVID-19 pandemic that originated in China and spread rapidly around the world in March 2020, particularly in Europe and the United States, has suppressed economic activity and depressed demand.

While the outlook is unclear, management has estimated future taxable income for assessing deferred tax assets and future cash flows from goodwill impairment tests, etc., on the assumption, based on information available at the end of the year ended March 31, 2020, that the pandemic's impact will continue in the next fiscal year.

6. Newly Applied Standards and Interpretations

Main standards and interpretations newly applied by the Group from the year ended March 31, 2020, are as follows.

Standard and Interpretation	Overview of Introduction or Revision
IFRS 16 Leases	Accounting standards and disclosure methods for leases have been revised. Specifically, under a single lessee accounting model, right-of-use assets and lease liabilities for leases with terms exceeding 12 months are recorded in the financial statements, in principle.

When transferring the right to control the use of assets specified in lease contracts in exchange for consideration over a certain period, the Group recognizes lease transactions and the right-of-use assets and lease liabilities as of the lease commencement dates. Determining whether an arrangement is, or contains, a lease is based on the substance of an arrangement regardless of whether it takes the legal form of a lease.

Lease liabilities are measured as the discounted present value of unsettled portions of lease payments at the lease commencement date. Right-of-use assets are initially measured by adjusting initial direct costs, prepaid lease fees, and other charges for lease liabilities, adding costs for the obligation to restore to original condition and other requirements based on lease contracts.

Lease payments are allocated to the repayment portion of the net financial expenses and lease liabilities so that the amount produces a constant periodic rate of interest with respect to the remaining balance of the lease liability, with financial expenses being recognized in profit or loss.

Right-of-use assets are depreciated over their service lives where ownership of the underlying assets transfer to the lessees by the end of lease periods or where the costs of right-of-use assets reflect the exercise of purchase options. In other cases, assets are depreciated systematically over the shorter of service lives or lease periods.

For leases ending within 12 months or whose underlying assets are of low value, related lease payments are systematically recognized as costs for lease periods.

As a result of the adoption of IFRS 16, the carrying amount of the Group's lease-related assets increased by ¥100.2 billion, and lease liabilities increased by ¥100.6 billion as of the date of initial application.

The Company applied a method to recognize the cumulative impact of adopting this standard on the date of initial application, recognized as a transitional measure, although there was no cumulative impact on the adoption date.

In adopting IFRS 16, the Company did not review whether or not contracts are, or contain leases as of the adoption date, and adopted a method, recognized as a transitional measure, in which it maintained assessments based on IAS 17 Leases and the IFRIC 4 Determining Whether an Arrangement Contains a Lease.

Under IAS 17, the Group classified lease contracts as finance leases when substantially all risks and economic value associated with the ownership of leased assets were transferred. The Group otherwise classified these contracts as operating leases. Under IFRS 16, lease assets and lease liabilities are recognized based on the substance of transaction without classifying them.

For leases classified as finance leases under IAS 17, the carrying amount of right-of-use assets and lease liabilities is calculated as the carrying amount of the lease assets and lease liabilities measured based on IAS 17 immediately before the date of initial application.

For leases classified as operating leases under IAS 17, lease liabilities as of the date of initial application are measured at the present value, calculated by discounting total remaining lease payments using the lessees incremental borrowing rate. For right-of-use assets, lease liabilities are measured by adjusting for prepaid and accrued lease payments.

The Group applied the following methods recognized as transitional measures in adopting IFRS 16 for leases classified as operating leases under IAS 17.

- As an alternative to impairment reviews, right-of-use assets are adjusted by any provision for onerous contract amounts under IAS 37 Provisions, Contingent Liabilities, and Contingent Assets immediately before the date of initial application.
- Recognition exemptions for right-of-use assets and lease liabilities apply to leases with lease terms of 12 months or less.
- Exclude initial direct costs from measurements of right-of-use assets on the date of initial

- application.
- Use hindsight when determining the lease term if the contract includes extension or termination options.

When measuring lease liabilities, the Group discounts lease payments using the incremental borrowing rate as of the date of initial application. The weighted average incremental borrowing rate applied is 1.981%.

A reconciliation between total future minimum payment lease payments for non-cancelable operating leases at the end of the previous fiscal year and lease liabilities as of the date of initial application is as follows:

	Millions of yen
Total future minimum lease payments for non-cancelable operating leases as of March 31, 2019	¥ 48,720
Total future minimum lease payments for non-cancelable operating leases as of March 31, 2019 (after discounting by the incremental borrowing interest rate as of April 1, 2019)	45,194
Finance lease obligations as of March 31, 2019	16,329
Short-term leases or leases of low value assets for which liabilities are not recognized	(6,181)
Extension options that are reasonably likely to be exercised and termination options that are reasonably unlikely to be exercised	61,601
Lease liabilities as of April 1, 2019	116,943

7. New Standards and Interpretations Not Yet Applied

As of the reporting date, the Group did not apply new standards or interpretations issued by the approval date for the Consolidated Financial Statements, as their application was not mandatory and would not have materially affected the Consolidated Financial Statements.

Note 3

Significant Accounting Policies

1. Basis of Consolidation

(1) Subsidiaries

Subsidiaries are entities controlled by the Group. The Group has control over an entity if it has exposure or rights to variable returns from its involvement with the investee and has the ability to affect those returns through its influence over the investee.

In preparing its consolidated financial statements, the Company based the financial statements of each Group company prepared as of the same closing date based on common Group accounting policies. Subsidiaries' financial statements are adjusted, if necessary, when their accounting policies differ from those of the Group.

The Group consolidates entities from the date on which it acquires control until the date on which it loses control.

All intergroup balances, outstanding receivables and obligations, unrealized gains and losses are eliminated on consolidation.

A change in ownership interest of a consolidated subsidiary, without a loss of control, is accounted for as an equity transaction. Differences between adjusted non-controlling interest amounts and fair value are recognized directly as equity attributable to owners of the parent.

In the event of a loss of control, the Group measures and recognizes any remaining investments at fair value. Any gain or loss arising from a loss of control is recognized in profit or loss.

Non-controlling interests in a subsidiary's net assets are recognized separately from those under the Group's control. The comprehensive income of consolidated subsidiaries is attributed to owners of the parent and non-controlling interests even if this results in the non-controlling interests having a deficit balance.

(2) Associates

Associates are entities in which the Group has significant influence over the financial and operational policies but does not have control or joint control. Normally, the Group is assumed to be able to exercise significant influence when it holds 20% to 50% ownership. Other factors considered in assessing whether or not the Group can exercise significant influence include sending any of its officers being on the Board of Directors. In such cases, the Group may be considered to be able to exercise significant influence over an associate even if its investment accounts for less than 20% of voting rights.

The Group accounts for investments in associates under the equity method. Such investments are recognized at cost upon acquisition. After acquisition, the Group's share of net assets of associates is adjusted and recorded in the consolidated statement of

financial position.

The consolidated financial statements reflect the Group's share of earnings in associates. If amounts recognized in other comprehensive income of associates change, the Group's share with respect to those changes is also recognized in other comprehensive income.

The Group's consolidated financial statements have been adjusted to eliminate its share in unrealized gains and losses arising from transactions between it and associates.

Associates prepare their financial statements for the same reporting period as the Group, adjusting their accounting policies to align with those of the Group.

In the event that the Group loses significant control over an associate, it assesses and recognizes the remaining investment at fair value as of the day on which it lost such influence. Gains and losses arising from the loss of significant influence are recognized in profit or loss.

In preparing the consolidated financial statements, the requirements of local laws and shareholder agreements made it effectively impossible to match reporting dates of all associates to that of the Group. For certain associates for which it was impracticable to provisionally settle accounts on the Group's reporting date owing to business or other factors, the Group uses relevant provisional financial statements for the period ending December 31. Significant transactions or events between the reporting dates of those associates and the consolidated closing date are reflected in the consolidated financial statements.

(3) Joint Arrangements

A joint arrangement is an arrangement in which unanimous consensus from the parties that have joint control of decision-making over related activities is required.

A joint venture is a joint agreement through which parties with joint control over an arrangement have rights to the net assets of an arrangement.

The Group uses the equity method to account for its equity interests in joint ventures.

A joint operation is one in which parties with joint control of an arrangement have rights to assets and obligations for liabilities relating to the joint arrangement.

If the Group holds an interest in a joint operation, the Group recognizes assets, liabilities, revenues and expenses generated from joint operating activities only to the extent of its interest. Inter-company transactions among the Group's companies as well as receivable and payable balances and unrealized gains and losses arising from such transactions are eliminated.

The principal joint operation is The Saudi Methacrylates Company, in which the Group and Saudi Arabia have a 50-50 interest. That company manufactures methyl methacrylate monomer, acrylic resin, and other offerings.

2. Business Combinations

The Group uses the acquisition method to account for business combinations.

If the initial accounting for a business combination is incomplete by the end of the reporting period in which the combination occurs, the Group reports provisional amounts and adjusts the amounts in a measurement period that does not exceed one year from the acquisition date.

The Group measures the cost of an acquisition as the aggregate of the consideration transferred, measured at acquisition-date fair value and the amount of any non-controlling interest in the acquiree.

For each business combination, the Group measures components of non-controlling interests in the acquiree at fair value or the amounts of non-controlling interests in the acquiree's identifiable net assets.

The Group accounts for acquisition-related costs as expenses in the periods in which such costs are incurred.

When the Group acquires a business, the Group classifies or designates the identifiable assets acquired and liabilities assumed on the basis of the contractual terms, economic conditions and other pertinent conditions as they exist at the acquisition date. In principle, the Group generally measures the identifiable assets acquired and the liabilities assumed at their acquisition-date fair values.

If a business combination is achieved in stages, the Group reassesses the equity of the acquiree before acquisition of control at fair value on the acquisition date, and recognizes the resulting gain or loss in profit or loss. The Group accounts for the equity interest of the acquiree booked in other comprehensive income before the acquisition on

the same basis as would be required if the Group had disposed directly of the previously held equity interest.

Goodwill is measured as the difference by which total value recognized as transferred consideration and non-controlling interests exceeds the net value of identifiable assets acquired and liabilities assumed.

If the total amount recognized as transferred consideration and non-controlling interests is less than net amount of identifiable assets acquired and liabilities assumed, the Group recognizes the difference as profit or loss.

After initial recognition, the Group does not amortize goodwill acquired through a business combination, but records goodwill at cost less any accumulated impairment loss. The Group conducts impairment tests annually or when there are signs of impairment.

3. Foreign Currency Translations

The consolidated financial statements of the Group are presented in Japanese yen, which is the Company's functional currency.

In addition, each company in the Group determines its individual functional currency and measures transactions using these functional currencies.

Foreign currency denominated transactions are translated into functional currencies at spot exchange rates as of the transaction dates or at similar rates.

Foreign currency monetary assets and liabilities are translated into the functional currency using the spot exchange rate on the date of end of the consolidated reporting period. Exchange differences arising from translations or settlement are recognized in profit or loss. However, exchange differences arising from financial instruments designated as hedging instruments of net investments in foreign operations (foreign subsidiaries, etc.), financial assets measured through other comprehensive income and cash flow hedges are recognized in other comprehensive income.

The Group translates assets and liabilities of foreign operations using the spot exchange rate at the end of the reporting period, and revenue and expenses using the spot exchange rate on the transaction date or an approximate rate in Japanese yen, respectively. The Group accounts for any exchange differences arising in such retranslation in other comprehensive income.

On the disposal of a foreign operation, accumulated exchange differences related to the foreign operation are recognized in profit or loss in the corresponding period of disposal.

4. Sales Revenue

The Group recognizes sales revenue based on the following five-step model in amounts reflecting the Group's anticipated entitlements in exchange for goods or services transferred to customers.

Step 1: Identify the contract(s) with a customer

Step 2: Identify the performance obligations in the contract

Step 3: Determine the transaction price

Step 4: Allocate the transaction price to performance obligations in the contract

Step 5: Recognize revenue when (or as) the entity satisfies a performance obligation

The Group offers an array of products and services to domestic and foreign customers through its business activities. The Group operates in four business areas centered on four operating companies. They are Mitsubishi Chemical Corporation, Mitsubishi Tanabe Pharma Corporation, Life Science Institute, Inc., and Taiyo Nippon Sanso Corporation. The business segments are Performance Products, Chemicals, Industrial Gases, and Health Care.

Regarding product sales in these businesses, once customers gain control over delivered products and it is determined that the performance obligations are met, sales revenue is recognized upon product delivery.

Sales revenue is measured at the amount of consideration promised in contracts with customers, net of discounts, rebates and returns.

Considerations in product sales contracts are generally collected within one year after control of products transfers to customer, and do not include significant financial elements.

5. Government Grants

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

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

Government grants relating to assets are deducted from asset acquisition costs.

6. Borrowing Costs

The Group capitalizes borrowing costs that are directly attributable to the acquisition, construction or production of assets that require considerable time before use as intended or sale as part of the cost of that asset. The Group recognizes all other borrowing costs as expenses in periods incurred.

7. Income Taxes

The Group calculates current tax liabilities or assets for the current and prior periods as amounts that it expects to pay to or recover from taxation authorities. The Group uses tax rates and tax laws enacted or substantively enacted by the end of a reporting period to determine tax amounts.

The Group uses the asset and liability method to record deferred taxes for differences between carrying amounts of assets or liabilities on the accounts at the end of the reporting period and the tax basis (temporary differences).

In principle, the Group recognizes deferred tax liabilities for all future taxable temporary differences. Deferred tax assets are recognized to the extent that it is probably that taxable income will be available against which deductible temporary differences and for tax credits and tax loss carryforwards can be used.

As exceptions, however, the Group does not recognize deferred tax assets or deferred tax liabilities for the following temporary differences:

- The initial recognition of goodwill
- The initial recognition of assets or liabilities in transactions that are not business combinations and do not affect profits in the accounts at the time of transactions or taxable profits or losses.
- Deductible temporary differences arising from investments in subsidiaries and associates, and interests in joint ventures to the extent that it is probable that the timing of the reversal of the temporary difference in the foreseeable future and it is not probable that future taxable profits will be available against which they can be utilized.
- Taxable temporary differences arising from investments in subsidiaries and associates, and interests in joint ventures to the extent that the timing of the reversal of the temporary difference is controlled and that it is probable the temporary difference will not reverse in the foreseeable future.

The Group reviews the carrying amount of deferred tax assets and liabilities (including unrecognized deferred tax assets) at the end of each reporting period. The Group calculates deferred tax and liabilities based on tax rates and tax laws that have been enacted or substantively enacted by the end of the reporting period, estimating tax rates at the time assets materialize or liabilities are settled.

8. Earnings per Share

The Company calculates basic earnings per share by dividing the net income attributable to ordinary shareholders by the weighted average number of ordinary shares, adjusted for treasury stock during that period. The Company calculates diluted earnings per share by adjusting the effects of all potentially dilutive shares.

9. Cash and Cash Equivalents

Cash and cash equivalents comprise cash on hand, demand deposits, and short-term investments that are readily convertible to cash, which are subject to insignificant risks of changes in value, and whose maturities are three months or less from the date of acquisition.

10. Inventories

The cost of inventories comprises all purchase costs, processing costs, and all costs incurred in bringing the inventories to their present location and condition. Inventories are measured at the lower of acquisition cost and net realizable value. The Company mainly uses the weighted average cost formula to calculate costs. The

Company calculates net realizable value by deducting the estimated selling price in the ordinary course of business from the estimated costs required to make a sale.

11. Assets Held for Sale and Discontinued Operations

The Company classifies a non-current asset (or disposal group) as held for sale if its carrying amount is expected to be recovered principally through a sale transaction rather than through continuing use. This applies only if the asset (or disposal group) is available for immediate sale in its present condition and a sale is highly probable within one year. The Company measures a non-current asset (or disposal group) classified as held for sale at the lower of the carrying amount and fair value, less the cost to sell.

The Group does not depreciate or amortize property, plant or equipment or intangible assets classified as held for sale.

Discontinued operations include units that have been disposed of or are classified as held for sale. The Group recognizes an operation as discontinued if it is a Group business and is scheduled for disposal.

12. Property, Plant and Equipment

The Group applies the cost model to measure property, plant and equipment.

The Group carries property, plant and equipment at acquisition cost less accumulated depreciation and accumulated impairment losses.

The acquisition cost includes direct costs of acquisition, estimated costs of dismantlement, removal and restoration, and borrowing costs that satisfy capitalization criteria.

Except for land, property, plant and equipment, less the residual value at the end of the reporting term, is depreciated using the straight-line method.

Depreciation is computed over the following estimated useful lives for the following major classes of assets:

Buildings and structures	3 to 50 years
Machinery, equipment and vehicles	2 to 22 years
Tools, furniture and fixtures	2 to 25 years

13. Intangible Assets

The Group uses the cost model to measure intangible assets.

Intangible assets are stated at acquisition cost less accumulated amortization and impairment losses.

Separately acquired intangible assets are initially recognized at cost. The acquisition cost of an intangible asset acquired in a business combination is measured at fair value at the acquisition date.

Expenditure on an internally generated intangible asset is recognized as an expense when it is incurred, excluding development expenditures that satisfy the criteria for capitalization.

The Group amortizes intangible assets with finite useful lives on a straight-line basis over their useful lives. It tests intangible assets when there are indications of impairment. Amortization periods and methods for intangible assets with finite useful lives are reviewed at year-end. Any changes are applied to the future as changes in accounting estimates.

Amortization is over the following estimated useful lives for the following major classes of intangible assets:

Technology-related intangible assets	4 to 20 years
Customer-related intangible assets	5 to 30 years
Software	3 to 5 years

The Group does not amortize intangible assets with indefinite useful lives, and conducts impairment tests individually or by cash-generating unit (or groups of cash-generating units) annually, and whenever there are indications of impairment.

14. Impairment of Assets

(1) Impairment of Non-Financial Assets

The Group assesses whether indications of asset impairment exist at the end of each reporting period. If there are such indications and annual impairment testing is necessary, the Group estimates recoverable amounts, which are the higher amount of

fair value less costs of disposal and value in use. If a recoverable amount of an asset cannot be estimated, the Group estimates the recoverable amount of each cash-generating unit or group of cash-generating units of the asset class. If the carrying amount of an asset exceeds its recoverable amount, the Group recognizes an impairment loss and reduces the carrying amount of the asset to its recoverable amount. In measuring value in use, the Group determines the present value of cash flow projections, discounted by pre-tax rates reflecting current market assessments of the time value of money and risks specific to the asset. The Group estimates cash flow projections using a business plan for five years or less, in principle. Cash flow projections beyond the business plan period use long-term-average growth rates according to individual circumstances.

The Group uses an appropriate valuation model supported by an available fair value index to measure fair value less costs of disposal.

The Group allocates goodwill after acquisition dates to individual or groups of cash generating units expected to benefit from corporate combination synergies.

For goodwill, intangible assets with indefinite useful lives and intangible assets not yet available for use, the Group tests for impairment annually and when there are indications of impairment.

(2) Reversal of Impairment Loss

For assets other than goodwill, at the end of each reporting period the Group evaluates whether assumptions used to measure recoverable amounts have changed for impairment losses recognized in prior periods and if there are indications that such losses have decreased or disappeared.

If such indications exist, the Group reverses impairment losses if recoverable amounts exceed the Group's carrying amounts of assets or cash-generating units. Any reversal is limited to the lower of the estimated recoverable amount or the carrying value that would have been determined, net of accumulated depreciation, had no impairment loss been recognized in prior periods.

Impairment loss reversals are recognized in profit or loss.

Goodwill impairment losses are not reversed.

15. Leases

Year ended March 31, 2019

A lease contract is classified as a finance lease if it transfers substantially all the risks and rewards incidental to ownership of a leased asset to the Group. An operating lease is a lease other than a finance lease.

In finance lease transactions, leased assets and lease obligations are recognized in the consolidated statement of financial position at the lower of the fair value of the leased property or the present value of the minimum lease payments, each determined at the inception of the lease. Lease payments are apportioned between the financial cost and reduction of lease obligations based on the interest method. Financial costs are recognized in profit or loss. Leased assets are depreciated on a straight-line basis over the useful lives or lease term, whichever is shorter.

In operating lease transactions, lease payments are recognized as an expense in the Consolidated Statement of Income on a straight-line basis over the lease terms. Variable lease is charged as expenses in the period when they are incurred.

Determining whether an arrangement is, or contains, a lease is based on the substance of the arrangement regardless of whether it takes the legal form of a lease.

Year ended March 31, 2020

When transferring the right to control the use of assets specified in lease contracts in exchange for consideration over a certain period, the Group recognizes lease transactions and the right-of-use assets and lease liabilities as of the commencement date of the lease. Determining whether an arrangement is, or contains, a lease is based on the substance of an arrangement regardless of whether it takes the legal form of a lease.

Lease liabilities are measured as the discounted present value of unsettled portions of lease payments at the lease commencement date. Right-of-use assets are initially measured by adjusting initial direct costs, prepaid lease fees, and other charges for lease liabilities, adding costs for the obligation to restore to original condition and other requirements based on lease contracts.

Lease payments are allocated to the repayment portion of the net financial expenses and lease liabilities so the amount produces a constant periodic rate of interest on the remaining balance of the lease liability, with financial expenses being recognized in profit or loss.

Right-of-use assets are depreciated over their service lives where ownership of the

underlying assets transfer to the lessees by the end of lease periods or where the costs of right-of-use assets reflect the exercise of purchase options. In other cases, assets are depreciated systematically over the shorter of service lives or lease periods.

For leases ending within 12 months or leases for which the underlying asset is of low value, related lease payments are systematically recognized as costs over the lease periods.

16. Provisions

A provision is recognized when the Group has a present obligation (legal or constructive) as a result of a past event, it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation, and the amount of the obligation can be estimated reliably.

Where the effect of the time value of money is material, the provision is measured at the present value of the expenditures expected to be required to settle obligations. The discount rate used in measuring the present value is a pre-tax rate that reflects current market assessments of the time value of money and risks inherent in the liability.

17. Retirement Benefits

The Group operates a defined benefit plan and defined contribution plan as employee retirement benefit plans.

The Group uses the projected unit credit method to determine the present value of its defined benefit obligations and the related current and past service costs for each plan.

The rate used to discount post-employment benefit obligations is determined by referring to market yields at the end of the reporting period on high quality corporate bonds.

The fair value of any plan assets is deducted from the present value of the defined benefit obligation in determining the amount of the net defined benefit liabilities or assets of defined benefit plans.

Remeasurements of liabilities and assets associated with defined benefit retirement plans are recognized in other comprehensive income in the period incurred and immediately reflected in retained earnings. Prior service costs are recognized as expenses in the periods incurred.

The Group recognizes contributions payable to defined contribution plans as expenses at the time of contribution.

18. Capital

(1) Ordinary Shares

The Company allocated the issue price of ordinary shares between common stock and additional paid-in capital.

(2) Treasury Shares

Acquired treasury stock is recognized at cost and deducted from equity, while the difference between the carrying value of treasury stock and its value at the time of sale is recognized in additional paid-in capital.

19. Share-Based Payment

The Company and some subsidiaries employ equity-settled share-based compensation plans.

Under such plans, services received are measured at fair value as of the date capital financial instruments are granted. If granted capital financial instruments are immediately determined, all services received on the grant date is recognized as expenses, that amount being recognized as an increase in equity. If granted capital financial instruments are determined after a certain period of time, they are recognized as expenses over the vesting period from the date granted, that amount being recognized as an increase in equity.

20. Financial Instruments

(1) Financial Assets (Except Derivatives)

(i) Initial Recognition and Measurement

The Group initially recognizes trade receivables at the date of occurrence. The Group initially recognizes all other financial assets on the transaction dates on which the Group becomes a contract party.

Financial assets are classified as financial assets measured at fair value through profit or loss or other comprehensive income and financial assets measured at amortized cost. The Group determines classifications at initial recognition.

Debt financial instruments are classified as financial assets measured at amortized

cost if both of the following conditions are met.

- Financial assets are based on a business model where the aim is to hold financial assets to recover contractual cash flows
- Contractual terms of financial assets give rise on specified dates to cash flows that are solely payments of principal and interest on principal amounts outstanding

Debt financial instruments meeting the following conditions and measured at fair value are classified as financial assets measured at fair value through other comprehensive income. Otherwise, they are classified as financial assets measured at fair value through profit or loss.

- Financial assets are based on a business model where the aim is to hold financial assets to collect contractual cash flows and sell assets
- Contractual terms of financial assets give rise on specified dates to cash flows that are solely payments of principal and interest on principal amounts outstanding

Equity instruments other than those for trading purpose are designated as measured at fair value through profit or loss or as measured at fair value through other comprehensive income. Such designations are applied subsequently on a consistent basis.

Except for financial assets measured at fair value through profit or loss, financial instruments are measured at fair value plus transaction costs attributable directly to them.

(ii) Subsequent Measurements

After initial recognition, financial assets are measured based on the following classifications:

(a) Financial Assets Measured at Amortized Cost

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

(b) Other Financial Assets

Financial assets other than those measured at amortized cost are measured at fair value.

Changes in the fair value of financial assets measured at fair value are recognized in profit or loss or in other comprehensive income.

Changes in the fair value of equity instruments designated as measured at fair value through other comprehensive income are recognized in other comprehensive income and the amount in other comprehensive income is transferred to retained earnings when equity instruments are derecognized or when the fair value of equity instruments declines significantly.

(iii) Derecognition

The Group derecognizes a financial asset only when the contractual rights to the cash flows from the financial asset expire or when the Group transfers the financial asset and the substantially all the risks and rewards of ownership of the financial asset are transferred.

If the Group neither transfers nor retains substantially all the risks and rewards of ownership of a transferred asset and retains control of the transferred asset, the Group recognizes the residual interest in the transferred asset and the associated liability to be payable to the extent of the Group's continuing involvement.

(iv) Impairment

At each closing date, the Group assesses whether the credit risk on a financial asset or a financial asset group measured at amortized cost or a financial guarantee contract has increased significantly since initially recognizing the impairment of a financial asset or financial guarantee contract.

If, at the closing date, the credit risk of a financial asset or a financial asset group has not increased significantly since initial recognition, the Group measures the loss allowance for that financial asset at an amount equal to 12-month expected credit losses. However, the Group recognizes the expected credit losses of trade receivables over the remaining period from the initial recognition.

If a credit risk has increased significantly since initial recognition, the Group recognizes an expected credit loss over the remaining period as a loss allowance.

The Group assesses whether the credit risk has increased significantly using the change in the risk of default, and assesses whether the default risk has changed mainly using delinquent (past due information).

The Group measures a credit loss using the discounted present value of the difference between the contractual amount receivable and the estimate amount

receivable based on the past credit loss.

(2) Financial Liabilities (Except Derivatives)

(i) Initial Recognition and Measurement

Financial liabilities are classified into financial liabilities measured at fair value through profit or loss and financial liabilities measured at amortized cost. The Group determines classifications at initial recognition.

Although all financial liabilities are measured at fair value at initial recognition, financial liabilities measured at amortized cost are measured at cost after deducting, from the fair value, transaction costs that are directly attributable to the financial liabilities.

(ii) Subsequent Measurement

After initial recognition, financial liabilities are measured based on classifications as follows:

(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, portions of changes in fair value attributed to the change in credit risk of the Group are recognized in other comprehensive income, and the balance is recognized in profit or loss.

(b) Financial Liabilities Measured at Amortized Cost

After initial recognition, financial liabilities measured at amortized cost are measured at amortized cost using the effective interest method. Amortization under the effective interest method and gains or losses on derecognition is recognized in profit or loss.

(iii) Derecognition

Financial liabilities are derecognized when the obligation is discharged, canceled or expired, or when they are exchanged with substantially different terms or their terms are modified substantially.

(3) Complex Financial Instruments

The Group measures and initially recognizes hybrid financial instrument liabilities at the fair value of similar liabilities that do not have equity conversion options. Equity is measured and initially recognized at fair value after deducting the fair value of the liabilities of complex financial instruments overall. Direct transaction costs are allocated according to initial carrying amount ratio of liabilities and equity. After initial recognition, complex financial instruments liabilities are measured at amortized cost using the effective interest method. The Company does not remeasure complex financial instrument equity after initial recognition.

(4) Offsetting of Financial Instruments

Financial assets and financial liabilities are offset and presented as a net amount in the consolidated statement of financial position only when there is a legally enforceable right to set off the recognized amounts and the Group intends either to settle on a net basis or to realize the asset and settle the liability simultaneously.

(5) Derivatives and Hedge Accounting

The Group uses derivatives, including forward foreign exchange contracts and interest rate swap contracts, to hedge foreign exchange and interest rate risks. These derivatives are initially measured at fair value when contracts are entered into and are subsequently remeasured at fair value.

Changes in the fair value of derivatives are recognized in profit or loss, although gains or losses on hedging instruments relating to the effective portions of cash flow hedges and hedges of net investments in foreign operations are recognized in other comprehensive income.

At the inception of hedging relationships, the Group formally designates and documents relationships to which hedge accounting applies and the objectives and strategies of risk management for undertaking the hedges. The documentation includes identifying hedging instruments, the hedged items or transactions, the nature of the risks being hedged and how the hedging instrument effectiveness (including its analysis of the sources of hedge ineffectiveness and how it determines the hedge ratio) is assessed in offsetting the exposure to changes in hedged item fair value or cash flows attributable to hedged risks. When designating a hedging relationship and on an ongoing basis, the Group analyses whether a derivative used to a hedge transaction is effective to offset the change in the fair value or the cash flow of a hedged item. The Group specifically

determines that a hedge is effective when the economic relationship between the hedged item and the hedging instrument is offset.

Hedges that meet the requirements for hedge accounting are classified in the following categories and accounted for in accordance with IFRS 9 “Financial Instruments”.

(a) Fair Value Hedges

Changes in the fair value of derivatives are recognized in profit or loss. For changes in the fair value of hedged items attributable to the hedged risks, carrying amounts of hedged items are adjusted, with changes recognized in profit or loss.

(b) Cash Flow Hedges

The effective portion of gains or losses on hedging instruments is recognized in other comprehensive income, while the ineffective portion is recognized immediately in profit or loss.

Hedging instrument amounts recognized in other comprehensive income are reclassified to profit or loss when the transactions of the hedged items affect profit or loss. Where hedged items result in the recognition of non-financial assets or liabilities, the amounts recognized in other comprehensive income are accounted for as adjustments to the original carrying amount of non-financial assets or liabilities.

When forecast transactions are no longer expected to occur, any related cumulative gain or loss that has been recognized in equity as other comprehensive income is reclassified to profit or loss. When hedging instruments expire, are sold, terminated or exercised without the replacement or rollover of other hedging instruments, or when the hedge designation is revoked due to change in the risk management objective, accumulated amounts that have been recognized in other comprehensive income continue to be recognized in other comprehensive income until the forecast transactions occur.

(c) Hedges of Net Investments in Foreign Operations

Hedges of net investments in foreign operations are accounted for similarly to cash flow hedges. The effective portion of gains or losses on hedging instruments is recognized in other comprehensive income. The ineffective portion is recognized in profit or loss. At the time of the disposal of the foreign operations, any related cumulative gain or loss recognized in equity as other comprehensive income is reclassified to profit or loss.

(6) Fair Value of Financial Instruments

The fair value of financial instruments that are traded in active financial markets at the fiscal year-end refers to quoted prices or dealer quotations.

If there is no active market, the fair value of financial instruments is determined referring to appropriate valuation models or prices presented by related financial institutions.

Note 4

Segment Information

1. Overview of Reporting Segments

The Group’s reporting segments are the components for which separate financial information is available, and the Board of Directors regularly assesses this information in deciding how to allocate resources and evaluate results. No operating segments or components have been aggregated in preparing the reporting segment information.

The Group operates in four business areas centered on four operating companies. They are Mitsubishi Chemical Corporation, Mitsubishi Tanabe Pharma Corporation, Life Science Institute, Inc., and Taiyo Nippon Sanso Corporation. The business segments are Performance Products, Chemicals, Industrial Gases, and Health Care.

The businesses in each reporting segment are as follows:

Business Domains	Business Segments	Sub Business Segments		
		Businesses		
Performance Products	Performance Products	Functional Products	Information, Electronics & Displays	Optical Films, Displays, and Semiconductor-Related Products
			High Performance Films	Packaging and Industrial Films
			Environment and Living Solutions	Aqua and Separator Solutions, Infrastructure Solutions, and Agricultural Materials
			Advanced Moldings and Composites	High-Performance Engineering Plastics, Fibers and Textiles, Carbon Fiber and Composite Materials, Functional Moldings and Composites, Alumina Fibers Light and Metal Products
	Performance chemicals	Advanced Polymers	Performance and Engineering Polymers and Sustainable Resources	
		High Performance Chemicals	Performance Chemicals and Materials and Food Ingredients	
		New energy	Lithium Ion Battery Materials and Energy Transduction Materials	
Industrial Materials	Chemicals	MMA	MMA	MMA
		Petrochemicals	Petrochemicals	Basic Petrochemicals, Polyolefins, and Basic Chemical Derivatives
		Carbon Products	Carbon Products	Carbon Products
	Industrial Gases			Industrial Gases
Health Care	Health Care			Ethical Pharmaceuticals
				Life Science

Accounting policies for reportable segments are identical to those Group accounting policies stated in Note 3, Significant Accounting Policies. Inter-segment sales and transfers are based mainly on prevailing market prices.

In keeping with an exchange of all of its shares in LSI Medience Corporation, the Company classified the businesses of that consolidated subsidiary and its subsidiaries and affiliate as discontinued operations. Segment revenues and operating results for the years ended March 31, 2019 and 2020, present the amounts from continuing operations, excluding those of discontinued operations. Details of discontinued operations are described in Note 6, Discontinued Operations.

2. Revenues and Operating Results for the Group's Reporting Segments

The Group evaluates results based on segment profits.

Year ended March 31, 2019

	REPORTING SEGMENT					Others (Note 1)	Subtotal	Adjustments (Note 2)	Consolidated
	Performance Products	Chemicals	Industrial Gases	Health Care	Total				
Sales revenue									
External revenue	¥1,155,496	¥1,275,973	¥732,837	¥ 462,563	¥3,626,869	¥213,472	¥3,840,341	¥ —	¥3,840,341
Inter-segment revenue	65,137	63,778	7,504	705	137,124	131,812	268,936	(268,936)	—
Total	¥1,220,633	¥1,339,751	¥740,341	¥ 463,268	¥3,763,993	¥345,284	¥4,109,277	¥ (268,936)	¥3,840,341
Segment profit (loss)									
Core operating income (Note 3)	¥ 71,338	¥ 127,950	¥ 63,323	¥ 53,782	¥ 316,393	¥ 7,932	¥ 324,325	¥ (10,221)	¥ 314,104
Segment assets	1,213,619	1,343,146	1,849,857	1,171,411	5,578,033	1,002,178	6,580,211	(1,007,703)	5,572,508
Other items									
Depreciation and amortization	54,838	60,386	58,554	16,274	190,052	3,273	193,325	2,732	196,057
Share of profit of investments accounted for using the equity method	8,189	14,692	3,836	(21)	26,696	82	26,778	—	26,778
Investments accounted for using the equity method	62,524	68,182	34,318	16,536	181,560	1,507	183,067	—	183,067
Capital expenditures	64,768	71,043	72,056	17,985	225,852	3,729	229,581	2,161	231,742

Notes:

- The Others category consists of businesses not included in reporting segments and mainly includes engineering, transportation, and warehousing operations.
- The segment profit (loss) adjustment includes corporate costs of ¥(10,189) million not allocated to reporting segments and inter-segment eliminations of ¥(32) million. Corporate costs include expenditures on basin testing, research, and other activities not allocated to reporting segments. The segment assets adjustment includes corporate assets of ¥95,968 million not allocated to reporting segments and inter-segment eliminations of ¥(1,103,671) million. Corporate assets include financial assets not allocated to reporting segments.
- Segment profit (loss) is Operating profit in accordance with IFRS after excluding earnings from non-recurring factors, such as losses from business withdrawals and downsizings, representing core operating income.

Year ended March 31, 2020

	REPORTING SEGMENT					Others (Note 1)	Subtotal	Adjustments (Note 2)	Consolidated
	Performance Products	Chemicals	Industrial Gases	Health Care	Total				
Sales revenue									
External revenue	¥1,081,612	¥1,057,054	¥843,340	¥ 413,140	¥3,395,146	¥ 185,364	¥3,580,510	¥ —	¥3,580,510
Inter-segment revenue	63,116	47,875	6,900	603	118,494	183,336	301,830	(301,830)	—
Total	¥1,144,728	¥1,104,929	¥850,240	¥ 413,743	¥3,513,640	¥ 368,700	¥3,882,340	¥ (301,830)	¥3,580,510
Segment profit (loss)									
Core operating income (Note 3)	¥ 62,668	¥ 30,265	¥ 87,973	¥ 14,638	¥ 195,544	¥ 12,319	¥ 207,863	¥ (13,043)	¥ 194,820
Segment assets	1,176,280	1,121,561	1,825,927	1,130,496	5,254,264	916,415	6,170,679	(1,038,530)	5,132,149
Other items									
Depreciation and amortization	56,725	64,809	86,164	20,469	228,167	6,259	234,426	4,186	238,612
Share of profit of investments accounted for using the equity method	4,733	4,964	3,569	8	13,274	158	13,432	—	13,432
Investments accounted for using the equity method	59,460	60,832	31,949	16,145	168,386	1,572	169,958	—	169,958
Capital expenditures	76,344	57,598	74,748	24,240	232,930	3,130	236,060	4,330	240,390

Notes:

- The Others category consists of businesses not included in reporting segments and mainly includes engineering, transportation, and warehousing operations.
- The segment profit (loss) adjustment includes corporate costs of ¥(13,060) million not allocated to reporting segments and inter-segment eliminations of ¥17 million. Corporate costs include expenditures on basic testing, research, and other activities not allocated to reporting segments. The segment assets adjustment includes corporate assets of ¥84,412 million not allocated to reporting segments and inter-segment eliminations of ¥(1,122,942) million. Corporate assets include financial assets not allocated to reporting segments. Intersegment elimination transactions mainly comprise cash management system-based loan eliminations.
- Segment profit (loss) is Operating profit in accordance with IFRS after excluding earnings from non-recurring factors, such as losses from business withdrawals and downsizings, representing core operating income.
- From the first quarter of the year ended March 31, 2020, the Company reviewed segments for some businesses and consolidated subsidiaries and changed its method of allocating some common expenses. The Company used new classifications to present segment information for the previous year.

Adjustments to income before tax from segment operating results are as follows:

	Millions of yen	
	Year ended March 31, 2019	Year ended March 31, 2020
Segment operating results	¥314,104	¥194,820
Gain on sales of property, plant and equipment	2,507	7,902
Reversal of impairment loss	—	1,720
Gain on sales of shares of subsidiaries and associates	7,538	523
Impairment loss (Note)	(11,775)	(43,916)
Loss on sales and disposal of fixed assets	(8,542)	(9,900)
Early retirement program expenses	(931)	(2,008)
Loss on sales of subsidiaries and associates	(34)	(1,512)
Provision for loss on business liquidation	(5,169)	—
Others	(2,946)	(3,344)
Operating income	294,752	144,285
Financial income	10,226	7,206
Financial expenses	(20,132)	(29,488)
Income before taxes	¥284,846	¥122,003

Note: See Note 16 Impairment Losses for details.

3. Geographic Information

The breakdown of external sales revenue and non-current assets is as follows:

External sales revenue

	Millions of yen	
	Year ended March 31, 2019	Year ended March 31, 2020
Japan	¥2,175,766	¥2,046,147
Asia and Oceania	770,445	645,049
(China)	(292,023)	(246,220)
North America	468,874	453,750
Europe	389,681	405,719
Others	35,575	29,845
Total	¥3,840,341	¥3,580,510

Note: Sales revenue is classified by country or region according to the locations of sales destinations.

Non-current assets

	Millions of yen	
	As of March 31, 2019	As of March 31, 2020
Japan	¥1,219,668	¥1,230,218
Asia and Oceania	425,233	417,522
North America	460,392	459,990
Europe	786,908	757,228
Others	16,929	12,086
Total	¥2,909,130	¥2,877,044

Note: Non-current assets are based on the locations of the assets and do not include financial instruments, deferred tax assets and retirement benefit asset.

4. Information about Major Customers

This information has been omitted because no external customers account for more than 10% of sales revenue.

Note 5

Business Combinations

Year ended March 31, 2019

1. Taiyo Nippon Sanso Corporation acquisition of European business of Plaxair of the United States

Consolidated subsidiary Taiyo Nippon Sanso Corporation acquired the European business of Plaxair, Inc., of the United States on December 3, 2018, through subsidiary Nippon Gases Euro-Holding S.L.U. and other entities.

(1) Overview of business combination

1. Names and business descriptions of acquired companies

Name : Praxair Espana S.L.U. and 36 other entities
Description of business: Praxair's European operations, including industrial gas businesses in Germany, Spain, Portugal, Italy, Norway, Denmark, Sweden, Netherlands, and Belgium, carbon dioxide businesses in the United Kingdom, Ireland, Netherlands, and France, and helium-related businesses

2. Main reason for business combination

Taiyo Nippon Sanso Corporation aims to enhance its global competitiveness amid an ongoing industry reorganization and solidify its position by pursuing a long-term business vision of generating ¥1 trillion in sales revenue, an operating margin of 10%, and a return on capital employed of more than 10%, deriving more than half of its sales revenues from overseas markets. The acquisition is a major step toward materializing that vision, and also represents a solid, strategically significant investment opportunity.

Europe's industrial gas market ranks second only to North America's, and features a stable competitive climate. Acquiring businesses with market shares in areas that it had yet to tap enable the company to make strong progress in globalizing. While acquiring highly profitable businesses of a certain scale and network (including manufacturing units), it also secures talented people, including top management, and business platforms. Under such business foundations, Taiyo Nippon Sanso Corporation will cultivate products, including by drawing on offerings that are compatible with environmental regulations, while pursuing a policy of strengthening the Group's cross-functional capabilities, including by expanding marketing to global enterprises.

3. Acquisition date

December 3, 2018

4. Method for gaining control of acquired company

Acquisition of shares for cash

5. Percentage of voting rights acquired

100%

(2) Fair value of consideration transferred

	Millions of yen
	Acquisition date (December 3, 2018)
Cash	¥635,847
Cost of the acquisition	¥635,847

(3) Assets acquired, liabilities assumed, non-controlling interests, and goodwill

	Millions of yen
	Acquisition date (December 3, 2018)
Current assets:	
Cash and cash equivalents	¥ 4,354
Trade receivables	32,664
Inventories	8,368
Others	3,681
Non-current assets:	

Property, plant and equipment (Note 1)	190,561
Intangible assets (Note 1)	208,301
Investments accounted for using the equity method	5,998
Others	4,196
Acquired assets	458,123
Current liabilities:	
Trade payables	23,882
Other financial liabilities	13,593
Others	12,254
Non-current liabilities:	
Retirement benefit liabilities	6,942
Deferred tax liabilities	72,444
Others	1,297
Liabilities assumed	130,412
Net assets acquired and liabilities assumed	327,711
Non-controlling interests	2,265
Goodwill (Note 2)	310,401

Notes

- Composition of property, plant and equipment and intangible assets
Property, plant and equipment mainly comprised ¥136,460 million in machinery, equipment, and vehicles. Intangible assets of ¥203,900 million were mainly for customers.
- Goodwill
Goodwill mainly comprises anticipated synergies and excess earnings capabilities arising from acquisition that do not match specific recognition criteria. Goodwill is not deductible for tax purposes.

(4) Acquisition-related expenses

Acquisition-related costs were ¥6,722 million, of which ¥2,695 million in selling, general and administrative expenses and ¥548 million in financial expenses were included in the Consolidated Statement of Income for the year ended March 31, 2019. The Consolidated Statement of Financial Position for the year included ¥(771) million in bonds and borrowings in current liabilities and ¥(2,708) million in bonds and borrowings in non-current liabilities. Acquisition-related expenses in the Consolidated Statement of Financial Position were costs of bond issue expenses and debt origination costs from obtaining to acquisition funds deducted from fair value at the time of initial recognition of the bonds and borrowings during the year ended March 31, 2019 that were not posted as financial expenses at the end of the period.

(5) Impact on Group business results

The Consolidated Statement of Income for the year ended March 31, 2019 included sales revenue of ¥55,101 million and net income of ¥6,167 million that the acquired company generated subsequent to the acquisition date.

If the business combination were on April 1, 2018, the start of the year ended March 31, 2019, the Group's pro forma sales revenue would have been ¥4,040,646 million, with net income of ¥226,781 million. The pro forma information has not been audited.

2. Acquisition of hydrogen and carbon monoxide business and related business assets in United States by Matheson Tri-Gas

Through Matheson Tri-Gas, Inc., a wholly owned subsidiary of consolidated subsidiary Taiyo Nippon Sanso Corporation acquired a portion of the hydrogen and carbon monoxide (HyCO) business and related U.S. assets of Linde Gas North America LLC.

(1) Overview of business combination

1. Name of counterparty company and description of business

Name : Linde Gas North America LLC
Description of business: Portion of HyCO business (see note) of Linde Gas North America LLC in the United States

Note: Large-scale supply of hydrogen and carbon monoxide derived from natural gas and other sources with steam reforming and other apparatuses through pipelines to petroleum refining and petrochemical industries

2. Main reason for business combination

Under the Ortus Stage 2 medium-term management plan, Taiyo Nippon Sanso Corporation aims to strategically expand in the gas technology area through mergers and acquisitions, and explored fully entering the HyCO business from the perspective of bolstering its product lineup to strengthen its proposal capabilities. The acquisition will enable the company to materialize that goal, generating the following envisaged benefits for the Taiyo Nippon Sanso Group.

- (i) Secure stable medium- and long-term earnings from on-site supplies of hydrogen and carbon monoxide
- (ii) Secure human and technological resources to streamline HyCO business operations
- (iii) Strengthening proposal capabilities for new on-site demand (including oil refining and petrochemicals) in the United States

3. Acquisition date: February 27, 2019

4. Method for gaining control of acquired company

A portion of the HyCO business of Linde Gas North America LLC in the United States and related U.S. business assets was acquired for cash by consolidated subsidiary Matheson Tri-Gas, Inc.

(2) Fair value of consideration transferred

	Millions of yen
	Acquisition date (February 27, 2019)
Cash	¥46,133
Cost of the acquisition	¥46,133

(3) Assets acquired, liabilities assumed, and goodwill

	Millions of yen
	Acquisition date (February 27, 2019)
Current assets	¥ 215
Non-current assets:	
Property, plant and equipment (Note 1)	31,387
Intangible assets (Note 1)	7,852
Acquired assets	39,454
Non-current liabilities	498
Liabilities assumed	498
Net assets acquired and liabilities assumed	38,956
Goodwill (Note 2)	7,177

Although this acquisition was accounted for on a provisional basis in the previous fiscal year, initial accounting for the business combination was completed in the second quarter of the year ended March 31, 2020. The Company accordingly adjusted provisional amounts above. The impact of the revisions is immaterial.

Notes:

1. Composition of property, plant and equipment and intangible assets
Property, plant and equipment mainly comprised ¥31,361 million in machinery, equipment and vehicles.
Intangible assets of ¥7,852 million were mainly customer-related intangible assets.
2. Goodwill
Goodwill mainly comprises anticipated synergies and excess earnings capabilities arising from acquisition that do not match specific recognition criteria. Goodwill is tax deductible for fixed periods.

(4) Acquisition related expenses

Acquisition-related expenses were ¥149 million and were included in selling, general and administrative expenses in the Consolidated Statement of Income for the year ended March 31, 2019.

(5) Impact on Group business results

If the business combination were on April 1, 2018, the start of the year ended March 31, 2019, the Group's pro forma sales revenue would have been ¥3,933,102 million, with net income of ¥219,046 million. The pro forma information has not been audited.

Year ended March 31, 2020

There were no significant business combinations in the year ended March 31, 2020.

Note 6

Discontinued Operations

1. Outline of Discontinued Operations

On May 14, 2019, Life Science Institute, Inc.(LSII), a consolidated subsidiary in the Health Care segment, came to an agreement on a strategic capital partnership with PHC Holdings Corporation (PHCHD), which engages in the health care business in Japan and overseas. In this agreement, it was determined that LSII would exchange all of its shares in LSI Medience Corporation (LSIM) for a part of PHCHD shares. On August 1, LSII completed the planned share exchange. In fiscal 2019, the company accordingly classified the earnings related to LSIM and its subsidiaries and affiliate and gains on the share exchange discontinued operations. Figures for the previous fiscal year have been restated, with the discontinued operations presented separately.

2. Profit or Loss from Discontinued Operations

Details of net income from discontinued operations in the Consolidated Statement of Income are as follows:

	Millions of yen	
	Year ended March 31, 2019	Year ended March 31, 2020
Revenue (Note 1)	¥83,304	¥52,754
Cost	(80,094)	(27,169)
Income from discontinued operations before taxes	¥ 3,210	¥25,585
Income taxes (Note 2)	(738)	(8,693)
Net income from discontinued operations	¥ 2,472	¥16,892

Notes:

1. In the fiscal year ended March 31, 2020, this included ¥23,922 million from a gain on share exchanges.
2. In the fiscal year ended March 31, 2020, this included ¥(8,117) million from income taxes related to gain on share exchanges.

3. Cash Flows from Discontinued Operations

Cash flows from discontinued operations included in the Consolidated Statement of Cash Flows are as follows:

	Millions of yen	
	Year ended March 31, 2019	Year ended March 31, 2020
Cash flows from operating activities	¥5,197	¥ 2,886
Cash flows from investing activities	(2,512)	12,608
Cash flows from financing activities	(173)	(994)
Total	¥2,512	¥ 14,500

4. Supplementary Information Relating to Cash Flows

The net assets and liabilities of LSI Medience Corporation and its subsidiaries excluded as of the date of the share exchange in connection with the share exchange and shares included for PHC Holdings Corporation are as follows:

	Share exchange date (August 1, 2019)
Cash and cash equivalents (Note)	¥ 753
Net amount of assets other than cash and cash equivalents and shares accepted	28,232
Liabilities (Note)	(52,957)

Note:

In keeping with the loss of control of LSI Medience Corporation and its subsidiaries, the net of ¥(753) million of cash and cash equivalents held by LSI Medience Corporation and its subsidiaries and proceeds from collections of loans to LSI Medience Corporation and its subsidiaries of ¥15,185 million is presented in the Consolidated Statement of Cash Flows as ¥14,432 million in proceeds from loss of control due to share exchange in Cash flows from investing activities.

Note 7

Sales Revenue

(1) Disaggregation of sales revenue

The Group operates in four business areas centered on four operating companies. They are Mitsubishi Chemical Corporation, Mitsubishi Tanabe Pharma Corporation, Life Science Institute, Inc., and Taiyo Nippon Sanso Corporation. The business segments are Performance Products, Chemicals, Industrial Gases, and Health Care. Progress reports on enhancing overseas sales ratios as a key operational measure go regularly to the Board of Directors. The relationship between geographic and segment revenue described in Note 4 Segment Information is as follows.

In keeping with Taiyo Nippon Sanso Corporation's acquisition of European operations in the previous fiscal year, the Company revised its geographic classification from countries to regions owing to an increase in the proportion of sales revenues in Europe. The Company accordingly reclassified the Japan, United States, China, and Others categories used in the previous fiscal year as Japan, Asia and Oceania, North America, Europe, and Others. China is internally disaggregated within Asia and Oceania in keeping with its importance. Sales revenue for the previous fiscal year is based on the revised classifications.

Year ended March 31, 2019

	Millions of yen						
	Japan	Asia and Oceania (China)	North America	Europe	Others	Total	
Performance Products	¥ 585,187	¥233,643	¥ (96,954)	¥164,741	¥157,877	¥14,048	¥1,155,496
Chemicals	771,327	317,074	(110,702)	80,325	91,616	15,631	1,275,973
Industrial Gases	369,033	124,597	(22,128)	178,035	59,324	1,848	732,837
Health Care	322,576	27,062	(7,767)	42,736	67,567	2,622	462,563
Others	127,643	68,069	(54,472)	3,037	13,297	1,426	213,472
Total	¥2,175,766	¥770,445	¥(292,023)	¥468,874	¥389,681	¥35,575	¥3,840,341

Notes:

1. Amounts are shown as sales revenue from external customers.
2. Sales revenue is mostly recognized from contracts with customers. Sales revenue recognized from other sources is immaterial.

Year ended March 31, 2020

	Millions of yen						
	Japan	Asia and Oceania (China)	North America	Europe	Others	Total	
Performance Products	¥ 554,891	¥208,030	¥ (91,758)	¥159,769	¥147,847	¥11,075	¥1,081,612
Chemicals	684,145	237,233	(91,894)	65,439	54,836	15,401	1,057,054
Industrial Gases	361,317	120,368	(18,306)	190,100	170,307	1,248	843,340
Health Care	329,264	26,702	(6,968)	35,596	19,852	1,726	413,140
Others	116,530	52,716	(37,294)	2,846	12,877	395	185,364
Total	¥2,046,147	¥645,049	¥(246,220)	¥453,750	¥405,719	¥29,845	¥3,580,510

Notes:

1. Amounts are shown as sales revenue from external customers.
2. Sales revenue is mostly recognized from contracts with customers. Sales revenue recognized from other sources is immaterial.

Performance Products Segment

This segment encompasses the functional products business (information, electronics and displays, high-performance films, environment and living solutions, and advanced moldings and composites) and the performance chemical business (advanced polymers, high-performance chemicals, and new energy). We sell to domestic and overseas customers.

Once customers gain control over products, when products are delivered to customer-designated locations, the legal title and physical possession of products and significant risks associated with product possession and rewards have been transferred, and we accordingly determine at that stage that we have satisfied our performance obligations and

recognize sales revenue. Sales revenue from selling these products is measured at transaction prices relating to agreements with customers.

Sales revenue is measured at the amount of consideration promised in contracts with customers, net of discounts, rebates and returns. Rebates and other estimates use the most frequent techniques based on experience. Sales revenue is recognized only to the extent of no possibility of a significant reversal. Considerations in product sales contracts are generally collected within one year after control of products transfers to customer, and do not include significant financial elements.

Chemicals Segment

In the Chemicals segment, we conduct the MMA, petrochemicals, and carbon products businesses, and sell to domestic and overseas customers.

Upon satisfying performance obligations in selling products in these businesses, calculations of transaction prices and payment terms are identical to those of the Performance Products segment.

Industrial Gases Segment

In this segment, our gas business serves the steel, chemical and electronics industries. We manufacture such household items as stainless steel thermoses. We sell to domestic and overseas customers.

Upon satisfying performance obligations in selling products in these businesses, calculations of transaction prices and payment terms are identical to those of the Performance Products segment.

Health Care Segment

Here, we engage in the ethical pharmaceuticals business (researching and developing and manufacturing ethical pharmaceuticals) and the life science business (manufacturing of capsules and pharmaceutical processing equipment, active pharmaceutical ingredients and intermediates), selling to domestic and foreign customers.

Upon fulfilling performance obligations in selling products in these businesses, calculations of transaction prices and payment terms are identical to those of the Performance Products segment.

Royalty income generated in the Health Care business is from contracts in which the Group has permitted third parties to produce or sell products or use technology. One-off contract payments are recognized as sales revenue when performance obligations are met at certain points. If such obligations are not met, the transaction is recorded as deferred sales revenue and recognized as sales revenue over a certain period as obligations are met. Milestone payments are recognized only to the extent that significant returns are unlikely after reaching contractual milestones. Running royalties are measured based on contractor sales calculations, etc., and sales revenue is recognized as sales occur. Royalty income is generally received within one year of establishing contractual rights, and does not include significant financing components.

With regard to royalty revenue and other income, consolidated subsidiary Mitsubishi Tanabe Pharma Corporation received a petition for arbitration from Novartis Pharma AG ("Novartis") of Switzerland in February 2019. Novartis claimed that some provisions of a license agreement entered into in 1997 ("Agreement") were invalid and that Novartis had no obligation to pay some royalties. Mitsubishi Tanabe Pharma Corporation claimed the right to receive all royalties payable under the Agreement, and will appropriately pursue this right through arbitration.

Due to arbitration proceedings, the Company decided not to recognize sales revenue in accordance with IFRS 15 for some royalty revenue. Since arbitration proceedings remain ongoing, some sales revenue was not recognized as revenue for some royalties in the year ended March 31, 2020.

The portion for which this revenue is not recognized has been posted to other non-current liabilities, and the cumulative amount will be recognized at the end of arbitration.

(2) Contract balance

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

	Millions of yen		
	As of April 1, 2018	Year ended March 31, 2019	Year ended March 31, 2020
Receivables arising from contracts with customers	¥851,576	¥850,802	¥706,659
Contract assets	7,893	12,562	11,873
Contract liabilities	16,582	16,234	23,158

The Group mainly posts contract assets for compensation from work in progress and posts contract liabilities for advance payments from customers and for deferred sales revenue.

Of sales revenue recognized in the years ended March 31, 2019 and 2020, ¥10,227 million and ¥9,245 million, respectively, were included in contract liabilities at the start of the terms. Sales revenue recognized from performance obligations satisfied during the two years was ¥63,960 million and ¥16,950 million, respectively. There were no significant changes in outstanding contract assets and liabilities.

(3) Transaction price allocated to the remaining performance obligations

Total transaction price allocated to the remaining performance obligations and sales revenue recognition periods were as follows. Transactions with estimated contract terms of less than one year are excluded.

	Millions of yen	
	Year ended March 31, 2019	Year ended March 31, 2020
Due within one year	¥15,443	¥28,903
Due after one year	26,317	19,507
Total	¥41,760	¥48,410

(4) Assets recognized from costs to obtain or fulfill contracts with customers

In the years ended March 31, 2019 and 2020, no assets were recognized from the costs to obtain or fulfill contracts with customers. As a practical expedient, costs are recognized as expenses when incurred if the amortization period of the asset to be recognized is one year or less.

Note 8

Employee Benefit Expenses The breakdown of employee benefit expenses is as follows:

	Millions of yen	
	Year ended March 31, 2019	Year ended March 31, 2020
Wages and salaries	¥ 552,558	¥ 562,253
Retirement benefit costs	30,249	31,333
Total	¥ 582,807	¥ 593,586

Note: Remuneration for key executives is excluded. Remuneration to major executives is as described in Note 38 Related Parties.

Note 9

Research and Development Expenses Research and development expenses recognized in the years ended March 31, 2019 and 2020 were ¥142,822 million and ¥133,368 million, respectively.

Note 10

Other Operating Income and Other Operating Expenses The breakdown of other operating income is as follows:

	Millions of yen	
	Year ended March 31, 2019	Year ended March 31, 2020
Gain on sales of property, plant and equipment	¥ 2,783	¥ 8,533
Insurance income	936	2,529
Rent income	2,269	2,079
Subsidy income	61	2,006
Reversal of impairment loss	—	1,720
Gain on sales of shares of subsidiaries and associates	7,546	530
Others	7,716	10,174
Total	¥ 21,311	¥ 27,571

The breakdown of other operating expenses is as follows:

	Millions of yen	
	Year ended March 31, 2019	Year ended March 31, 2020
Impairment loss	¥ 17,340	¥ 48,647
Loss on sales and disposal of fixed assets	13,776	15,793
Loss on reduction of fixed assets	57	1,988
Loss on sales of shares of subsidiaries and associates	34	1,567
Provision for loss on business liquidation	5,169	—
Others	14,601	15,368
Total	¥ 50,977	¥ 83,373

The provision for loss on business liquidation is as described in Note 23 Assets Held for Sale.

See Note 16 Impairment Losses for details.

Note 11

Financial Income and Financial Expenses

The breakdown of financial income is as follows:

	Millions of yen	
	Year ended March 31, 2019	Year ended March 31, 2020
Financial income		
Interest income		
Financial assets measured at amortized cost	¥4,429	¥2,699
Dividend income		
Financial assets measured at fair value through other comprehensive income	5,192	4,187
Foreign exchange gains	360	—
Others	245	320
Total	¥10,226	¥7,206

The breakdown of financial expenses is as follows:

	Millions of yen	
	Year ended March 31, 2019	Year ended March 31, 2020
Financial expenses		
Interest expenses		
Financial liabilities measured at amortized cost	¥18,863	¥24,515
Foreign exchange losses	—	3,661
Others	1,269	1,312
Total	¥20,132	¥29,488

Note 12

Income Taxes

1. Deferred Tax Assets and Liabilities

As of March 31, 2019 and 2020, significant components of deferred tax assets and liabilities are as follows:

Year ended March 31, 2019

	Millions of yen				
	April 1, 2018	Amounts recognized in profit or loss	Amounts recognized in other comprehensive income	Others (Note)	March 31, 2019
Deferred tax assets:					
Tax loss carryforwards	¥ 57,423	¥ 6,392	¥ —	¥ 254	¥ 64,069
Net defined benefit liabilities	31,130	(1,741)	1,631	1,842	32,862
Property, plant and equipment	15,477	1,641	—	120	17,238
Employees' bonuses	15,138	(369)	—	46	14,815
Inventory	7,006	3,530	—	57	10,593
Employees' paid leave	6,887	582	—	676	8,145
Others	50,981	5,136	1,383	(708)	56,792
Total	¥ 184,042	¥15,171	¥ 3,014	¥ 2,287	¥ 204,514
Deferred tax liabilities:					
Valuation of assets	¥ (81,690)	¥ 4,641	—	¥(67,737)	¥(144,786)
Property, plant and equipment	(50,070)	(13,697)	—	(10,415)	(74,182)
Securities and other investments	(35,700)	—	(2,397)	3,789	(34,308)
Retained earnings of foreign subsidiaries	(13,910)	(4,186)	—	—	(18,096)
Others	(23,546)	(3,717)	(303)	1,523	(26,043)
Total	¥(204,916)	¥(16,959)	¥ (2,700)	¥(72,840)	¥(297,415)
Net deferred tax assets	¥ (20,874)	¥ (1,788)	¥ 314	¥(70,553)	¥ (92,901)

Year ended March 31, 2020

	Millions of yen				
	April 1, 2019	Amounts recognized in profit or loss	Amounts recognized in other comprehensive income	Others (Note)	March 31, 2020
Deferred tax assets:					
Tax loss carryforwards	¥ 64,069	¥(10,830)	¥ —	¥ (289)	¥ 52,950
Net defined benefit liabilities	32,862	(733)	569	(1,979)	30,719
Property, plant and equipment	17,238	1,486	—	14	18,738
Employees' bonuses	14,815	(1,834)	—	(522)	12,459
Inventory	10,593	(483)	—	(42)	10,068
Employees' paid leave	8,145	188	—	(379)	7,954
Others	56,792	7,090	122	330	64,334
Total	¥ 204,514	¥ (5,116)	¥ 691	¥ (2,867)	¥ 197,222
Deferred tax liabilities:					
Valuation of assets	¥(144,786)	¥13,164	—	¥ 5,063	¥(126,559)
Property, plant and equipment	(74,182)	(3,949)	—	1,583	(76,548)
Securities and other investments	(34,308)	(8,117)	5,978	1,876	(34,571)
Retained earnings of foreign subsidiaries	(18,096)	3,266	—	(18)	(14,848)
Others	(26,043)	(7,093)	(1)	493	(32,644)
Total	¥(297,415)	¥ (2,729)	¥ 5,977	¥ 8,997	¥(285,170)
Net deferred tax assets	¥ (92,901)	¥ (7,845)	¥ 6,668	¥ 6,130	¥ (87,948)

Notes:

- Others include exchange differences on translation of foreign operations and changes owing to business combinations, etc.
- Amount recognized in profit or loss includes ¥8,117 million in income taxes related to share exchange gains.

In recognizing deferred tax assets, the Group considers whether it can use all or part of future deductible temporary differences or unused tax loss carryforwards with respect to expected future taxable income. In evaluating the recoverability of deferred tax assets, the Group considers the planned reversal of deferred tax liabilities, expected future taxable income, and tax planning. In addition, future taxable income estimates are based on future business plans. The primary assumptions are prospects for revenue growth and market trends for raw material prices. Management expects to recover recognized deferred tax assets in keeping with the forecasts for future taxable income when past taxable income levels and deferred tax assets can be deductible. Although management deems its assumptions reasonable, they could be affected by future uncertain fluctuations in economic conditions. If future taxable income differs from forecasts and assumptions, the recoverability of deferred tax assets could differ.

Future deductible temporary differences and unused tax loss carryforwards (on an income basis), not recognized as deferred tax assets are as follows:

	Millions of yen	
	Year ended March 31, 2019	Year ended March 31, 2020
Future deductible temporary differences	¥106,112	¥112,005
Unused tax loss carryforwards	374,604	392,703
Unused tax credit carryforwards	25,095	28,458

Unrecognized deferred tax assets corresponding to the above are as follows.

	Millions of yen	
	Year ended March 31, 2019	Year ended March 31, 2020
Future deductible temporary differences	¥30,172	¥32,543
Unused tax loss carryforwards	58,308	63,884
Unused tax credit carryforwards	6,365	6,879

The breakdowns of tax loss carryforwards not recognized as deferred tax assets (on an income basis) by expiration date are as follows:

	Millions of yen	
	Year ended March 31, 2019	Year ended March 31, 2020
Tax loss carry forwards:		
Due within one year	¥ 65,918	¥ 8,543
Due after one year and not later than five years	51,169	85,155
Due after five years and not later than 10 years	93,829	124,571
Due after 10 years and not later than 20 years	95,568	89,591
Indefinite	68,120	84,843
Total	¥374,604	¥392,703

	Millions of yen	
	Year ended March 31, 2019	Year ended March 31, 2020
Unused tax credit carryforwards		
Due within one year	¥ 83	¥ 744
Due after one year and not later than five years	8,811	8,852
Due after five years and not later than 10 years	—	—
Due after 10 years and not later than 20 years	—	—
Indefinite	16,201	18,862
Total	¥25,095	¥28,458

As of March 31, 2019 and 2020, total temporary differences related to undistributed earnings of subsidiaries for which deferred tax liabilities were not recognized were ¥1,142,046 million and ¥1,306,312 million, respectively.

The Group does not recognize deferred tax liabilities related to temporary differences when it can control the timing of the reversal of the temporary differences and it is highly probable that temporary differences will not be reversed in the foreseeable future.

2. Income Taxes

The breakdown of income taxes is as follows:

Income taxes relating to discontinued operations are disclosed in Note 6 Discontinued Operations.

	Millions of yen	
	Year ended March 31, 2019	Year ended March 31, 2020
Income taxes	¥68,886	¥53,139
Deferred income taxes	1,703	(804)
Total	¥70,589	¥52,335

3. Effective Tax Rate Reconciliation Schedule

The Company is principally subject to corporate taxes, resident taxes and business taxes. The statutory effective tax rate that is the base for these taxes was 30.6% in the years ended March 31, 2019 and 2020. For overseas subsidiaries, local corporate income taxes are imposed.

A reconciliation of the statutory tax rates to the effective tax rates for the years ended March 31, 2019 and 2020, was as follows:

	Year ended March 31, 2019	Year ended March 31, 2020
Statutory tax rate	30.6%	30.6%
Unrecognized deferred tax assets	(0.6)	17.1
Goodwill impairment	—	4.1
Permanent differences	1.8	3.1
Foreign taxes	1.0	3.0
Difference of statutory tax rate in overseas subsidiaries	(5.1)	(6.4)
Share of profit of investments accounted for using the equity method	(2.8)	(3.3)
Tax credits for research and development costs	(1.9)	(2.8)
Tax effect on undistributed earnings	1.4	(2.7)
Others	0.4	0.2
Effective tax rate	24.8%	42.9%

Note 13

Per Share Information

The bases for calculating basic and diluted earnings per share attributable to owners of the parent were as follows:

1. Basic Earnings per Share

	Year ended March 31, 2019	Year ended March 31, 2020
(Millions of yen)		
Net income used to calculate basic earnings per share:		
Net income from continuing operations attributable to owners of the parent	¥167,063	¥ 37,186
Net income from discontinued operations attributable to owners of the parent	2,467	16,891
Net income attributable to owners of the parent	¥169,530	¥ 54,077
(Thousands of shares)		
Average number of ordinary shares during period	1,422,018	1,419,982
(Yen)		
Basic earnings per share attributable to owners of the parent:		
Continuing operations	¥117.49	¥ 26.19
Discontinued operations	1.73	11.89
Basic earnings per share attributable to owners of the parent	¥119.22	¥ 38.08

2. Diluted Earnings per Share

	Year ended March 31, 2019	Year ended March 31, 2020
(Millions of yen)		
Net income used to calculate diluted earnings per share:		
Net income from continuing operations used to calculate basic earnings per share	¥167,063	¥ 37,186
Adjustment	285	285
Net income from continuing operations used to calculate diluted earnings per share	¥167,348	¥ 37,471
Net income from discontinued operations used to calculate diluted earnings per share	2,467	16,891
Net income used to calculate diluted earnings per share	¥169,815	¥ 54,362
(Thousands of shares)		
Average number of diluted ordinary shares during period:		
Average number of ordinary shares during period	1,422,018	1,419,982
Impact of potentially dilutive ordinary shares		
Convertible bond-type bonds with subscription rights to shares	119,685	122,565
Subscription rights to shares	1,388	1,568
Average number of diluted ordinary shares during period	1,543,091	1,544,115
(Yen)		
Diluted earnings per share attributable to owners of the parent:		
Continuing operations	¥108.45	¥ 24.27
Discontinued operations	1.60	10.94
Diluted earnings per share attributable to owners of the parent	¥110.05	¥ 35.21

Note:
In the calculation of basic and diluted net income per share attributable to owners of the parent, the Company stocks held by Board Incentive Plan trust are included in shares of treasury stock deducted in calculating the average number of shares during the period.

Note 14

Goodwill and Intangible Assets

1. Schedule of Goodwill and Intangible Assets

The acquisition cost, accumulated amortization, accumulated impairment losses and carrying amount of goodwill and intangible assets were as follows:

Year ended March 31, 2019

Acquisition cost

	Millions of yen					
	Goodwill	Intangible assets				Total
		Technology-related intangible assets	Customer-related intangible assets	Software	Other	
Balance as of April 1, 2018	¥324,201	¥282,798	¥112,842	¥76,414	¥63,136	¥535,190
Acquisitions	—	3,192	7,127	7,922	3,149	21,390
Acquisitions through business combinations	334,121	1,688	216,914	2,470	511	221,583
Sale or disposal	—	(4,061)	(2)	(6,981)	(1,790)	(12,834)
Transfers	—	(14)	—	(3)	9	(8)
Exchange differences on translation of foreign operations	(9,516)	8,010	(4,431)	(311)	1,161	4,429
Balance as of March 31, 2019	¥648,806	¥291,613	¥332,450	¥79,511	¥66,176	¥769,750

Accumulated amortization, accumulated impairment losses

	Millions of yen					
	Goodwill	Intangible assets				Total
		Technology-related intangible assets	Customer-related intangible assets	Software	Other	
Balance as of April 1, 2018	¥—	¥55,449	¥33,221	¥57,014	¥34,355	¥180,039
Amortization	—	7,422	10,595	7,805	4,012	29,834
Impairment losses	—	383	—	165	63	611
Sale or disposal	—	(3,696)	—	(6,808)	(1,755)	(12,259)
Exchange differences on translation of foreign operations	—	1,728	407	(294)	897	2,738
Balance as of March 31, 2019	¥—	¥61,286	¥44,223	¥57,882	¥37,572	¥200,963

Carrying amount

	Millions of yen					
	Goodwill	Intangible assets				Total
		Technology-related intangible assets	Customer-related intangible assets	Software	Other	
Balance as of April 1, 2018	¥324,201	¥227,349	¥79,621	¥19,400	¥28,781	¥355,151
Balance as of March 31, 2019	¥648,806	¥230,327	¥288,227	¥21,629	¥28,604	¥568,787

Year ended March 31, 2020

Acquisition cost

	Millions of yen					
	Goodwill	Intangible assets				Total
		Technology-related intangible assets	Customer-related intangible assets	Software	Other	
Balance as of April 1, 2019	¥648,806	¥291,613	¥332,450	¥79,511	¥66,176	¥769,750
Acquisitions	—	6,347	—	5,985	4,644	16,976
Acquisitions through business combinations	7,992	144	5,353	35	(278)	5,254
Sale or disposal	(268)	(25,524)	(14)	(6,918)	(9,221)	(41,677)
Transfers	(546)	—	831	(245)	(2)	584
Exchange differences on translation of foreign operations	(22,941)	(27,661)	(12,572)	(5,351)	(1,596)	(47,180)
Balance as of March 31, 2020	¥633,043	¥244,919	¥326,048	¥73,017	¥59,723	¥703,707

Accumulated amortization, accumulated impairment losses

	Intangible assets					Millions of yen
	Goodwill	Technology-related intangible assets	Customer-related intangible assets	Software	Other	Total
	Balance as of April 1, 2019	¥ —	¥61,286	¥44,223	¥57,882	¥37,572
Amortization	—	7,227	16,606	6,947	3,169	33,949
Impairment losses	16,274	24,102	83	53	22	24,260
Sale or disposal	—	(25,610)	—	(3,693)	(7,992)	(37,295)
Exchange differences on translation of foreign operations	—	(22,302)	(1,269)	(4,441)	(733)	(28,745)
Balance as of March 31, 2020	¥ 16,274	¥44,703	¥59,643	¥56,748	¥32,038	¥193,132

Carrying amount

	Intangible assets					Millions of yen
	Goodwill	Technology-related intangible assets	Customer-related intangible assets	Software	Other	Total
	Balance as of April 1, 2019	¥648,806	¥230,327	¥288,227	¥21,629	¥28,604
Balance as of March 31, 2020	¥616,769	¥200,216	¥266,405	¥16,269	¥27,685	¥510,575

There were no material internally generated assets in the years ended March 31, 2019 and 2020.

The amortization of intangible assets is included in Cost of sales, Selling, general and administrative expenses and Net income from discontinued operations in the Consolidated Statement of Income.

2. Significant Intangible Assets

Significant intangible assets in the Consolidated Statement of Financial Position include technology-related intangible assets that the Company obtained in acquiring Mitsubishi Rayon Co., Ltd. (now Mitsubishi Chemical Corporation), in March 2010. The carrying amounts of these intangible assets were ¥18,254 million as of March 31, 2019 and ¥15,532 million as of March 31, 2020. The remaining amortization periods were 5 to 9 years.

The carrying amount of technology-related intangible assets of Medicago Inc., which Mitsubishi Tanabe Pharma Corporation acquired in September 2013, was ¥25,967 million in the year ended March 31, 2019, and classified as intangible assets with indefinite useful lives. In the fiscal year ended March 31, 2020, the carrying amount of such intangible assets was fully impaired, and stated in Note 16 Impairment Losses.

The carrying amounts of customer-related intangible assets of Taiyo Nippon Sanso Corporation, which the Company acquired in November 2014, were ¥28,187 million as of March 31, 2019, and ¥26,083 million as of March 31, 2020. The remaining amortization periods were 8 to 13 years.

The carrying amounts of technology-related intangible assets of NeuroDerm Ltd. which Mitsubishi Tanabe Pharma Corporation acquired in October 2017, were ¥134,076 million as of March 31, 2019 and ¥131,467 million as of March 31, 2020. This item is classified as intangible assets with indefinite useful lives.

The carrying amount of customer-related intangible assets of European businesses which Taiyo Nippon Sanso Corporation acquired in December 2018, were ¥194,267 million as of March 31, 2019 and ¥186,453 million as of March 31, 2020. The remaining amortization periods were mainly 28 years.

3. Intangible Assets with Indefinite Useful Lives

The carrying amount of intangible assets with indefinite useful lives was ¥192,381 million at March 31, 2019. The main item was in-process research and development expenses recognized when Mitsubishi Tanabe Pharma Corporation acquired Medicago Inc. in 2013 and

NeuroDerm Ltd. in 2017 (both in the Health Care segment), included in Technology-related intangible assets. At March 31, 2020, the carrying amount of intangible assets with indefinite useful lives was ¥168,180 million. The main item was in-process research and development expenses related to NeuroDerm. Given that the assets are at the research and development stage, have yet to obtain marketing approval from regulatory authorities, and cannot be in use, the assets are classified as intangible assets with indefinite useful lives.

Intangible assets with indefinite useful lives are subject to impairment testing at certain times every year, regardless of whether there are indications of impairment.

In impairment tests, recoverable amounts of intangible assets are measured by their value in use.

In calculating value in use, the Company uses estimates of future cash flows based on management-approved business plans. The business plans are based on experience and external information. Except on justifiable grounds, the plans are, in principle, for up to five years, the significant assumptions being the prospects for obtaining regulatory approval for sales, post-launch sales forecasts, and discount rates.

The Company used a pretax weighted average cost of capital of 5.5% to 14.8% in the year ended March 31, 2019, and 7.7% to 13.0% in the year ended March 31, 2020. The discount rates for in-process research and development expenses related to NeuroDerm were 14.8% and 13.0% in years ended March 31, 2019 and 2020, respectively.

Although management deems these assumptions reasonable, they are subject to uncertain fluctuations in future economic conditions. If assumptions change, calculations of recoverable amount may differ.

Impairment losses recognized for intangible assets with indefinite useful lives are as stated in Note 16 Impairment Losses.

4. Goodwill

The carrying amounts of goodwill allocated to cash-generating units (groups of cash-generating units) are as follows:

Reporting segment	Cash-Generating Unit (Groups of Cash-Generating Units)	Millions of yen	
		March 31, 2019	March 31, 2020
Performance Products	High performance engineering plastics	¥ 21,029	¥ 25,497
	Other	37,036	36,024
	Total	¥ 58,065	¥ 61,701
Chemicals	MMA	¥ 36,813	¥ 36,813
	Other	2,887	2,859
	Total	¥ 39,700	¥ 39,672
Industrial Gases	Industrial gases	¥459,013	¥441,805
Health Care	Ethical Pharmaceuticals	¥ 59,246	¥ 57,303
	Pharmaceutical formulation materials	32,626	16,288
	Other	156	—
	Total	¥ 92,028	¥ 73,591
Total		¥648,806	¥616,769

The recoverable amount of goodwill in cash-generating units and groups of cash generating units is measured by the value in use.

The value in use is based on a management-approved five-year plan reflecting past experience and external source of information. After considering future uncertainties after the five-year period, the Company assumed a zero growth rate, with value equaling cash flows in the fifth year. Estimated future cash flows are shaped largely by sales volume expansions and market growth rates. While management has determined that its main assumptions are reasonable, they are subject to uncertain changes in economic conditions, and calculations of recoverable amounts could differ if assumptions change.

The discount rates used for measuring recoverable amounts are as follows:

Reporting segment	Cash-Generating Unit (Groups of Cash-Generating Units)	March 31, 2019	March 31, 2020
Performance Products	High performance engineering plastics	8.1%	7.5%
Chemicals	MMA	7.7%	5.9%
Industrial Gases	Industrial gases	7.7%	5.9%
Health Care	Ethical pharmaceuticals	5.5%	7.7%
	Pharmaceutical formulation materials	6.5%	7.2%

It was possible that the recoverable amount of goodwill allocated to pharmaceutical formulation materials would equal the carrying amount if the discount rate rose 1.9% in the previous fiscal year. In the year ended March 31, 2020, the Company recorded impairment losses because recoverable amounts were less than carrying amounts. See Note 16 Impairment Losses for details.

Note 15

Property, Plant and Equipment The acquisition cost, accumulated depreciation, accumulated impairment losses and carrying amount of property, plant and equipment were as follows:

1. Schedule of property, plant and equipment

Year ended March 31, 2019

Acquisition cost

	Buildings and structures	Machinery and vehicles	Tools, furniture and fixtures	Land	Construction in progress	Total
Balance as of April 1, 2018	¥1,082,503	¥2,950,161	¥317,268	¥283,707	¥149,428	¥4,783,067
Acquisitions (Note 1)	31,620	184,832	23,936	1,992	(11,923)	230,457
Acquisitions through business combinations	12,259	171,121	29,263	9,923	8,451	231,017
Sale or disposal	(16,081)	(71,148)	(12,196)	(2,349)	(913)	(102,687)
Transfers (Note 2)	(2,338)	(2,867)	(1,671)	(482)	(12,894)	(20,252)
Exchange differences on translation of foreign operations	(3,038)	(978)	189	(2,680)	707	(5,800)
Balance as of March 31, 2019	¥1,104,925	¥3,231,121	¥356,789	¥290,111	¥132,856	¥5,115,802

Accumulated depreciation, accumulated impairment losses

	Buildings and structures	Machinery and vehicles	Tools, furniture and fixtures	Land	Construction in progress	Total
Balance as of April 1, 2018	¥745,969	¥2,350,556	¥243,400	¥7,891	¥1,742	¥3,349,558
Depreciation	25,906	125,004	18,507	—	—	169,417
Impairment losses	6,958	4,418	415	2,283	2,655	16,729
Sale or disposal	(13,906)	(66,379)	(11,416)	(377)	(219)	(92,297)
Transfers (Note 2)	(1,599)	(4,111)	(1,626)	(6)	281	(7,061)
Exchange differences on translation of foreign operations	(3,555)	123	834	(422)	(878)	(3,898)
Balance as of March 31, 2019	¥759,773	¥2,409,611	¥250,114	¥9,369	¥3,581	¥3,432,448

Notes:

- In addition to the increase in the construction in progress account from new acquisitions, the net amount, including figures in parentheses for transfer amounts is shown for each tangible fixed asset.
- Transfers include a transfer to assets held for sale.

Carrying amount

	Buildings and structures	Machinery and vehicles	Tools, furniture and fixtures	Land	Construction in progress	Total
Balance as of April 1, 2018	¥336,534	¥599,605	¥73,868	¥275,816	¥147,686	¥1,433,509
Balance as of March 31, 2019	¥345,152	¥821,510	¥106,675	¥280,742	¥129,275	¥1,683,354

Year ended March 31, 2020

Acquisition cost

	Millions of yen					
	Buildings and structures	Machinery and vehicles	Tools, furniture and fixtures	Land	Construction in progress	Total
Balance as of April 1, 2019	¥1,104,925	¥3,231,121	¥356,789	¥290,111	¥132,856	¥5,115,802
Adjustment due to applying IFRS 16	62,633	14,501	9,744	7,851	—	94,729
Adjusted balance as of April 1, 2019	1,167,558	3,245,622	366,533	297,962	132,856	5,210,531
Acquisitions (Note 1)	46,563	166,556	24,266	2,523	17,287	257,195
Acquisitions through business combinations	1,148	1,029	158	300	14	2,649
Sale or disposal	(46,642)	(55,342)	(39,081)	(4,690)	(1,239)	(146,994)
Transfers (Note 2)	(12,898)	(2,504)	(404)	(6,149)	(15,894)	(37,849)
Exchange differences on translation of foreign operations	(1,680)	(40,585)	(10,768)	(1,445)	(119)	(54,597)
Balance as of March 31, 2020	¥1,154,049	¥3,314,776	¥340,704	¥288,501	¥132,905	¥5,230,935

Accumulated depreciation, accumulated impairment losses

	Millions of yen					
	Buildings and structures	Machinery and vehicles	Tools, furniture and fixtures	Land	Construction in progress	Total
Balance as of April 1, 2019	¥759,773	¥2,409,611	¥250,114	¥9,369	¥3,581	¥3,432,448
Adjustment due to applying IFRS 16	—	—	—	—	—	—
Adjusted balance as of April 1, 2019	759,773	2,409,611	250,114	9,369	3,581	3,432,448
Depreciation	41,889	142,127	20,695	1,164	—	205,875
Impairment losses	2,500	4,725	760	4	124	8,113
Sale or disposal	(29,656)	(52,245)	(32,218)	(440)	(3)	(114,562)
Transfers (Note 2)	(14,424)	(775)	(158)	—	—	(15,357)
Exchange differences on translation of foreign operations	(3,108)	(18,432)	(4,043)	(2,092)	(123)	(27,798)
Balance as of March 31, 2020	¥756,974	¥2,485,011	¥235,150	¥8,005	¥3,579	¥3,488,719

Notes:

- In addition to the increase in the construction in progress account from new acquisitions, the net amount including figures in parentheses for transfer amounts is shown for each tangible fixed asset.
- Transfers include a transfer to assets held for sale.

Carrying amount

	Millions of yen					
	Buildings and structures	Machinery and vehicles	Tools, furniture and fixtures	Land	Construction in progress	Total
Balance as of April 1, 2019	¥407,785	¥836,011	¥116,419	¥288,593	¥129,275	¥1,778,083
Balance as of March 31, 2020	¥397,075	¥829,765	¥105,554	¥280,496	¥129,326	¥1,742,216

Right-of-use assets increased ¥18,211 million in the year ended March 31, 2020.

Depreciation of property, plant and equipment is included in Cost of sales and Selling, general and administrative expenses and Net income from discontinued operations in the Consolidated Statement of Income.

Expenditure on construction work in progress for property, plant and equipment is included in construction in progress.

2. Right-of-use assets (lease assets)

The carrying amounts of leased assets included in property, plant and equipment were as follows:

	Millions of yen
	As of March 31, 2019
Buildings and structures	¥1,221
Machinery and vehicles	3,557
Tools, furniture and fixtures	3,529
Total	¥8,307

The carrying amounts of right-of-use assets included in property, plant and equipment are as follows:

	Millions of yen
	As of March 31, 2020
Buildings and structures	¥57,565
Machinery and vehicles	16,716
Tools, furniture and fixtures	11,837
Land	6,681
Total	¥92,799

Note 16

Impairment Losses

In principle, the Group determines its cash-generating units considering operational, production processes, regions, and other factors based on business units. The Group tests idle assets individually to recognize impairment losses.

Impairment losses and gain on reversal of impairment loss in the years ended March 31, 2019 and 2020, are included in Other operating income and Other operating expenses, respectively, in the Consolidated Statement of Income.

Impairment losses

	Millions of yen	
	Year ended March 31, 2019	Year ended March 31, 2020
Property, plant and equipment		
Buildings and structures	¥ 6,958	¥ 2,500
Machinery and vehicles	4,418	4,725
Tools, furniture and fixtures	415	760
Land	2,283	4
Construction in progress	2,655	124
Total of property, plant and equipment	¥16,729	¥8,113
Goodwill	—	16,274
Intangible assets (Note)	611	24,260
Total impairment losses	¥17,340	¥48,647

Note: The impairment loss on intangible assets with indefinite useful lives was ¥24,069 million.

Gain on reversal of impairment loss

	Millions of yen	
	Year ended March 31, 2019	Year ended March 31, 2020
Property, plant and equipment		
Land	¥ —	¥1,720
Total gain on reversal of impairment loss	¥ —	¥1,720

The main assets for which impairment losses were recognized are as follows:

Year ended March 31, 2019

Use	Location	Category	Reporting segment	Impairment loss
Pharmaceuticals research facilities	Mitsubishi Tanabe Pharma Corporation's Toda Office (Toda, Saitama Prefecture)	Buildings and land, etc.	Health Care	¥5,271 million

Composition of Impairment Losses

Pharmaceuticals research facilities

¥5,271 million (including ¥3,537 million in buildings and structures, ¥1,720 million in land, and ¥14 million in others)

Consolidated subsidiary Mitsubishi Tanabe Pharma Corporation decided to close its Toda Office in line with a research bases reorganization. Because of the likelihood of the property, plant and equipment of the office becoming idle owing to the closure, its book value has been reduced to the recoverable amount. The recoverable amount is measured at ¥4,062 million, representing the fair value, less disposal costs based on the appraised property value. The fair value hierarchy is Level 3.

For such assets, a real estate sales contract was concluded in the year ended March 31, 2020, and its recoverable amount is expected to increase. A reversal of impairment loss of ¥1,720 million (¥1,720 million on land) is thus recorded in Other operating income in the Consolidated Statement of Income.

Year ended March 31, 2020

Goodwill

Millions of yen		
Main details	Reporting segment	Impairment loss
Goodwill on pharmaceutical formulation materials	Health Care	¥16,274

Management expects profitability in the pharmaceutical formulation materials business of the Health Care segment to decrease owing to a deteriorating business climate and reviews of plans based on prevailing circumstances. The Company thus lowered the carrying amount of goodwill related to the pharmaceutical formulation materials business to the recoverable amount of ¥16,288 million.

The recoverable amount is measured using value in use. The cash flow forecast underpinning value in use is based on experience and external information sources, and is based on a management-approved five-year business plan that reflects management's assessment of future business trends.

The significant assumptions used to calculate the value in use are the growth and discount rates. Taking into account uncertainties subsequent to the five-year plan, management assumes that the growth rate will be zero, with cash flows remaining the same as in the fifth year. The Company used a pretax weighted average cost of capital of 7.2% in the year ended March 31, 2020 (6.5% in the previous year) for cash-generating units.

Under the assumptions above, if the discount rate used to calculate the value in use increases 0.5%, the impairment loss would rise ¥3,371 million.

Intangible Assets

Millions of yen				
Use	Location	Category	Reporting segment	Impairment loss
Development of virus-like particle vaccines for seasonal flu	Medicago Inc. (headquartered in Quebec, Canada)	Intangible assets related to technology (in-process R&D expenses)	Health Care	¥24,069

The Company reduced the overall carrying amount of intangible assets related to technology (in-process R&D expenses) owing to Medicago's decision to stop U.S. development of a virus-like particle vaccine (MT-2271) for seasonal flu.

The recoverable amount is based on value in use, which is zero.

Note 17

Individually Insignificant Investments Accounted for Using Equity Method

The carrying amounts of individually insignificant investments in joint ventures accounted for using the equity method are as follows:

	Millions of yen	
	As of March 31, 2019	As of March 31, 2020
Carrying amounts of investments in joint ventures	¥92,615	¥84,956

Equity in earnings of joint ventures accounted for using the equity method for total comprehensive income is as follows:

	Millions of yen	
	Year ended March 31, 2019	Year ended March 31, 2020
Share of profit from continuing operations using equity method	¥14,186	¥5,099
Share of profit from discontinued operations using equity method	33	5
Share of other comprehensive income using equity method	(1,180)	(3,146)
Share of total shareholders' equity in total comprehensive income	¥13,039	¥1,958

Carrying amounts of individually insignificant investments in associates accounted for using the equity method are as follows:

	Millions of yen	
	As of March 31, 2019	As of March 31, 2020
Carrying amounts of investments in associates	¥90,452	¥85,002

Equity in earnings of associates accounted for using the equity method for total comprehensive income is as follows:

	Millions of yen	
	Year ended March 31, 2019	Year ended March 31, 2020
Share of profit from continuing operations using equity method	¥12,631	¥8,297
Share of other comprehensive income using equity method	(1,009)	(2,811)
Share of total shareholders' equity in total comprehensive income	¥11,622	¥5,486

Note 18

Other Financial Assets

The breakdown of other financial assets is as follows:

	Millions of yen	
	As of March 31, 2019	As of March 31, 2020
Stocks and investments	¥192,413	¥192,481
Bonds	30,000	50,000
Accounts receivable	41,507	32,553
Time deposits	36,560	10,738
Certificate of deposits	129,500	5,000
Other	48,403	55,380
Allowance for doubtful accounts	(1,550)	(2,036)
Total	¥476,833	¥344,116
Current assets	¥248,262	¥117,628
Non-current assets	228,571	226,488
Total	¥476,833	¥344,116

Stocks and investments are classified mainly as equity financial assets measured at fair value through other comprehensive income. Bonds, accounts receivable, time deposits and certificate of deposits are classified as financial assets measured mainly at amortized cost.

The major issues and fair values of equity financial assets measured at fair value through other comprehensive income are as follows:

As of March 31, 2019

Company name	Millions of yen
SUZUKEN CO., LTD.	¥9,924
TOHO HOLDINGS CO., LTD.	9,873
Alfresa Holdings Corporation	7,011
MEDIPAL HOLDINGS CORPORATION	5,591
JFE Holdings Corporation	4,833
Tosoh Corporation	3,834
Mitsubishi UFJ Financial Group, Inc.	3,481
Daicel Corporation	3,085
KOATSU GAS KOGYO CO., LTD.	2,862
Mitsubishi Research Institute, Inc.	2,790

As of March 31, 2020

Company name	Millions of yen
TOHO HOLDINGS CO., LTD.	¥8,101
Alfresa Holdings Corporation	4,482
MEDIPAL HOLDINGS CORPORATION	4,289
SUZUKEN CO., LTD.	3,774
IBIDEN CO., LTD.	3,145
Mitsubishi Research Institute, Inc.	2,744
Tosoh Corporation	2,742
KOATSU GAS KOGYO CO., LTD.	2,427
Shin-Etsu Chemical Co., Ltd.	2,167
Mitsubishi UFJ Financial Group, Inc.	2,142

As well as the assets above, the Group holds financial assets measured at fair value through other comprehensive income for which quoted prices in active markets are unavailable, mainly comprising stocks related to the Chemicals, Health Care and Industrial Gases product segments.

Investments in Chemicals -related stocks were ¥64,579 million as of March 31, 2019, and ¥62,128 million as of March 31, 2020. Investments in Health Care-related stocks were ¥6,659 million as of March 31, 2019, and ¥43,929 million as of March 31, 2020. Investments in Industrial Gases-related stocks amounted to ¥9,295 million as of March 31, 2019, and ¥7,864 million as of March 31, 2020.

As stocks are held mainly to maintain and strengthen business and collaborative ties and financial transactions, they are designated as equity financial assets measured at fair value through other comprehensive income.

The Company endeavors to enhance the efficiency and effective use of its assets by selling (derecognizing) equity financial assets measured at fair value through other comprehensive income. Fair values upon sales and cumulative gains or losses (before tax) on sales are as follows. Cumulative gains or losses (after tax) recognized in other components of equity are transferred to retained earnings at the time of sale.

	Millions of yen	
	Year ended March 31, 2019	Year ended March 31, 2020
Fair value	¥15,148	¥13,117
Cumulative gains or losses	7,989	2,668

Dividend income from equity financial assets measured at fair value through other comprehensive income is as follows:

	Millions of yen	
	Year ended March 31, 2019	Year ended March 31, 2020
Derecognized financial assets	¥ 287	¥ 134
Financial assets held at year-end	4,910	4,053

Note 19

Other Assets

The breakdown of other assets is as follows:

	Millions of yen	
	As of March 31, 2019	As of March 31, 2019
Net defined benefit assets	¥25,390	¥35,329
Prepaid expenses	28,318	34,916
Accrued income tax	31,510	23,840
Advance payment	7,258	7,522
Other	17,169	31,346
Total	¥109,645	¥132,953
Current assets	76,072	90,140
Non-current assets	33,573	42,813
Total	¥109,645	¥132,953

Note 20

Inventory

The breakdown of inventory is as follows:

	Millions of yen	
	As of March 31, 2019	As of March 31, 2020
Finished goods	¥365,278	¥356,999
Raw materials and supplies	177,863	175,083
Work in process	79,908	74,423
Total	¥623,049	¥606,505

Inventories measured at net realizable value as of March 31, 2019 and 2020 were ¥96,463 million and ¥80,516 million, respectively.

In the years ended March 31, 2019 and 2020, write-downs of inventories recognized as expenses were ¥7,483 million and ¥7,523 million, respectively.

Note 21

Trade Receivables The breakdown of trade receivables is as follows:

	Millions of yen	
	As of March 31, 2019	As of March 31, 2020
Accounts receivable	¥863,364	¥706,659
Allowance for doubtful accounts	(8,257)	(8,143)
Total	¥855,107	¥698,516

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

Note 22

Cash and Cash Equivalents The breakdown of cash and cash equivalents is as follows:

	Millions of yen	
	As of March 31, 2019	As of March 31, 2020
Cash and deposits	¥219,968	¥207,640
Short-term investments	101,573	20,571
Total	¥321,541	¥228,211

Note 23

Assets Held for Sale The breakdowns of assets held for sale and directly related liabilities are as follows:

	Millions of yen	
	As of March 31, 2019	As of March 31, 2020
Assets held for sale:		
Cash and cash equivalents	¥ 2,152	¥ 49
Trade receivables	5,165	660
Inventories	7,359	1,029
Property, plant and equipment	1,782	6,047
Other financial assets	532	83
Others	820	413
Total	¥17,810	¥8,281
Liabilities related directly to assets held for sale:		
Trade payables	¥ 2,090	¥ 102
Other financial liabilities	3,563	152
Provision	5,169	—
Others	901	1,507
Total	¥ 11,723	¥ 1,761

Year ended March 31, 2019

Assets held for sale and directly related liabilities as of March 31, 2019, were primarily the recording media and other global businesses of the Verbatim Group, as subsidiary of Mitsubishi Chemical Media Co., Ltd. (MCM), a consolidated subsidiary of the Group in the performance products segment, and covered sales of assets related to those businesses of MCM.

Assets held for sale and liabilities related directly to them are classified as held for sale based on a resolution of the Corporate Executive Officers Committee on March 28, 2019, to strengthen portfolio management. The fair value is based on the price negotiated with the buyer. The hierarchy is Level 3.

Of the difference between the fair value (expected selling price) after deducting selling costs and the book value, the estimated loss exceeding the book value of non-current assets is posted as a provision for loss on business liquidation.

On June 14, 2019, MCM entered into a transfer agreement relating to the above business with CMC Magnetics Corporation of Taiwan.

As of March 31, 2019, the amount of other components of equity relating to assets held for sale was ¥(528) million.

Year ended March 31, 2020

Assets held for sale and directly related liabilities directly as of March 31, 2020, stemmed mainly from the conclusion of a real estate sales agreement for the Toda Office of Mitsubishi Tanabe Pharma Corporation, a consolidated subsidiary of the Company in the Health Care segment.

Assets held for sales relating the Toda Office is measured at the carrying amount because the fair value after deducting the sale cost (projected sale value) exceeds the carrying amount. The assets were divested on April 24, 2020.

As of March 31, 2020, other components of equity related to assets held for sale were immaterial.

Note 24

Capital

1. Common stock and Treasury Stock

Number of shares authorized and issued is as follows:

	Thousands of shares	
	Year ended March 31, 2019	Year ended March 31, 2020
Number of shares authorized	6,000,000	6,000,000
Number of shares issued:		
At the beginning of the period	1,506,288	1,506,288
Increase (decrease)	—	—
At the end of the period	1,506,288	1,506,288

The Company's shares are ordinary shares without par value. The shares issued were fully paid.

Changes in the number of shares of treasury stock during the year are as follows:

	Thousands of shares	
	Year ended March 31, 2019	Year ended March 31, 2020
At the beginning of the period	66,902	86,402
Increase (note 1)	19,584	35
Decrease (note 2)	(84)	(207)
At the end of the period	86,402	86,230

Notes:

1. An increase in the number of shares of treasury stock in the year ended March 31, 2019, was due to the acquisition of 19,549,000 shares through a resolution of the Board of Directors and the purchase of 35,000 shares of less than one unit.

An increase in the number of shares of treasury stock in the year ended March 31, 2020, was due to the purchase of 35,000 shares of less than one unit.

2. A decrease in the number of shares of treasury stock in the year ended March 31, 2019, was due to the payment of 71,000 shares through the exercise of stock options, 9,000 shares from the Board Incentive Plan trust, and the sale of 3,000 shares of less than one unit.

A decrease in the number of shares of treasury stock in the year ended March 31, 2020, was due to the payment of 103,000 shares through the exercise of stock options, 101,000 shares from the Board Incentive Plan trust, and the sale of 2,000 shares of less than one unit.

3. Company stocks held by the Board Incentive Plan trust are included.

March 31, 2019: 3,285,000 shares and March 31, 2020: 3,184,000 shares

2. Additional paid-in capital and Retained Earnings

Additional paid-in capital comprises amounts arising from capital transactions that are not included in common stock. The main component is legal capital surplus and other capital surplus. Retained earnings comprise legal retained earnings and other retained earnings.

The Japanese Company Law mandates that at least half of paid-in capital be appropriated as common stock and the rest be appropriated as a legal reserve within the legal capital surplus. Under that law, the legal capital surplus can be incorporated in common stock by resolution at a shareholders' meeting.

Amounts classified as equity elements at the time of issuance of convertible bond type bonds with stock acquisition rights are included in other capital surplus as a capital element of compound financial products.

That law requires that 10% of the surplus appropriated for dividends be retained until the total amount of the legal capital surplus and legal retained earnings reaches a quarter of the amount of common stock. The accumulated legal retained earnings can be appropriated for

deficit disposition, and legal retained earnings may be available for dividends by resolution at a shareholders' meeting.

3. Other Components of Equity

Other components of equity are as follows:

(Financial Assets Measured at Fair Value through Other Comprehensive Income)
Unrealized gains on financial assets are measured at fair value through other comprehensive income.

(Remeasurement of Defined Benefit Pension Plans)

This remeasurement is for differences between actuarial assumptions at the beginning of the year and actual experience and the effects of changes in actuarial assumptions. This amount is recognized in other comprehensive income when it occurs and is immediately transferred from other components of equity to retained earnings.

(Exchange Differences on Translation of Foreign Operations)

These are the adjustments result from consolidating the financial statements of foreign operations, and the cumulative amount of effective portions of hedges from gains or losses on hedge instruments designated as net investment hedges.

(Effective Portion of Net Change in Fair Value of Cash Flow Hedges)

This is the cumulative amount of effective portions of hedges from gains or losses arising from changes in the fair value of hedging instruments relating to cash flow hedges.

4. Capital Transactions with Non-Controlling Interests

(Making Mitsubishi Tanabe Pharma Corporation a wholly owned subsidiary)

(1) Tender Offer

The Company implemented a tender offer as part of a series of transactions to acquire all of the shares of consolidated subsidiary Mitsubishi Tanabe Pharma Corporation (MTPC) from November 19, 2019, to January 7, 2020. The tender offer was completed, as the total number of the tendered shares was greater than the minimum number of shares to be purchased. The Company thereby acquired 197,355 thousand shares of MTPC's common stock for ¥396,684 million (excluding transaction costs) on January 15, 2020, lifting the Company's ownership of shares with voting rights from 56.4%, to 91.6%.

(2) Demand for Sale of Shares

On January 17, 2020, the Company notified MTPC that it would request non-controlling MTPC shareholders to sell all of their MTPC shares of common stock. That day, MTPC's Board of Directors resolved to approve of the demand. With the demand going into effect on March 2, 2020, the Company acquired 47,308,000 of these shares for ¥95,088 million (excluding transaction costs), with MTPC becoming a wholly owned subsidiary of the company.

The non-controlling interest (NCI) transaction associated with the acquisition of additional shares was accounted for as a capital transaction. The difference between the adjustment of NCI and the fair value of consideration and transaction costs is directly recognized as equity attributable to owners of the parent. The transaction outline is as follows.

Millions of yen	
Year ended March 31, 2020	
NCI carrying amount acquired	¥348,615
Consideration paid to NCI (Notes 1, 2, 3)	(493,271)
Decrease in equity attributable to owners of the parent	¥144,656

Notes:

- As of March 31, 2020, ¥95,433 million in payments had yet to be completed, and was deducted in calculating Payments for acquisition of subsidiaries' interests from non-controlling interests in the Consolidated Statement of Cash Flows.
- Payments for MTPC stock held by the MTPC Board Incentive Plan trust were deducted from the consideration paid to NCI.
- Consideration paid to NCI included transaction costs.

Note 25

Dividends

Dividends paid to shareholders are as follows:

Year ended March 31, 2019

Date of approval	Resolution approved by	Type of shares	Amount (Millions of yen)	Amount per share (Yen)	Entitlement date	Effective date
May 16, 2018	Board of Directors	Common stock	¥24,470	¥17	March 31, 2018	June 5, 2018
November 1, 2018	Board of Directors	Common stock	¥28,463	¥20	September 30, 2018	December 4, 2018

Note: Total dividends from a resolution of the Board of Directors on November 1, 2018, included ¥66 million in dividends for the Company stock held by the Board Incentive Plan trust.

Year ended March 31, 2020

Date of approval	Resolution approved by	Type of shares	Amount (Millions of yen)	Amount per share (Yen)	Entitlement date	Effective date
May 22, 2019	Board of Directors	Common stock	¥28,463	¥20	March 31, 2019	June 4, 2019
November 1, 2019	Board of Directors	Common stock	¥28,464	¥20	September 30, 2019	December 3, 2019

Note:

Total dividends from a resolution of the Board of Directors on May 22, 2019, and November 1, 2019, included ¥66 million and ¥57 million, respectively, in dividends for the Company stock held by the Board Incentive Plan trust (excluding shares equivalent to the accumulated number of points granted).

Dividends with a record date in the year ended March 31, 2020, with an effective date in the following fiscal year are as follows:

Year ended March 31, 2020

Date of approval	Resolution approved by	Type of shares	Amount (Millions of yen)	Paid from	Amount per share (Yen)	Entitlement date	Effective date
May 26, 2020	Board of Directors	Common stock	¥17,079	Retained earnings	¥12	March 31, 2020	June 10, 2020

Note:

Total dividends included ¥34 million in dividends of for the Company stock held by the Board Incentive Plan trust (excluding shares equivalent to the accumulated number of points granted).

Note 26

Other Comprehensive Income

Changes in each item of other comprehensive income during the year are as follows:

	Millions of yen	
	Year ended March 31, 2019	Year ended March 31, 2020
Financial assets measured at fair value through other comprehensive income:		
Amounts arising during period	¥ 7,629	¥(21,955)
Tax effects	(2,886)	6,043
Net amount	¥ 4,743	¥(15,912)
Remeasurements of defined benefit pension plans:		
Amounts arising during period	¥ (6,227)	¥ (1,312)
Tax effects	1,745	577
Net amount	¥ (4,482)	¥ (735)
Exchange differences on translation of foreign operations:		
Amounts arising during period	¥ (6,848)	¥(64,738)
Reclassification adjustments	1,032	1,149
Tax effects	65	72
Net amount	¥ (5,751)	¥(63,517)
Effective portion of net change in fair value of cash flow hedges:		
Amounts arising during period	¥ (3,220)	¥ 129
Reclassification adjustments	(1,322)	(69)
Tax effects	1,390	(24)
Net amount	¥ (3,152)	¥ 36
Share of other comprehensive income (loss) of investments accounted for using equity method:		
Amounts arising during period	¥ (2,193)	¥ (5,966)
Reclassification adjustments	4	9
Net amount	¥ (2,189)	¥ (5,957)
Total other comprehensive income	¥ (10,831)	¥(86,085)

Note 27

Share-based Payment

1. Stock Option System

(1) Details of Equity-Settled Share-Based Compensation Plan

Based on a resolution of the Remuneration Committee, the Company issues share-based compensation stock options as a form of performance-related payment to its corporate executive officers (directors excluding outside directors until the year ended March 31, 2015. The same shall apply hereinafter) and executive officers who will share with shareholders not only the benefits due to a rise in the Company's stock price but also losses due to a decline in the stock price as an incentive to boost corporate performance and enhance medium- to long-term corporate value taking into consideration the Company's financial results for each fiscal year as well as the status of achieving of business targets by the corporate executive officers or executive officers (including those who have the retired) based on their degree of contribution, etc.

All stock options that the Company issues are equity-settled share-based compensation. There are no vesting conditions. The exercise period is principally 20 years from the date of grant, and is, in principle, effective for 5 years from the day after the first year after recipients lose their status as director, executive officer, executive, or corporate auditor of the Company and/or its subsidiaries.

In line with the deployment of a share-based compensation plan using the Board Incentive Plan trust, there will be no new share-based compensation stock option grants from the fiscal year ending March 2020.

(2) Changes in the Number of Stock Options

	Number of shares	
	Year ended March 31, 2019	Year ended March 31, 2020
Outstanding at the beginning of the period	921,300	1,028,500
Granted	178,500	—
Exercised	(71,300)	(103,400)
Forfeited	—	—
Expired	—	—
Outstanding at the end of the period	1,028,500	925,100
Exercisable at the end of the period	123,350	286,050

The exercise price for all stock options is ¥1 per share.

The weighted average share prices for exercised stock options were ¥967.8 and ¥772.4 in the years ended March 31, 2019 and 2020, respectively.

The weighted average remaining contractual years of stock options outstanding at year-end were 11.4 years and 10.1 years as of March 31, 2019 and 2020, respectively.

(3) Fair Value of Stock Options

The weighted average fair value of stock options granted in year ended March 31, 2019 as of the measurement date was ¥834.

The Company employs the Black-Scholes model to calculate the fair value of stock options, using the following assumptions.

	Millions of yen	
	Year ended March 31, 2019	Year ended March 31, 2020
Share price	¥954.7	—
Share price volatility (note 1)	31.808%	—
Expected period (note 2)	3.98years	—
Expected dividends (note 3)	¥32 per share	—
Risk-free interest rate (note 4)	(0.102)%	—

Notes:

- For the year ended March 31, 2019, the calculation was based on the daily stock price for the previous 3.98 years.
- Using a period up to the expected average exercise time from the grant date.
- Based on the latest dividends for each fiscal year.
- The yield on Japanese government bonds for the expected period.

(4) Share-Based Compensation Expenses

Stock option-related expenses was ¥149 million in the year ended March 31, 2019 and was posted in Selling, general and administrative expenses in the Consolidated Statement of Income.

For stock options that do not have vesting conditions, bulk expenses are applied at the time of grant.

2. Share-Based Compensation Plans using Board Incentive Plan Trusts of the Company and Mitsubishi Chemical Corporation

(1) Details of Share-Based Compensation Plans

In the year ended March 31, 2019, the Company and Mitsubishi Chemical Corporation began offering performance-based share compensation plans ("the Plans") to executive officers and directors (excluding non-residents of Japan, the same applying hereafter) and the president & CEO of Mitsubishi Chemical Corporation and to directors and executives concurrently serving as executive officers (excluding nonresidents of Japan; executive officers and directors collectively referred to as executive officers below).

The Plans cover five consecutive fiscal years (initially, three through the fiscal year ending March 2021) that correspond to the period covered by the Company's medium-term management plan. Based on assessments of progress toward corporate performance

targets, each executive officer is granted a number of points each year according to that person's position. The Company stocks equivalent to accumulated points calculated after the retirements of executive officers (1 point = 1 share) are provided as executive remuneration.

The Plans employ the Board Incentive Plan trust. The Company and Mitsubishi Chemical Corporation contribute funds to acquire the Company stocks through the trust, which delivers the shares to executive officers.

The Plans are accounted for as equity-settled share-based compensation.

(2) Number of Points Granted during the Period and Weighted Average Fair Value of Points

The number of points granted during the period and weighted average fair value of points are as follows. The fair value on the day points were granted uses the share price on that day since the share price on the day of grant is a close approximation of fair value.

	Year ended March 31, 2019	Year ended March 31, 2020
Number of points granted during the period	464,540	197,008
Weighted average fair value of points (yen)	991	985

(3) Share-Based Compensation Expenses

Stock option-related expenses were ¥460 million and ¥194 million in the years ended March 31, 2019 and 2020, respectively. These expenses were presented within Selling, general and administrative expenses and Cost of sales in the Consolidated Statement of Income.

3. Share-Based Compensation Plan using the Board Incentive Plan Trust of Mitsubishi Tanabe Pharma Corporation

(1) Details of Share-based Compensation Plan

Mitsubishi Tanabe Pharma Corporation (MTPC), a consolidated subsidiary of the Company, has introduced a performance-based share compensation plan (hereinafter, "the plan") from the fiscal year ended March 31, 2018. The plan clarifies the linkage between remuneration of MTPC's board directors and executive officers (excluding non-residents of Japan and outside board directors; hereinafter "MTPC directors and executive officers") and the MTPC group's business performance. The objectives of introducing the plan are to provide incentives to MTPC directors and executive officers to strive for sustained growth of the MTPC group and enhance medium- to long-term corporate value, as well as raise management team morale. These objectives will be achieved by sharing with shareholders not only the benefits of rises in MTPC's share price but also the risk of share price decline.

MTPC has adopted a Board Incentive Plan (BIP) trust as the structure for the plan. Under the plan, MTPC shares are acquired through the trust using money contributed by MTPC as the source of funds. In accordance with "Rules relating to grant of shares" established by MTPC, from the date of commencement of the plan, points (1 point = 1 share) are granted to MTPC directors and executive officers each year on the final day of the fiscal year during the period in which the plan applies. Vesting conditions include the requirement that the recipient is a current office holder as an MTPC director or executive officer, and points are granted according to office held and the degree of achievement of performance targets. In principle, when MTPC directors and executive officers retire from office, by carrying out the prescribed beneficiary vesting procedures, they are able to receive shares of the Company, with the number of shares corresponding to the number of points granted.

The plan is accounted for as equity-settled share-based compensation.

In line with that entity's delisting on February 27, 2020, in March 2020 the Company revised its provisions for incorporating stock compensation in performance compensation for monetary benefits.

(2) Number of Points Granted during the Period and Weighted Average Fair Value of Points

The number of points granted during the period and weighted average fair value of points are as follows. The fair value on the day points were granted uses the share price on that day since the share price on the day of grant is a close approximation of fair value.

	Year ended March 31, 2019	Year ended March 31, 2020
Number of points granted during the period	11,975	4,749
Weighted average fair value of points (yen)	2,532	2,416

(3) Share-Based Compensation Expenses

Stock option-related expenses were ¥33 million and ¥14 million in the years ended March 31, 2019 and 2020, respectively. These expenses were presented within Selling, general and administrative expenses in the Consolidated Statement of Income.

Note 28

Retirement Benefits

The Company's consolidated subsidiaries maintain lump-sum retirement and retirement benefit plans. The retirement benefit plans are defined benefit (fund- and contract-type) and defined contribution plans. Some consolidated subsidiaries also maintain welfare pension plans.

1. Defined Benefit Plans

The defined benefit plans of the Company's consolidated subsidiaries are mainly cash balance pension plans. Benefits under these plans are based on such conditions as years of service, points gained from results and contributions during employment. Investment yields are determined after taking into consideration the yields of 10-year national government bonds.

Cash balance pension plans are managed by corporate pension funds that are legally separated from the consolidated subsidiaries of the Company pursuant to Japan's Defined Benefit Corporate Pension Plan Act. Consolidated subsidiaries, or pension fund directors, and pension investment management institutions are legally required to accord top priority to plan participants, and must manage plan assets based on prescribed policies.

Contract-type cash balance plans are run in line with Bureau of Health and Welfare-approved pension provisions. The management and operation of reserve funds is through contracts with trust banks and other entrusted management institutions on the basis of duty of care and damages stipulations for trustees.

Funded cash balance pension plans are run by corporate pension funds. If fund directors neglect to faithfully discharge their duties concerning reserve management and operations, they assume liability for fund damages.

Defined benefit plan amounts in the Consolidated Statement of Financial Position are as follows:

	As of March 31, 2019	Millions of yen As of March 31, 2020
Present value of the defined benefit obligation	¥617,139	¥577,815
Fair value of the plan assets	(521,713)	(487,533)
Net defined benefit liabilities	¥ 95,426	¥ 90,282
Retirement benefit liabilities	¥120,816	¥125,611
Retirement benefit assets	(25,390)	(35,329)
Net defined benefit liabilities	¥ 95,426	¥ 90,282

For defined benefit plans, amounts recognized as expenses in the Consolidated Statement of Income are as follows:

	Year ended March 31, 2019	Millions of yen Year ended March 31, 2020
Current service cost	¥19,091	¥18,935
Prior service cost	31	301
Interest expense	4,477	3,887
Interest income	(3,913)	(3,901)
Total	¥19,686	¥19,222

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

	Millions of yen	
	Year ended March 31, 2019	Year ended March 31, 2020
Outstanding at the beginning of the period	¥613,261	¥617,139
Current service cost	19,091	18,935
Interest expense	4,477	3,887
Remeasurements:		
Actuarial gains and losses arising from changes in demographic assumptions	41	(3,806)
Actuarial gains and losses arising from changes in financial assumptions	5,466	(605)
Other	1,349	(2,128)
Benefits paid	(37,797)	(35,268)
Prior service cost	31	301
Acquisitions through business combinations	12,817	204
Exchange differences on translation of foreign operations	(1,597)	(20,844)
Outstanding at the end of the period	¥617,139	¥577,815

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

	Millions of yen	
	Year ended March 31, 2019	Year ended March 31, 2020
Outstanding at the beginning of the period	¥529,998	¥521,713
Interest income	3,913	3,901
Remeasurements:		
Return on plan assets	629	(7,851)
Contributions by the employer	13,563	13,694
Benefits paid	(32,429)	(29,092)
Acquisitions through business combinations	5,275	106
Exchange differences on translation of foreign operations	764	(14,938)
Outstanding at the end of the period	¥521,713	¥487,533

The principal actuarial assumptions used to calculate present values of defined benefit obligations are as follows:

	As of March 31, 2019	As of March 31, 2020
Discount rate	0.57%	0.60%

In the event of a 0.5% increase or decrease in the discount rate, the principal actuarial assumption, the impact on the present value of defined benefit obligation as of March 31, 2019 and 2020 would be as follows. This sensitivity analysis assumes that all actuarial assumptions other than that subject to analysis are held constant.

	Millions of yen	
	As of March 31, 2019	As of March 31, 2020
Increase by 0.5%	¥(33,558)	¥(29,659)
Decrease by 0.5%	21,757	23,401

Note: The discount rate is determined by referring to yields on high-quality bonds with maturities similar to periods in which benefits are anticipated. The sensitivity analysis is therefore based on a minimum reasonable discount rate of 0%.

The fair value of plan assets are as follows:

As of March 31, 2019

	Millions of yen		Total
	Fair value with quoted prices in active markets	Fair value without quoted prices in active markets	
Cash and cash equivalents	¥ 15,601	¥ —	¥ 15,601
Equity instruments			
Domestic equities	37,550	—	37,550
Foreign equities	33,413	—	33,413
Other	—	101,119	101,119
Debt instruments			
Domestic bonds	8,766	—	8,766
Foreign bonds	25,256	—	25,256
Other	—	168,237	168,237
General accounts of life insurance companies	—	103,260	103,260
Other	—	28,511	28,511
Total	¥120,586	¥401,127	¥521,713

As of March 31, 2020

	Millions of yen		Total
	Fair value with quoted prices in active markets	Fair value without quoted prices in active markets	
Cash and cash equivalents	¥ 30,560	¥ —	¥ 30,560
Equity instruments			
Domestic equities	29,785	—	29,785
Foreign equities	13,901	—	13,901
Other	—	67,564	67,564
Debt instruments			
Domestic bonds	3,426	—	3,426
Foreign bonds	44,251	—	44,251
Other	—	162,899	162,899
General accounts of life insurance companies	—	104,747	104,747
Other	—	30,400	30,400
Total	¥121,923	¥365,610	¥487,533

The Company's consolidated subsidiaries secure the total investment returns required within an acceptable range of risk to sufficiently fund payments of pension benefits and lump-sum payments, and endeavor to minimize long-term contributions and amass financing for payments of benefits.

To achieve targeted rates of return, management sets percentages of policy assets based on medium- to long-term perspectives, reviewing them regularly, and endeavors to maximize returns in keeping with risk assumptions.

Standard and special contributions to defined benefit plans cover the expenses necessary to provide benefits.

In keeping with laws and regulations, the Company regularly recalculates pension financing to balance pension funding for the future. The recalculations review basal rates (including projected mortality, withdrawal, and interest rates) related to setting contributions, and validating premiums.

Scheduled contributions to plan assets for the year ending March 31, 2021 are ¥11,915 million.

The Company's consolidated subsidiaries may pay premium benefits to employees on retirement.

Some domestic consolidated subsidiaries have established retirement benefits trusts.

The weighted average durations of defined benefit plan obligations as of March 31, 2019 and 2020 were 10.8 years and 10.5 years, respectively.

2. Defined Contribution and Public Plans

Amounts recognized as expenses under defined contribution and public plans are as follows:

	Millions of yen	
	Year ended March 31, 2019	Year ended March 31, 2020
Defined contribution plan cost	¥ 8,451	¥ 9,556
Public plan cost	24,821	24,669

Note 29

Provisions

The breakdowns and schedule of provisions are as follows:

Year ended March 31, 2019

	Millions of yen				
	Asset retirement obligations	Provision for litigation	Provision for environmental measures	Other	Total
As of April 1, 2018	¥16,703	¥8,571	¥3,466	¥9,435	¥38,175
Arising during the year	1,414	992	1,054	7,065	10,525
Interest cost associated with passage of time	557	12	—	57	626
Utilized	(146)	(1,974)	(1,462)	(5,665)	(9,247)
Unused amounts reversed	(139)	—	—	(2,672)	(2,811)
Exchange differences on translation of foreign operations	427	—	3	108	538
Other	(878)	—	—	(338)	(1,216)
As of March 31, 2019	¥17,938	¥7,601	¥3,061	¥7,990	¥36,590
Current liabilities	¥29	¥ —	¥ 841	¥7,426	¥ 8,296
Non-current liabilities	17,909	7,601	2,220	564	28,294
Total	¥17,938	¥7,601	¥3,061	¥7,990	¥36,590

Year ended March 31, 2020

	Millions of yen				
	Asset retirement obligations	Provision for litigation	Provision for environmental measures	Other	Total
As of April 1, 2019	¥17,938	¥7,601	¥3,061	¥7,990	¥36,590
Arising during the year	10,687	—	2,470	2,971	16,128
Interest cost associated with passage of time	235	11	—	12	258
Utilized	(35)	(818)	(1,481)	(1,959)	(4,293)
Unused amounts reversed	(5,400)	(98)	(5)	(2,684)	(8,187)
Exchange differences on translation of foreign operations	(554)	—	(1)	(58)	(613)
Other	(160)	—	29	109	(22)
As of March 31, 2020	¥22,711	¥6,696	¥4,073	¥6,381	¥39,861
Current liabilities	¥201	¥ —	¥2,060	¥5,707	¥ 7,968
Non-current liabilities	22,510	6,696	2,013	674	31,893
Total	¥22,711	¥6,696	¥4,073	¥6,381	¥39,861

Asset retirement obligations

The Company covers recovery obligations for the rental real estate of the Group by recording projected payments based on historical amounts. These expenses are expected to be paid after one year or more; however, they may be affected by future business plans.

Reserves for Possible Losses in Connection with Litigation

Reserves for possible losses in connection with litigation are set aside for payments to settle lawsuits and in preparation for payments that may arise in the future. The main provisions for loss on litigation are as follows:

(1) Reserve for Health Management Allowances for HIV Compensation

To provide for future payments of health management allowances in connection with a lawsuit for damages filed by plaintiffs infected with HIV, the consolidated subsidiary, Mitsubishi Tanabe Pharma Corporation (MTPC) has set aside an estimated amount for such future payments.

Based on a letter confirming a settlement concluded in March 1996, an amount equivalent to the present value of the estimated future expenditure based on the payments to date for AIDS patients who have reached a settlement is recognized.

(2) Reserve for Health Management Allowances for Sub-acute Myelo-Optical

Neuropathy (SMON) Compensation

MTPC has made a provision in the accompanying consolidated financial statements for the estimated future medical treatment payments to be made over the remaining lives of the parties entitled to such payments under the compromise settlement.

(3) Reserve for HCV Litigation

To provide for losses that may arise in the future from a settlement of lawsuits filed by plaintiffs infected with HCV (hepatitis C virus), MTPC has set aside an estimated amount for payments related to such settlement based on estimates of the number of people receiving relief and the amount of relief payments required under a law which stipulates

that relief be provided to people who contacted hepatitis C from specific fibrinogen products or specific coagulation factor IX products.

Reserve for environmental measures

The Company records estimated losses to cover future losses from construction and environmental remediation activities. These expenses are expected to be paid after one year or more; however, they may be affected by future business plans.

Note 30

Bonds and Borrowings

The breakdown of bonds and borrowings is as follows:

	Millions of yen	
	As of March 31, 2019	As of March 31, 2020
Short-term borrowings	¥ 771,340	¥ 422,290
Current portion of long-term borrowings	180,873	155,532
Commercial paper	68,000	70,000
Current portion of bonds	60,000	55,000
Loans due to the transfer of trade receivables	24,322	21,586
Loans due to the transfer of trade receivables of subsidiaries	4,108	2,899
Bonds	392,065	486,823
Convertible bond-type bonds with subscription rights to shares	148,403	148,779
Long-term borrowings	597,640	920,345
Total	¥2,246,751	¥2,283,254
Current liabilities	¥1,108,643	¥ 727,307
Non-current liabilities	1,138,108	1,555,947
Total	¥2,246,751	¥2,283,254

Bonds and borrowings are classified as financial liabilities measured at amortized cost.

The average interest rates for short- and long-term borrowings as of March 31, 2019 were 0.736% and 1.585%, respectively.

The average interest rates for short- and long-term borrowings as of March 31, 2020 were 0.578% and 1.162%, respectively.

Repayment terms for long-term borrowings are from 2020 to 2059.

Loans due to the transfer of trade receivables are liabilities for transfers that do not meet the criteria for derecognition as financial assets.

Borrowings by consolidated subsidiaries from trade receivable transfers are liabilities related to transfers to consolidated subsidiaries.

The breakdown of bonds is as follows:

Note	Name of bond	Term	Interest rate	Millions of yen	
				As of March 31, 2019	As of March 31, 2020
1	2nd unsecured bond	2011-2021	1.204%	¥ 10,000	¥ 10,000
1	4th unsecured bond	2012-2019	0.556%	10,000	—
1	6th unsecured bond	2012-2019	0.665%	10,000	—
1	8th unsecured bond	2013-2020	0.948%	10,000	10,000
1	9th unsecured bond	2013-2023	1.226%	10,000	10,000
1	11th unsecured bond	2013-2020	0.604%	15,000	15,000
1	12th unsecured bond	2013-2023	0.918%	15,000	15,000
1	13th unsecured bond	2014-2019	0.319%	25,000	—
1	14th unsecured bond	2014-2021	0.482%	15,000	15,000
1	15th unsecured bond	2014-2024	0.800%	15,000	15,000
1	16th unsecured bond	2015-2022	0.433%	10,000	10,000
1	17th unsecured bond	2015-2025	0.755%	10,000	10,000
1	18th unsecured bond	2015-2020	0.281%	20,000	20,000
1	19th unsecured bond	2015-2022	0.476%	10,000	10,000
1	20th unsecured bond	2015-2025	0.711%	10,000	10,000
1	21st unsecured bond	2016-2021	0.120%	10,000	10,000
1	22nd unsecured bond	2016-2026	0.320%	10,000	10,000
1	23rd unsecured bond	2016-2036	0.850%	20,000	20,000
1	24th unsecured bond	2018-2028	0.370%	15,000	15,000
1	25th unsecured bond	2018-2038	0.890%	15,000	15,000
1	26th unsecured bond	2018-2028	0.410%	12,000	12,000
1	27th unsecured bond	2018-2038	1.000%	8,000	8,000
1	28th unsecured bond	2018-2048	1.380%	5,000	5,000
1	29th unsecured bond	2019-2029	0.330%	—	10,000
1	30th unsecured bond	2019-2039	0.830%	—	12,000
1	31st unsecured bond	2019-2049	1.214%	—	8,000
1	32nd unsecured bond	2020-2027	0.230%	—	20,000
1	33rd unsecured bond	2020-2030	0.280%	—	20,000
1	34th unsecured bond	2020-2040	0.690%	—	29,825
2	38th unsecured bond	2009-2019	2.020%	10,000	—
3	6th unsecured bond	2009-2019	1.940%	5,000	—
4	12th unsecured bond	2014-2021	0.558%	10,000	10,000
4	13th unsecured bond	2016-2021	0.140%	15,000	15,000
4	14th unsecured bond	2016-2026	0.390%	15,000	15,000
4	15th unsecured bond	2019-2024	0.130%	—	19,908
4	16th unsecured bond	2019-2026	0.190%	—	9,947
4	17th unsecured bond	2019-2029	0.300%	—	19,900
5	1st series deferrable interest and callable unsecured subordinated bonds	2019-2054	1.410%	99,153	99,323
6	2nd series deferrable interest and callable unsecured subordinated bonds	2019-2059	1.870%	7,912	7,920
	Subtotal			¥452,065	¥541,823
1	Zero coupon convertible bond-type bonds with subscription rights to shares due 2022	2017-2022	0.196%	74,561	74,707
1	Zero coupon convertible bond-type bonds with subscription rights to shares due 2024	2017-2024	0.312%	73,842	74,072
	Subtotal			148,403	148,779
	Total			¥600,468	¥690,602

Notes:

- These corporate bonds are issued by the Company.
- These corporate bonds are issued by Mitsubishi Chemical Corporation, a domestic consolidated subsidiary. As of March 28, 2016, the Company began managing the bonds because the company took over them based on the absorption-type company split.
- This corporate bond is issued by Mitsubishi Plastic, Inc. (now Mitsubishi Chemical Corporation), a domestic consolidated subsidiary. As of March 28, 2016, the Company began managing the bond because the company took over it based on the absorption-type company split.
- These corporate bonds are issued by Taiyo Nippon Sanso Corporation, a domestic consolidated subsidiary.
- These corporate bonds are issued by Taiyo Nippon Sanso Corporation, a domestic consolidated subsidiary. A fixed interest rate from the day following January 29, 2019 to January 29, 2024 and a variable interest rate from the day following January 29, 2024 (with a step-up in the interest rate scheduled for January 30, 2024).
- These corporate bonds are issued by Taiyo Nippon Sanso Corporation, a domestic consolidated subsidiary. A fixed interest rate from the day following January 29, 2019 to January 29, 2029 and a variable interest rate from the day following January 29, 2029 (with a step-up in the interest rate scheduled for January 30, 2029).

Assets pledged as collateral and collateralized obligations are as follows:
Assets pledged as collateral

	Millions of yen	
	As of March 31, 2019	As of March 31, 2020
Buildings and structures	¥ 6,248	¥ 6,291
Machinery and vehicles	11,979	11,590
Land	6,667	6,417
Other	763	773
Total	¥25,657	¥25,071

Collateralized obligations

	Millions of yen	
	As of March 31, 2019	As of March 31, 2020
Trade payables	¥ 389	¥ 312
Short-term borrowings	49	46
Current portion of long-term borrowings	1,486	2,304
Long-term borrowings	6,882	6,088
Other	50	20
Total	¥ 8,856	¥ 8,770

Note 31

Changes in Liabilities Relating to Financing Activities

Changes in liabilities relating to financing activities are as follows:

Year ended March 31, 2019

	Millions of yen				
	Short-term borrowings	Commercial paper	Long-term borrowings (Note)	Bonds (Note)	Lease liabilities (Note)
As of April 1, 2018	¥375,829	¥24,000	¥673,266	¥533,027	¥17,334
Cash flows	428,298	44,000	90,228	67,036	(3,893)
Increase (decrease) due to transfer to liabilities related directly associated with assets held for sale	(400)	—	—	—	1
Changes from acquisition or loss of control over subsidiaries or other businesses	841	—	5,978	—	—
Changes owing to new leases and contract changes, etc.	—	—	—	—	2,780
Impact of foreign exchange rate fluctuations, etc.	(4,798)	—	9,041	405	107
As of March 31, 2019	¥799,770	¥68,000	¥778,513	¥600,468	¥16,329

Note: Including amounts due or scheduled for redemption within one year.

Year ended March 31, 2020

	Millions of yen				
	Short-term borrowings	Commercial paper	Long-term borrowings (Note)	Bonds (Note)	Lease liabilities (Note)
As of April 1, 2019	¥799,770	¥68,000	¥778,513	¥600,468	¥ 16,329
Adjustment due to applying IFRS 16	—	—	—	—	100,614
Adjusted balance as of April 1, 2019	799,770	68,000	778,513	600,468	116,943
Cash flows	(330,088)	2,000	306,715	89,185	(30,555)
Increase (decrease) due to transfer to liabilities related directly associated with assets held for sale	(100)	—	(600)	—	—
Changes from acquisition or loss of control over subsidiaries or other businesses	331	—	732	—	(9,627)
Changes owing to new leases and contract changes, etc.	—	—	—	—	29,284
Impact of foreign exchange rate fluctuations, etc.	(23,138)	—	(9,483)	949	(1,239)
As of March 31, 2020	¥446,775	¥70,000	¥1,075,877	¥690,602	¥104,806

Note: Including amounts due or scheduled for redemption within one year.

Note 32

Other Financial Liabilities

The breakdown of other financial liabilities is as follows:

	Millions of yen	
	As of March 31, 2019	As of March 31, 2020
Accounts payable-other	¥ 124,855	¥ 212,111
Accrued expenses	75,174	78,052
Lease obligations	16,329	—
Lease liabilities	—	104,806
Deposits	8,699	30,665
Other	24,075	22,439
Total	¥249,132	¥448,073
Current liabilities	¥222,377	¥359,540
Non-current liabilities	26,755	88,533
Total	¥249,132	¥448,073

Other financial liabilities are mainly classified as financial liabilities measured at amortized cost.

Note 33

Lease Transactions

1. Finance Leases (Lessee)

Future minimum lease payments and the present value of future minimum lease payments are as follows:

	Millions of yen		
	As of March 31, 2019		
	Total future minimum lease payments	Future finance costs	Present value
Due within one year	¥ 3,849	¥ (184)	¥3,665
Due after one year and not later than five years	7,711	(403)	7,308
Later than five years	5,444	(88)	5,356
Total	¥17,004	¥ (675)	¥16,329

2. Operating Lease (Lessee)

Future minimum lease payments under non-cancellable operating lease contracts are as follows:

	Millions of yen
	As of March 31, 2019
Due within one year	¥14,638
Due after one year and not later than five years	24,504
Later than five years	9,578
Total	¥48,720

In the year ended March 31, 2019, lease fees recognized as expenses were ¥22,154 million.

3. Profit or Loss and Cash Outflows Related to Lease Transactions

Profit or loss and cash outflows related to lease transactions are as follows.

	Millions of yen
	Year ended March 31, 2020
Depreciation of right-of-use assets	
Underlying assets of land, buildings and structures	¥ 16,450
Underlying assets of tools, furniture and fixtures	2,676
Underlying assets of machinery and vehicles	5,574
Total	¥ 24,700
Expenses related to short-term leases	¥ 1,507
Expenses related to leases of low-value assets	10,841
Variable lease payments	353
Total cash outflows for leases	¥ 43,256

4. Additional Information Related to Lease Transactions

Many of the leasing activities of the Group entail real estate leasing, with land and buildings being leased mainly as office and factory land. To provide business flexibility, some leases contain extension and termination options. The Group assesses whether it is reasonably certain to exercise extension options (or not to exercise termination options) and determines the lease periods.

Under the Group's leasing activities, there are no significant restrictions or covenants imposed by leasing or sale and leaseback transactions.

Note 34

Other Liabilities

The breakdown of other liabilities is as follows:

	Millions of yen	
	As of March 31, 2019	As of March 31, 2020
Employees' bonuses	¥ 48,537	¥ 40,495
Employees' paid leave related obligations	35,646	35,443
Advances received	14,243	16,522
Accrued consumption taxes	12,319	13,051
Social insurance premiums received	6,199	3,719
Deferred income from out-licensing agreements	3,777	3,090
Other (Note)	59,339	91,095
Total	¥180,060	¥203,415
Current liabilities	¥138,089	¥122,575
Non-current liabilities	41,971	80,840
Total	¥180,060	¥203,415

Note:

Others include amounts recorded as liability for some royalties without recognizing revenue. See Note 7 Revenues for details.

Note 35

Trade Payables

Trade payables are as follows:

	Millions of yen	
	As of March 31, 2019	As of March 31, 2020
Accounts payable	¥492,404	¥398,061

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

Note 36

Financial Instruments

1. Capital Management

Under the APTIS 20 medium-term management plan (fiscal 2016 to 2020), which commenced from the year ended March 31, 2017, the Group aims to become a fast-growing, highly profitable corporate entity through its business domains in Performance Products, Health Care and Industrial Materials. The Company aims to balance efforts to invest in growth business, bolster shareholder returns, and reinforce its financial position and thereby enhance enterprise value. Key benchmarks are core operating income, core operating income return on sales, net income attributable to owners of the parent, return on equity, and the net debt-to-equity ratio.

	As of or year ended March 31, 2019	As of or year ended March 31, 2020
Return on Equity (ROE) (Note 1)	12.7%	4.2%
Net D/E ratio (Note 2)	1.26	1.79

Notes:

- Net income attributable to owners of the parent / equity attributable to owners of the parent (averages of beginning and end of fiscal years)
- Net interest-bearing debt^{*1} / equity attributable to owners of the parent (end of fiscal years)
^{*1}Net interest-bearing debt = Interest-bearing debt - (cash and cash equivalents + cash reserves^{*2})
^{*2} Cash reserves comprise certificates of deposits, securities, and other instruments other than cash equivalents that the Group holds to manage surplus funds.

2. Financial Risk Management

The Group is exposed to financial risks in the course of doing business in an array of fields around the world. It manages risks based on certain policies to reduce or avoid such risks. The policy with derivatives transactions is to restrict their use to actual demand. The Group does not enter into derivative transactions for speculative purposes. The relevant officers are informed about contract balances, fair value, and other elements of these transactions based on internal regulations for transaction authority and limits.

3. Credit Risk

The Group is exposed to customer credit risk for trade and other receivables acquired in the course of business. The securities that the Group holds are exposed to the credit risk of issuers. Derivatives transactions that the Group conducts to hedge financial risks are exposed to the credit risks of counterparty financial institutions.

In keeping with its credit management rules, the Group regularly monitors the trade receivables and long-term loans of major customers, oversees due dates and balances for each counterparty, and endeavors to swiftly identify and mitigate collections concerns arising from deteriorating financial positions. The Group only invests in bonds with high ratings, so credit risk is inconsequential. Derivatives transactions are only entered into with financial institutions with high credit ratings to minimize credit risk from nonperformance by counterparties. The Group prevents excessive concentrations of credit risk through special management procedures.

At the end of the fiscal year, the Group recognizes impairment losses based on historical rates to the Allowance for doubtful accounts, for significant uncollectible financial assets, and for insignificant financial assets. The Allowance for doubtful accounts relating to such assets is included in Trade receivables and Other financial assets in the Consolidated Statement of Financial Position.

Changes in the Allowance for doubtful accounts, measured at amounts equivalent to projected losses for the entire period, are as follows.

There were no significant differences between projected 12-month credit losses on loans and the projected credit losses for the entire period.

	Millions of yen	
	Year ended March 31, 2019	Year ended March 31, 2020
Outstanding at the beginning of the period	¥6,713	¥9,807
Addition	5,465	2,637
Decrease (intended use)	(1,462)	(1,445)
Decrease (reversal)	(699)	(406)
Other	(210)	(414)
Outstanding at the end of the period	¥9,807	¥10,179

The maximum exposure to the credit risks of financial assets is the carrying amount after impairment presented in the Consolidated Statement of Financial Position.

The Group holds real estate, securities, etc. as collateral for receivables against certain customers.

Maximum exposure on credit risk of financial guarantee contracts is the amount of guarantee obligations etc. described in "Note 40 Contingent Liabilities".

4. Liquidity Risk

The Group's trade payables obligations and borrowings are exposed to liquidity risk. The Group manages this risk by producing cash plan and ensuring liquidity by maintaining commitment lines with several financial institutions.

Outstanding financial liabilities (including derivative financial instruments) by fiscal year are as follows:

As of March 31, 2019

	Millions of yen								
	Carrying amount	Contractual cash flow	Due within one year	Due after one year through two years	Due after two years through three years	Due after three years through four years	Due after four years through five years	Due after five years	
Non-derivative financial liabilities:									
Trade payables	¥492,404	¥492,404	¥492,404	¥ —	¥ —	¥ —	¥ —	¥ —	¥ —
Short-term borrowings	799,770	799,770	799,770	—	—	—	—	—	—
Commercial paper	68,000	68,000	68,000	—	—	—	—	—	—
Bonds	600,468	603,000	60,000	55,000	125,000	20,000	100,000	243,000	
Long-term borrowings	778,513	780,598	181,298	114,325	84,036	64,495	96,187	240,257	
Lease obligations	16,329	17,003	3,849	2,690	2,185	1,624	1,213	5,442	
Accounts payable-other	124,855	124,855	124,855	—	—	—	—	—	
Accrued expenses	75,174	75,174	75,174	—	—	—	—	—	
Others	32,635	32,635	19,866	1,563	262	2	2	10,940	
Derivative liabilities:									
Foreign exchange forward contracts									
Currency swaps	4	4	1	1	1	1	—	—	
Interest rate swaps	89	84	75	9	—	—	—	—	
Others	8	8	8	—	—	—	—	—	

As of March 31, 2020

	Millions of yen								
	Carrying amount	Contractual cash flow	Due within one year	Due after one year through two years	Due after two years through three years	Due after three years through four years	Due after four years through five years	Due after five years	
Non-derivative financial liabilities:									
Trade payables	¥398,061	¥398,061	¥398,061	¥ —	¥ —	¥ —	¥ —	¥ —	¥ —
Short-term borrowings	446,775	446,775	446,775	—	—	—	—	—	—
Commercial paper	70,000	70,000	70,000	—	—	—	—	—	—
Bonds	690,602	693,000	55,000	125,000	20,000	100,000	35,000	358,000	
Long-term borrowings	1,075,877	1,080,863	155,532	114,698	106,578	137,557	114,916	451,582	
Lease obligations	104,806	116,458	30,264	22,517	13,475	10,584	8,853	30,765	
Accounts payable-other	212,111	212,111	212,111	—	—	—	—	—	
Accrued expenses	78,052	78,052	78,052	—	—	—	—	—	
Others	51,829	51,829	40,879	268	22	2	2	10,656	
Derivative liabilities:									
Foreign exchange forward contracts									
Currency swaps	1,181	1,181	1,181	—	—	—	—	—	
Interest rate swaps	69	69	18	11	11	11	11	7	

For financial guarantee agreements, maximum amounts based on performance requests are the outstanding guaranteed liabilities described in Note 40 Contingent Liabilities.

The total commitment line and borrowing balance is as follows:

	Millions of yen	
	As of March 31, 2019	As of March 31, 2020
Total commitment line	¥131,589	¥135,878
Borrowing balance	7,769	—
Unused balance	¥123,820	¥135,878

We are also diversifying funding, notably by obtaining uncommitment-based overdraft facilities with several financial institutions and by securing frameworks to issue commercial paper or register corporate bond issues.

5. Foreign Exchange Risk

Foreign currency denominated receivables and payables from the Group's global operations are exposed to foreign exchange fluctuation risk. The Group uses foreign exchange forward contracts and currency swaps as needed to hedge against the foreign currency risk associated with such receivables and payables.

The Group's net investments in foreign operations are exposed to foreign exchange fluctuation risk. The Group hedges such risk as needed using foreign currency-denominated loans.

Foreign Exchange Sensitivity Analysis

If the yen at the end of the fiscal year was 1% higher against the U.S. dollar and the euro for the foreign currency denominated financial instruments that the Group held at the year end, the impact on income before taxes in the Consolidated Statement of Income would be as follows.

This analysis is based on multiplying each currency risk exposure by 1%, based on the assumption that other variables (including other foreign exchange rates and interest rates) are held constant.

	Millions of yen	
	Year ended March 31, 2019	Year ended March 31, 2020
U.S. dollar (1% appreciation of yen)	¥(388)	¥(39)
Euro (1% appreciation of yen)	118	(6)

6. Interest Rate Risk

Interest rate risk within the Group arises from interest-bearing debt net of cash equivalents. The Group raises funds needed to do business and make capital investments through borrowings and the issuance of corporate bonds. Borrowings and corporate bonds with floating rates are exposed to interest rate fluctuation risk.

The Group uses derivatives transactions (interest rate swaps) to hedge against interest rate fluctuation risk.

Interest Rate Sensitivity Analysis

In the event the interest rate on financial instruments that the Group holds at the end of each fiscal year increases by 100 basis points, the impact on income before taxes in the Consolidated Statement of Income would be as follows:

The analysis is for financial instruments affected by interest rate fluctuations and assumes that other factors, including the impacts of foreign exchange fluctuations, are held constant.

	Millions of yen	
	Year ended March 31, 2019	Year ended March 31, 2020
Income before taxes	¥(3,300)	¥(3,426)

7. Market Price Fluctuation Risk

The Group's securities holdings are exposed to market price fluctuation risk.

With respect to securities, the Group regularly reviews the fair value and financial positions of issuers (business partners), and constantly reviews holdings by taking into account its relationships with business partners.

8. Fair Value of Financial Instruments

Financial instruments are classified into the following three-level fair value hierarchy:

- Level 1: Unadjusted quoted prices for identical assets or liabilities in active markets
- Level 2: Valuations measured by direct or indirect observable inputs other than Level 1
- Level 3: Valuations measured by significant unobservable inputs

Whether any financial instruments are determined to have been transferred between levels is considered at year-end. There were no significant transfers between levels in the years ended March 31, 2019 and 2020.

(1) Financial instruments measured at fair value on a recurring basis

Financial assets and liabilities measured at fair value on a recurring basis were as follows:

As of March 31, 2019				
	Millions of yen			
	Level 1	Level 2	Level 3	Total
Assets				
Stocks and investments	¥108,249	¥ —	¥84,164	¥192,413
Stocks and investments held for sale	449	—	9	458
Derivatives	—	258	—	258
Total	¥108,698	¥ 258	¥84,173	¥193,129
Liabilities				
Derivatives	¥ —	¥ 139	¥ —	¥ 139
Total	¥ —	¥ 139	¥ —	¥ 139

As of March 31, 2020

	Millions of yen			
	Level 1	Level 2	Level 3	Total
Assets				
Stocks and investments	¥ 75,050	¥ —	¥ 117,431	¥ 192,481
Stocks and investments held for sale	20	—	11	31
Derivatives	—	169	—	169
Total	¥75,070	¥ 169	¥ 117,442	¥ 192,681
Liabilities				
Derivatives	¥ —	¥1,275	¥ —	¥ 1,275
Total	¥ —	¥1,275	¥ —	¥ 1,275

Stocks and investments

The fair value of marketable shares classified as Level 1 is based on unadjusted quoted prices in active markets for identical assets or liabilities.

The fair value of Level 3 unlisted shares and investments for which quoted prices in active markets are unavailable is calculated by using reasonably available inputs through similar company comparisons or other appropriate valuation techniques. Illiquidity discounts are added as needed.

Derivative assets and liabilities

The fair value of Level 2 derivative assets and liabilities is based on such observable inputs as prices provided by counterparty financial institutions or exchange and interest rates and such like.

The fair value of Level 3 financial instruments is calculated by valuation specialists determining valuation methods for each relevant financial instrument in accordance with valuation policies and procedures that include valuation methods for fair value calculations approved by suitably authorized personnel.

Changes in Level 3 financial instruments are as follows:

	Millions of yen	
	Year ended March 31, 2019	Year ended March 31, 2020
Balance at beginning of period	¥73,244	¥84,173
Other comprehensive income (Note)	13,354	(1,712)
Purchase and share exchange acceptance	1,794	37,860
Sales or redemptions	(3,582)	(289)
Others	(637)	(2,590)
Balance at end of period	¥84,173	¥117,442

Note: Included in "Financial assets measured at fair value through other comprehensive income" in the Consolidated Statement of Comprehensive Income

(2) Financial instruments measured at amortized cost
The carrying amounts and estimated fair values of the financial instruments measured at amortized cost are as follows:

As of March 31, 2019

	Carrying amounts	Fair value			Total
		Level 1	Level 2	Level 3	
Assets:					
Debt securities	¥ 30,000	¥ —	¥ —	¥29,982	¥ 29,982
Total	¥ 30,000	¥ —	¥ —	¥29,982	¥ 29,982
Liabilities:					
Long-term borrowings	¥ 778,513	¥ —	¥ 793,472	¥ —	¥ 793,472
Bonds	600,468	—	609,081	—	609,081
Total	¥1,378,981	¥ —	¥1,402,553	¥ —	¥1,402,553

As of March 31, 2020

	Carrying amounts	Fair value			Total
		Level 1	Level 2	Level 3	
Assets:					
Debt securities	¥ 50,000	¥ —	¥ —	¥49,960	¥ 49,960
Total	¥ 50,000	¥ —	¥ —	¥49,960	¥ 49,960
Liabilities:					
Long-term borrowings	¥1,075,877	¥ —	¥1,094,455	¥ —	¥1,094,455
Bonds	690,602	—	695,108	—	695,108
Total	¥1,766,479	¥ —	¥1,789,563	¥ —	¥1,789,563

The carrying amounts of financial assets and liabilities measured at amortized cost, other than debt securities, long-term borrowings and bonds presented in the tables above, are approximately the same as the fair values of such financial assets and liabilities.

Debt securities

The fair value of Level 3 subordinated and other bonds is calculated with reference to prices provided by counterparty financial institutions.

Long-term borrowings

The fair value of Level 2 long-term loans is based on the present value, calculated by discounting the total principal and interest by the interest rate assumed for similar new borrowings.

Bonds

The fair value of Level 2 corporate bonds is based on the market price.

9. Transfers of Financial Assets

The Group transfers some operating receivables to a business entity comprising third-party financial institutions. The entity operates as part of these institutions and purchases a large amount of assets from customers other than those of the Group, so trade receivables that the Group transferred constitute a small proportion of the entity's total assets. The relevance of the Group to the assessment of exposure to the risks of this entity is therefore low.

(1) Transfers of financial assets that are not derecognized overall

As of March 31, 2019 and 2020, Trade receivables included ¥20,097 million and ¥9,202 million, respectively, of trade receivables that were transferred without satisfying financial asset derecognition requirements. Bonds and borrowings included ¥24,322 million and ¥21,586 million in transfers. These fair values approximate their carrying values. The net positions mainly stem from differences in periods for retained portions relating to sales of trade receivables and deposits of trade receivables and repayments of borrowings. If debtors defaulted on these trade receivables, the Group would be deemed to hold most of the risks and economic value of ownership of the transferred assets, as payment obligations would revert to the Group.

(2) Transfers of financial assets that are derecognized overall

In the years ended March 31, 2019 and 2020, expenses arising from transfers of trade receivables that were derecognized in their entirety were ¥224 million and ¥224 million, respectively.

10. Derivative Transactions

(1) Derivative transactions to which hedge accounting is applied

The analysis of contract amounts of derivative transactions by due dates is as follows:

As of March 31, 2019

	Contract amount	Due within one year	Due after one year through two years	Due after two years through three years	Due after three years through four years	Due after four years through five years	Due after five years
Cash flow hedges							
Foreign exchange risk:							
Foreign exchange forward contracts	¥5,436	¥4,766	¥ 670	¥ —	¥ —	¥ —	¥ —
Interest rate risk:							
Interest rate swaps	63,893	60,332	2,284	284	284	284	425
Others	292	292	—	—	—	—	—

As of March 31, 2020

	Contract amount	Due within one year	Due after one year through two years	Due after two years through three years	Due after three years through four years	Due after four years through five years	Due after five years
Cash flow hedges							
Foreign exchange risk:							
Foreign exchange forward contracts	¥12,983	¥12,983	¥ —	¥ —	¥ —	¥ —	¥ —
Currency swaps	17,899	17,899	—	—	—	—	—
Interest rate risk:							
Interest rate swaps	3,639	2,298	298	298	298	298	149
Others	—	—	—	—	—	—	—
Hedge of net investments in foreign operations							
Foreign exchange risk:							
Foreign currency-denominated borrowings	74,718	—	—	—	—	—	74,718

The principal rates on forward exchange contracts and currency swap transactions and the principal rates on payments under interest rate swaps are as follows:

	Millions of yen	
	As of March 31, 2019	As of March 31, 2020
Cash flow hedges		
Foreign exchange risk:		
Foreign exchange forward contracts		
U.S. dollars	¥107.13-111.82	¥103.93-111.68
Euros	¥124.43-131.48	¥118.23-122.43
Currency swaps		
British pounds	—	¥143.19
Interest rate risk		
Interest rate swaps		
Pay fixed rate, receive floating rate	0.23%-2.30%	0.23%-0.70%

Amounts for derivatives designated as hedges are as follows:

As of March 31, 2019

	Contract amount	Carrying amount		Items in Consolidated Statement of Financial Position	Change in fair value of hedged item used as the basis for recognizing hedge ineffectiveness
		Assets	Liabilities		
Cash flow hedges					
Foreign exchange risk:					
Foreign exchange forward contracts	¥ 5,436	¥ 46	¥ 27	Other financial assets Other financial liabilities	¥ (28)
Interest rate risk:					
Interest rate swaps	63,893	158	89	Other financial assets Other financial liabilities	53
Interest rate currency swaps	—	—	—	—	(1,180)
Others	292	—	8	Other financial liabilities	(23)

As of March 31, 2020

	Contract amount	Carrying amount		Items in Consolidated Statement of Financial Position	Change in fair value of hedged item used as the basis for recognizing hedge ineffectiveness
		Assets	Liabilities		
Cash flow hedges					
Foreign exchange risk:					
Foreign exchange forward contracts	¥ 12,983	¥ 96	¥ 23	Other financial assets Other financial liabilities	¥ 54
Currency swaps	17,899	—	1,181	Other financial liabilities	(1,181)
Interest rate risk:					
Interest rate swaps	3,639	—	69	Other financial liabilities	(138)
Others	—	—	—	—	8
Hedge of net investments in foreign operations					
Foreign exchange risk:					
Foreign currency-denominated borrowings	74,718	—	74,718	Bonds and borrowings	937

Amounts for items designated as hedges are as follows:

	As of March 31, 2019		As of March 31, 2020		
	Change in fair value of hedged item used as the basis for recognizing hedge ineffectiveness	Cash flow hedge reserve	Change in fair value of hedged item used as the basis for recognizing hedge ineffectiveness	Cash flow hedge reserve	Foreign currency translation surplus
Cash flow hedges					
Foreign exchange risk:					
Planned to purchase	¥ 28	¥ 54	¥ (54)	¥ 69	—
Foreign currency-denominated debt and interest	—	—	1,181	37	—
Interest rate risk:					
Interest on borrowings	1,127	95	138	45	—
Others	23	38	(8)	19	—
Hedge of net investments in foreign operations					
Foreign exchange risk:					
Exchange rate fluctuations in net investments	—	—	(937)	—	474

Details of cash flow hedges and hedges of net investments in foreign operations are as follows:

Year ended March 31, 2019

	Changes in fair value of hedges recognized in other comprehensive income	Ineffective portions of hedges recognized in profit or loss	Consolidated Statement of Income items in which ineffective portions of hedges are included in profit or loss	Millions of yen	
				Reclassification adjustments from cash flow hedge reserve to profit or loss	Consolidated Statement of Income items including profit from reclassification adjustments
Cash flow hedges					
Foreign exchange risk:					
Foreign exchange forward contracts	¥(2,960)	¥—	¥—	¥(124)	Financial expenses
Others	(199)	—	—	—	—
Interest rate risk:					
Interest rate swaps	48	—	—	61	Financial expenses
Interest rate currency swaps	(24)	—	—	(832)	Financial expenses
Others	(17)	—	—	—	—

Year ended March 31, 2020

					Millions of yen
	Changes in fair value of hedges recognized in other comprehensive income	Ineffective portions of hedges recognized in profit or loss	Consolidated Statement of Income items in which ineffective portions of hedges are included in profit or loss	Reclassification adjustments from cash flow hedge reserve to profit or loss	Consolidated Statement of Income items including profit from reclassification adjustments
Cash flow hedges					
Foreign exchange risk:					
Foreign exchange forward contracts	¥32	¥—	¥—	¥23	Financial expenses
Currency swaps	37	—	—	—	—
Interest rate risk:					
Interest rate swaps	(39)	—	—	38	Financial expenses
Others	6	—	—	—	—
Hedge of net investments in foreign operations					
Foreign exchange risk:					
Foreign currency-denominated borrowings	937	—	—	—	—

(2) Derivative transactions to which hedge accounting is not applied
Amounts relating to items not designated as hedges are as follows:

	As of March 31, 2019			As of March 31, 2020		
	Contract amount	Over one year	Fair value	Contract amount	Over one year	Fair value
Foreign exchange forward contracts	¥ 7,250	¥ —	¥ 1	¥ 5,370	¥ —	¥ 37
Currency swaps	626	458	38	339	269	34
Total	¥ 7,876	¥458	¥ 39	¥ 5,709	¥269	¥ 71

Note 37

Subsidiaries

Subsidiaries with significant non-controlling interests in years ended March 31, 2019 and 2020, were as follows:

Name of subsidiary	Location	Percentage of non-controlling interest	
		As of March 31, 2019	As of March 31, 2020
Mitsubishi Tanabe Pharma Corporation	Japan, others	43.6%	—
TAIYO NIPPON SANSCO CORPORATION	Japan, others	49.4%	49.4%

Note:

Consolidated subsidiary Mitsubishi Tanabe Pharma Corporation became a wholly owned subsidiary in the year ended March 31, 2020. See Note 24 Capital for details.

As of March 31, 2020, there were no significant non-controlling interests in the Mitsubishi Tanabe Pharma Corporation, so cumulative non-controlling interests and summarized financial information for the year are not stated.

Net income attributable to non-controlling interests of relevant subsidiaries and dividends paid to non-controlling interests are as follows:

	Year ended March 31, 2019		Year ended March 31, 2020	
	Mitsubishi Tanabe Pharma Corporation	TAIYO NIPPON SANSCO CORPORATION	Mitsubishi Tanabe Pharma Corporation	TAIYO NIPPON SANSCO CORPORATION
Net income (loss) attributable to non-controlling interests	¥10,714	¥21,528	¥(1,371)	¥26,681
Dividends paid to non-controlling interests	13,982	5,735	13,879	6,391

Cumulative non-controlling interests of relevant subsidiaries are as follows:

	As of March 31, 2019		As of March 31, 2020
	Mitsubishi Tanabe Pharma Corporation	TAIYO NIPPON SANSCO CORPORATION	TAIYO NIPPON SANSCO CORPORATION
Cumulative non-controlling interests amounts	¥369,091	¥ 219,605	¥ 222,418

Summary financial information on relevant subsidiaries is as follows. Summary financial information below is calculated based on the amounts before elimination in consolidation, adjusting goodwill and other items recognized at the time of a business combination.

Summary Consolidated Statements of Financial Position

	As of March 31, 2019		As of March 31, 2020
	Mitsubishi Tanabe Pharma Corporation	TAIYO NIPPON SANSCO CORPORATION	TAIYO NIPPON SANSCO CORPORATION
Current assets	¥ 588,433	¥ 347,143	¥ 367,302
Non-current assets	438,606	1,508,420	1,464,947
Total	¥1,027,039	¥1,855,563	¥1,832,249
Current liabilities	91,699	719,177	331,903
Non-current liabilities	55,406	626,225	996,880
Total	¥ 147,105	¥1,345,402	¥1,328,783
Equity	879,934	510,161	503,466
Total	¥1,027,039	¥1,855,563	¥1,832,249

Summary Consolidated Statements of Income and Consolidated Statements of Comprehensive Income

	Millions of yen		
	Year ended March 31, 2019		Year ended March 31, 2020
	Mitsubishi Tanabe Pharma Corporation	TAIYO NIPPON SANSCO CORPORATION	TAIYO NIPPON SANSCO CORPORATION
Sales revenue	¥424,767	¥740,341	¥850,239
Net income	32,216	42,017	51,396
Total comprehensive income	40,894	26,161	9,608

Summary Consolidated Statements of Cash Flows

	Millions of yen		
	Year ended March 31, 2019		Year ended March 31, 2020
	Mitsubishi Tanabe Pharma Corporation	TAIYO NIPPON SANSCO CORPORATION	TAIYO NIPPON SANSCO CORPORATION
Cash flows from operating activities	¥ 41,460	¥ 98,686	¥150,084
Cash flows from investing activities	(31,212)	(754,969)	(62,630)
Cash flows from financing activities	(25,869)	664,925	(46,242)
Effect of exchange rate changes on cash and cash equivalents	531	3,128	(1,096)
Net increase (decrease) in cash and cash equivalents	¥(15,090)	¥ 11,770	¥ 40,116

Note 38

Related Parties

1. Related Party Transactions

Transactions with major related parties are as follows. For sales of goods and services, the principal transactions are product sales, while the main transactions for goods purchases are purchases of raw materials. The terms for transactions with related parties are similar to those of independent third-party transactions.

	Millions of yen			
	Year ended March 31, 2019		Year ended March 31, 2020	
	Joint venture	Associates	Joint venture	Associates
Sales of goods and services	¥64,441	¥37,058	¥62,576	¥29,449
Purchases of goods and services	23,138	45,824	24,024	40,687

Receivables and obligations to major related parties as a result of the above transactions are as follows:

	Millions of yen			
	As of March 31, 2019		As of March 31, 2020	
	Joint venture	Associates	Joint venture	Associates
Receivables				
Accounts receivable	¥12,538	¥ 9,658	¥14,302	¥ 7,274
Others	509	2,145	635	1,548
Total	¥13,047	¥11,803	¥14,937	¥ 8,822
Obligations				
Accounts payable	¥3,467	¥4,516	¥3,154	¥4,418
Others	2	841	11	204
Total	¥ 3,469	¥5,357	¥ 3,165	¥4,622

Remuneration for key Group executives is as follows:

	Millions of yen	
	Year ended March 31, 2019	Year ended March 31, 2020
Remuneration and bonuses	¥1,952	¥1,788
Share-based compensation	237	116
Total	¥2,189	¥1,904

Note 39

Commitments relating to acquisitions of property, plant and equipment and intangible assets are as follows:

	Millions of yen	
	As of March 31, 2019	As of March 31, 2020
Acquisitions of property, plant and equipment and intangible assets	¥152,883	¥169,921

Note 40

Contingent Liabilities

Guarantee Obligations

Guarantees and similar undertakings for borrowings from joint ventures, associates and financial institutions of general business partners are as follows.

	Millions of yen	
	As of March 31, 2019	As of March 31, 2020
Joint ventures	¥8,201	¥6,741
Associates	372	247
General business partners	361	225
Others	1,262	1,170
Total	¥10,196	¥8,383

Note 41

Subsequent Event

Acquisition of Gelest, Inc. through Mitsubishi Chemical America, Inc. (MCA)

Mitsubishi Chemical Corporation (MCC) has decided to acquire, through MCA, this American innovator, manufacturer, and supplier of silicones, organosilanes, and metal-organics.

MCA entered into a definitive agreement with Gelest Intermediate Holdings, Inc., Gelest's parent, to acquire all of the latter's issued and outstanding shares on April 30, 2020. The transaction should be completed within six months of that date.

Combining Gelest's extensive capabilities with MCC's technologies, operating resources, and customer network should greatly expand the breadth of MCC's customer solutions.

Overview of Gelest, Inc.

Head office and plant: Morrisville, Pennsylvania

Establishment: 1991

Number of employees: Approximately 240 (as of July 1, 2019)

Key businesses: Developing, manufacturing, and selling silicon chemicals, methacrylates, and metal-organic compounds



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

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

Independent Auditor's Report

The Board of Directors
Mitsubishi Chemical Holdings Corporation

Opinion

We have audited the accompanying consolidated financial statements of Mitsubishi Chemical Holdings Corporation and its subsidiaries (the Group), which comprise the consolidated statement of financial position at March 31, 2020, and the consolidated statements of income, comprehensive income, changes in equity, and cash flows for the year then ended, and notes to the consolidated financial statements.

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Group as at March 31, 2020, and its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with International Financial Reporting Standards (IFRSs).

Basis for Opinion

We conducted our audit in accordance with auditing standards generally accepted in Japan. Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Consolidated Financial Statements section of our report. We are independent of the Group in accordance with the ethical requirements that are relevant to our audit of the consolidated financial statements in Japan, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Key Audit Matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements of the current period. These matters were addressed in the context of the audit of the consolidated financial statements as a whole, and in forming the auditor's opinion thereon, and we do not provide a separate opinion on these matters.



Valuation of goodwill	
Description of Key Audit Matter	Auditor's Response
<p>As described in note 14 to the consolidated financial statements, goodwill is valued at ¥616,769 million (12.0% of total assets) on March 31, 2020. As described in note 16 to the consolidated financial statements, impairment loss of ¥16,274 million for goodwill in pharmaceutical formulation material business was recognized for the year ended March 31, 2020.</p> <p>In the impairment tests, the recoverable amount of cash generating units including goodwill is measured based on value in use. The value in use is measured using discounted cash flow projections. The cash flow projections are based on the medium-term management plan for a five-year period approved by management. After the five-year plan, the Company estimates growth rates considering future uncertainties.</p> <p>The significant assumptions in estimating the value in use are the cash flow projections based on the medium-term management plan for a five-year period, the growth rates for subsequent periods and the discount rates. The medium-term management plan is affected primarily by the sales volume developments and the market growth rates.</p> <p>As the impairment test of goodwill is complex and requires management to apply judgment, and the assumptions in the future cash flows, growth rates and discount rates involve uncertainties, we determined it to be a key audit matter.</p>	<p>We performed the following procedures to assess valuation of goodwill, among others:</p> <ul style="list-style-type: none"> -With the involvement of the valuation specialists of our network firm, we assessed valuation methodologies used in the calculation of the value in use. -We assessed the future cash flows for the five-year period by evaluating consistency of the underlying business plan with the budget for the next year and the medium-term management plan approved by management. We also assessed the degree of accuracy of estimation for the business plan by comparing the budgets and medium-term management plans in the prior years with actual results. In addition, we discussed impacts of Coronavirus disease (COVID-19) pandemic with management and evaluated management's assumptions on the duration of economic fallout and the market demands thereafter. -We assessed the key inputs included in the estimation for the business plan such as the sales volume developments and the market growth rates by discussing with management, comparing the relevant assumptions with market forecasts and publicly available data, performing comparisons with similar companies, and analyzing trends using actual results. -We assessed the growth rates for the periods following the five-year medium-term management plan by evaluating management's assessment of estimation uncertainties related to long-term market growth rates. -We assessed the discount rates by comparing the ones used by management with the estimates made by the valuation specialists of our network firm using available external data.



Valuation of intangible assets with indefinite useful lives	
Description of Key Audit Matter	Auditor's Response
<p>As described in note 14 to the consolidated financial statements, intangible assets with indefinite useful lives are valued at ¥168,180 million on March 31, 2020. Intangible assets with indefinite useful lives mostly consist of in-process research and development expenses recognized when Mitsubishi Tanabe Pharma Corporation, a consolidated subsidiary of the Company, acquired NeuroDerm Ltd. The carrying amount is ¥131,467 million. As described in note 16 to the consolidated financial statements, impairment loss of ¥24,069 million for the in-process research and development expenses from Medicigo Inc. acquisition was recognized for the year ended March 31, 2020, due to a decision to halt development on the related product in the United States.</p> <p>Because the in-process research and development expenses are at the research and development stage, have yet to obtain marketing approval from regulatory authorities, and are not available for use, the period during which the future economic benefits embodied in the assets are consumed is unforeseeable and therefore, the assets are classified as intangible assets with indefinite useful lives. The Company does not amortize intangible assets with indefinite useful lives and conducts impairment tests annually and whenever there are indications of impairment.</p> <p>In the impairment tests, the recoverable amount of the in-process research and development expenses is measured based on value in use. The value in use is measured using discounted cash flow projections, and the significant assumptions thereof are the probability of obtaining marketing approval from regulatory authorities, the projected revenues after launch of products and the discount rates.</p>	<p>We performed the following procedures to assess valuation of the in-process research and development expenses, among others:</p> <ul style="list-style-type: none"> - With the involvement of the valuation specialists of our network firm, we assessed valuation methodologies used in the calculation of the value in use. - We assessed the probability of obtaining marketing approval from regulatory authorities by considering publicly available and observable success ratios for each stage of research and development. We also discussed the current development status of the products and the probability of approval with management and the persons responsible for the products. - We assessed the key inputs such as projected sales prices and volumes, and market share of the products to evaluate the projected revenues after launch of the products. We compared the relevant assumptions with market forecasts from external institutions and examined changes from the projections in the previous year. We compared management's assumptions with external data where it was available. We also discussed with management and reviewed management presentation materials to the Board of Directors. - We assessed the discount rates with the estimates made by the valuation specialists of our network firm using available external data. - We evaluated management's assessment of estimation uncertainties related to the assumptions with high sensitivity resulting in the outcome of value in use calculation. - We discussed with management the product related to the in-process research and development expenses of Medicigo Inc. on which the decision of halt was made, and its background including the probability of obtaining marketing approval from regulatory authorities and the projected revenues. We also

A member firm of Ernst & Young Global Limited



<p>The research and development processes involve inherent uncertainties. Further, the impairment tests of in-process research and development expenses require management to apply judgment on the assumptions in the future cash flows and discount rates; and therefore we determined it to be a key audit matter.</p>	<p>reviewed management presentation materials to the Board of Directors.</p>
---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------

Valuation of deferred tax assets	
Description of Key Audit Matter	Auditor's Response
<p>On March 31, 2020, deferred tax assets are valued at ¥74,049 million in the consolidated statement of financial position. The related disclosure of income taxes is made in note 12 to the consolidated financial statements.</p> <p>The Company recognizes deferred tax assets for future deductible temporary differences and unused tax loss carryforwards, considering the planned reversal of deferred tax liabilities, expected future taxable income and tax planning. In particular, the Company has unused tax loss carryforwards incurred in the prior years, and recognizes the deferred tax assets of ¥52,950 million for unused tax loss carryforwards considering estimates of the expected future taxable income.</p> <p>The estimates of future taxable income are based on the Company's business plan, and the significant assumptions thereof are primarily the projected revenue growth and the forecasted market prices of raw materials.</p> <p>As the valuation of deferred tax assets is based on primarily management's estimates of future taxable income, and the underlying business plan is affected by significant assumptions involving management's judgment, we determined it to be a key audit matter.</p>	<p>We performed the following procedures to assess valuation of the deferred tax assets, among others:</p> <ul style="list-style-type: none"> - With the involvement of the tax specialists of our network firm, we assessed balances of temporary differences and unused tax loss carryforwards. We also assessed the scheduling of the reversals of existing temporary differences and the utilizations of unused tax loss carryforwards. - We assessed the future taxable income estimated by management by evaluating the underlying business plan. We also assessed consistency of the business plan with the budget for the next year approved by management, and evaluated the degree of accuracy of estimation for the business plan by comparing past business plans with historical results. In addition, we discussed impacts of Coronavirus disease (COVID-19) pandemic with management and evaluated management's assumptions on the duration of economic fallout and the market demands thereafter. - We assessed the significant assumptions included in the business plan such as the projected revenue growth and the forecasted market prices of raw materials by discussing with management, performing trend analysis considering actual results and performing comparisons with publicly available data. - We evaluated management's assessment of estimation uncertainties related to the business plan.

A member firm of Ernst & Young Global Limited



Responsibilities of Management, the Audit Committee for the Consolidated Financial Statements

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

In preparing the consolidated financial statements, management is responsible for assessing the Group's ability to continue as a going concern and disclosing, as required by IFRSs, matters related to going concern. The Audit Committee is responsible for overseeing the Group's financial reporting process.

Auditor's Responsibilities for the Audit of the Consolidated Financial Statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As part of an audit in accordance with auditing standards generally accepted in Japan, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion.
- Consider internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances for our risk assessments, while the purpose of the audit of the consolidated financial statements is not expressing an opinion on the effectiveness of the Group's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation in accordance with IFRSs.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.



We communicate with the Audit Committee regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide the Audit Committee with a statement that we have complied with the ethical requirements regarding independence that are relevant to our audit of the financial statements in Japan, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with the Audit Committee, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

Interest Required to Be Disclosed by the Certified Public Accountants Act of Japan

Our firm and its designated engagement partners do not have any interest in the Group which is required to be disclosed pursuant to the provisions of the Certified Public Accountants Act of Japan.



Ernst & Young ShinNihon LLC

Ernst & Young ShinNihon LLC
Tokyo, Japan

June 24, 2020

中村 和臣 

Kazuomi Nakamura
Designated Engagement Partner
Certified Public Accountant

剣持 宜昭 

Noriaki Kenmochi
Designated Engagement Partner
Certified Public Accountant

植木 貫幸 

Takayuki Ueki
Designated Engagement Partner
Certified Public Accountant

川 瑞 孝 祐 

Kosuke Kawabata
Designated Engagement Partner
Certified Public Accountant