Nabtesco
moving it. stopping it.

挑戦

Leaders in Innovation for the Future

Nabtesco

Value Report 2021

Integrated Report FY Ended December 31, 2021

Appendix

Consolidated Financial Statements

1 Consolidated financial statements

(1) Consolidated statement of financial position

As of December 31, 2021 and 2020

(Millions of yen)

	Note	2021	2020
Assets			
Current assets			
Cash and cash equivalents	6	112,771	64,665
Trade receivables	7, 21	74,957	74,632
Contract assets	23	2,065	1,230
Other receivables	7	1,300	1,114
Inventories	8	41,880	36,505
Other financial assets	21	7,821	2,582
Other current assets		3,588	2,382
Subtotal		244,382	183,110
Assets held for sale	9	44,519	—
Total current assets		288,900	183,110
Non-current assets			
Property, plant and equipment	10, 12	89,020	89,522
Intangible assets	11, 12	4,251	3,905
Right-of-use assets	12, 13	8,877	7,558
Goodwill	11, 12	16,184	14,658
Investment property	14	2,162	2,192
Investments accounted for using the equity method	15	15,475	34,887
Other financial assets	21	53,860	12,646
Deferred tax assets	20	1,997	2,016
Other non-current assets		992	1,230
Total non-current assets		192,818	168,614
Total assets		481,718	351,723

(Millions of yen)

	Note	2021	2020
Liabilities and equity			
Liabilities			
Current liabilities			
Trade payables	16, 21	51,974	44,838
Contract liabilities	23	5,704	5,763
Bonds and borrowings	18, 21	14,690	37,001
Other payables	16, 21	10,776	9,723
Income taxes payable		19,788	6,700
Provisions	17	1,206	1,065
Lease liabilities	18, 21	2,158	2,209
Other financial liabilities	21	77,878	—
Other current liabilities		7,139	6,362
Total current liabilities		191,315	113,662
Non-current liabilities			
Bonds and borrowings	18, 21	2,897	2,865
Lease liabilities	18, 21	7,575	6,291
Net defined benefit liability	19	9,079	10,211
Deferred tax liabilities	20	13,922	4,949
Other financial liabilities	21	—	69
Other non-current liabilities		1,936	2,035
Total non-current liabilities		35,408	26,421
Total liabilities		226,723	140,083
Equity			
Share capital	22	10,000	10,000
Share premium	22	14,961	14,998
Retained earnings	22	214,791	173,988
Treasury shares	22	(4,784)	(2,471)
Other components of equity	22	4,942	1,515
Equity attributable to owners of the parent		239,910	198,031
Non-controlling interests		15,084	13,610
Total equity		254,995	211,641
Total liabilities and equity		481,718	351,723

(2) Consolidated statement of profit or loss

For the years ended December 31, 2021 and 2020

(Millions of yen)

	Note	2021	2020
Net sales	5, 23	299,802	279,358
Cost of sales	24	(217,759)	(206,166)
Gross profit		82,043	73,192
Other income	25	1,180	6,515
Selling, general and administrative expenses	24	(52,520)	(50,655)
Other expenses	25	(686)	(519)
Operating profit	5	30,017	28,533
Finance income	26	126,977	2,291
Finance costs	26	(57,126)	(573)
Share of profit of investments accounted for using the equity method	15	2,099	3,467
Profit before tax		101,966	33,718
Income tax expense	20	(34,073)	(10,206)
Profit for the year		67,893	23,512

Profit for the year attributable to			
Owners of the parent		64,818	20,505
Non-controlling interests		3,075	3,008
Profit for the year		67,893	23,512

Earnings per share			
Basic earnings per share (yen)	28	534.67	165.18
Diluted earnings per share (yen)	28	534.53	165.09

(3) Consolidated statement of comprehensive income

For the years ended December 31, 2021 and 2020

(Millions of yen)

	Note	2021	2020
Profit for the year		67,893	23,512
Other comprehensive income for the year			
Items that will not be reclassified to profit or loss			
Remeasurements of net defined benefit liabilities (assets)	22	1,148	(578)
Net changes in financial assets measured at fair value through other comprehensive income	22	274	(528)
Share of other comprehensive income of investments accounted for using the equity method	15,22	―	516
Total items that will not be reclassified to profit or loss		1,422	(590)
Items that may be reclassified subsequently to profit or loss			
Exchange differences on translation of foreign operations	22	6,480	368
Total items that may be reclassified subsequently to profit or loss		6,480	368
Total other comprehensive income for the year, net of tax		7,902	(222)
Total comprehensive income for the year		75,795	23,291

Comprehensive income attributable to			
Owners of the parent		71,444	20,201
Non-controlling interests		4,351	3,090
Total comprehensive income for the year		75,795	23,291

(4) Consolidated statement of changes in equity

For the years ended December 31, 2021 and 2020

2021

(Millions of yen)

	Note	Share capital	Share premium	Retained earnings	Treasury shares	Other components of equity	
						Exchange differences on translation of foreign operations	Valuation differences due to changes in fair value
Balance as of January 1, 2021		10,000	14,998	173,988	(2,471)	(3,348)	4,863
Profit for the year		—	—	64,818	—	—	—
Other comprehensive income for the year	22	—	—	—	—	5,222	268
Total comprehensive income for the year		—	—	64,818	—	5,222	268
Acquisition (disposal) of treasury shares and others, net	22	—	(4)	(19)	(20,707)	—	—
Cancellation of treasury shares	22	—	—	(18,394)	18,394	—	—
Change in scope of consolidation		—	—	—	—	—	—
Dividends	22	—	—	(8,800)	—	—	—
Transfer from other components of equity to retained earnings		—	—	3,199	—	—	(2,062)
Share-based payment transactions	27	—	(34)	—	—	—	—
Total transactions with owners and others		—	(38)	(24,015)	(2,313)	—	(2,062)
Balance as of December 31, 2021		10,000	14,961	214,791	(4,784)	1,874	3,069

	Note	Other components of equity		Total equity attributable to owners of the parent	Non-controlling interests	Total equity
		Remeasurements of net defined benefit liabilities (assets)	Total			
Balance as of January 1, 2021		—	1,515	198,031	13,610	211,641
Profit for the year		—	—	64,818	3,075	67,893
Other comprehensive income for the year	22	1,137	6,626	6,626	1,276	7,902
Total comprehensive income for the year		1,137	6,626	71,444	4,351	75,795
Acquisition (disposal) of treasury shares and others, net	22	—	—	(20,730)	—	(20,730)
Cancellation of treasury shares	22	—	—	—	—	—
Change in scope of consolidation		—	—	—	51	51
Dividends	22	—	—	(8,800)	(2,928)	(11,728)
Transfer from other components of equity to retained earnings		(1,137)	(3,199)	—	—	—
Share-based payment transactions	27	—	—	(34)	—	(34)
Total transactions with owners and others		(1,137)	(3,199)	(29,564)	(2,877)	(32,441)
Balance as of December 31, 2021		—	4,942	239,910	15,084	254,995

2020

(Millions of yen)

	Note	Share capital	Share premium	Retained earnings	Treasury shares	Other components of equity	
						Exchange differences on translation of foreign operations	Valuation differences due to changes in fair value
Balance as of January 1, 2020		10,000	14,932	163,794	(2,536)	(3,639)	4,847
Profit for the year		—	—	20,505	—	—	—
Other comprehensive income for the year	22	—	—	—	—	291	14
Total comprehensive income for the year		—	—	20,505	—	291	14
Acquisition (disposal) of treasury shares and others, net	22	—	—	—	65	—	—
Dividends	22	—	—	(9,700)	—	—	—
Transfer from other components of equity to retained earnings		—	—	(610)	—	—	2
Share-based payment transactions	27	—	66	—	—	—	—
Total transactions with owners and others		—	66	(10,310)	65	—	2
Balance as of December 31, 2020		10,000	14,998	173,988	(2,471)	(3,348)	4,863

	Note	Other components of equity		Total equity attributable to owners of the parent	Non-controlling interests	Total equity
		Remeasurements of net defined benefit liabilities (assets)	Total			
Balance as of January 1, 2020		—	1,208	187,398	11,735	199,133
Profit for the year		—	—	20,505	3,008	23,512
Other comprehensive income for the year	22	(609)	(304)	(304)	82	(222)
Total comprehensive income for the year		(609)	(304)	20,201	3,090	23,291
Acquisition (disposal) of treasury shares and others, net	22	—	—	65	—	65
Dividends	22	—	—	(9,700)	(1,215)	(10,915)
Transfer from other components of equity to retained earnings		609	610	—	—	—
Share-based payment transactions	27	—	—	66	—	66
Total transactions with owners and others		609	610	(9,568)	(1,215)	(10,783)
Balance as of December 31, 2020		—	1,515	198,031	13,610	211,641

(5) Consolidated statement of cash flows

For the years ended December 31, 2021 and 2020

(Millions of yen)

	Note	2021	2020
Cash flows from operating activities			
Profit for the year		67,893	23,512
Depreciation and amortization		13,266	13,730
Impairment losses	12	—	3,885
Increase (decrease) in net defined benefit assets and liabilities		297	79
Interest and dividends income		(528)	(301)
Interest expenses		168	205
Gain from remeasurement relating to discontinuing the use of the equity method		(125,107)	—
Gain or loss on valuation of investment securities		56,958	(1,983)
Share of (profit) loss of investments accounted for using the equity method		(2,099)	(3,467)
Loss (gain) on sales and disposal of property, plant and equipment		382	104
Gain (Loss) on sales of investment property		—	(4,892)
Income tax expense		34,073	10,206
Decrease (increase) in trade receivables, contract assets and contract liabilities		1,545	(5,242)
Decrease (increase) in inventories		(3,846)	4,613
Increase (decrease) in trade payables		5,040	(223)
Others		(355)	132
Sub-total		47,686	40,358
Interest and dividends received		1,023	1,141
Interest paid		(165)	(190)
Income tax paid		(12,204)	(7,106)
Net cash provided by operating activities		36,340	34,203

(Millions of yen)

	Note	2021	2020
Cash flows from investing activities			
Decrease (increase) in time deposits		1,484	2,163
Purchase of property, plant and equipment		(7,738)	(17,148)
Proceeds from sales of property, plant and equipment		89	112
Purchase of intangible assets		(1,561)	(1,549)
Proceeds from sales of investment property		17	6,585
Payments for acquisition of subsidiaries resulting in a change in the scope of consolidation		(746)	—
Proceeds from sale of investment securities	21	79,014	13
Payments of leasehold and guarantee deposits	21	(11,528)	(362)
Proceeds from refund of leasehold and guarantee deposits	21	5,031	308
Proceeds from sales of investments accounted for using the equity method		3,156	—
Others		(71)	(831)
Net cash used in investing activities		67,147	(10,710)
Cash flows from financing activities			
Net increase (decrease) in short-term borrowings	18	(12,601)	(3,805)
Proceeds from long-term borrowings	18	30	60
Repayments of long-term borrowings	18	(222)	(310)
Redemption of bonds	18	(10,000)	—
Payments of lease liabilities	18	(2,522)	(2,547)
Net decrease (increase) in treasury shares		(20,969)	12
Dividends paid	22	(8,800)	(9,691)
Capital contribution from non-controlling interests		51	—
Dividends paid to non-controlling interests		(2,928)	(1,215)
Net cash used in financing activities		(57,960)	(17,497)
Net increase in cash and cash equivalents		45,527	5,995
Cash and cash equivalents at the beginning of the year	6	64,665	58,686
Effect of exchange rate changes on cash and cash equivalents		2,579	(16)
Cash and cash equivalents at the end of the year	6	112,771	64,665

Notes to consolidated financial statements

1. Reporting entity

Nabtesco Corporation (the "Company") is an entity domiciled in Japan. The Company’s consolidated financial statements for the year ended December 31, 2021 comprise the financial statements of the Company and its subsidiaries (the "Group") and the equity interests in associates. The Group’s principal businesses are "Component Solutions Business", "Transport Solutions Business" and "Accessibility Solutions Business". The details are described in Note "5. Business segments".

2. Basis of preparation

(1) Compliance with IFRS

The consolidated financial statements have been prepared in accordance with International Financial Reporting Standards ("IFRS").

The accompanying consolidated financial statements were authorized by the Company's Board of Directors on March 24, 2022.

(2) Basis of measurement

As described in "Note 3. Significant accounting policies", the Group’s consolidated financial statements have been prepared based on historical cost, except for certain items, such as financial instruments measured at fair value.

(3) Functional currency and presentation currency

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

3. Significant accounting policies

The significant accounting policies are consistently applied, unless specifically stated, to all the periods presented in the consolidated financial statements.

(1) Basis of consolidation

1) Subsidiaries

Subsidiaries are entities controlled by the Group. The financial statements of subsidiaries are included in the Group's consolidated financial statements from the date on which the Group obtains control of the subsidiary and until the date on which control is lost. The accounting policies of subsidiaries have been adjusted to conform to the accounting policies adopted by the Group, as necessary.

Changes in the Group's ownership interest in a subsidiary that do not result in a loss of control are accounted for as equity transactions. Any difference between the adjusted non-controlling interests and the fair value of consideration is recognized as equity attributable to owners of the parent.

Intra-group balances of receivables and payables, intra-group transactions, and unrealized gains and losses arising from intra-group transactions are eliminated in preparing the consolidated financial statements.

A subsidiary with a different reporting date is consolidated based on its provisional financial statements at the consolidated reporting date.

2) Investments in associates

Associates are entities over which the Group has a significant influence, but not control, on the financial and operating policies. If the Group holds 20% or more of the voting rights of another entity, the Group is presumed to have significant influence over the entity.

Investments in associates are accounted for using the equity method and are recognized at cost on acquisition. Under the equity method, any difference between the cost of the investment on the investment date and the Group’s share of the net fair value of the investee’s identifiable assets and liabilities is included in the carrying amount of the investment as goodwill.

In the consolidated financial statements, the carrying amount of the investment is adjusted to recognize the Group’s share of the profit or loss and other comprehensive income of the associate during the period from the date on which the Group has a significant influence until the date on which it loses such influence.

The Group’s share of losses of an associate is recorded in profit or loss to the extent of the Group’s interest in the associate. Any further loss is not recognized except when the Group incurs legal or constructive obligations or makes payments on behalf of the associate.

In applying the equity method, necessary adjustments are made to align the accounting policies of the associates accounted for using the equity method with the Group’s accounting policies. For certain associates accounted for using the equity method, it is impracticable to conform their reporting dates to the Group’s reporting date mainly due to the relationships with other owners of the associates. The consolidated financial statements, therefore include investments in such associates whose reporting dates differ from the Group’s reporting date. Adjustments are made for significant transactions or events that occurred between the reporting date of the associates accounted for using the equity method and that of the Group. Reporting date of the associates accounted for using the equity method is mainly March 31.

Unrealized gains arising from transactions with associates accounted for using the equity method are eliminated against the investment to the extent of the Group’s interest in the investees.

(2) Business combinations

Business combinations are accounted for using the acquisition method. Identifiable assets and liabilities of an acquiree are measured at fair value at the date of acquisition.

Goodwill is measured as the excess of the aggregate of the consideration transferred in a business combination, the amount of any non-controlling interest in the acquiree and the fair value of the acquirer's previously held equity interest in the acquiree, over the net amount of identifiable assets and liabilities at the date of acquisition.

Acquisition-related costs are expensed in the periods in which they are incurred.

Regarding business combinations of entities under common control, the Company accounts for such transactions based on the carrying amounts prior to the occurrence of the transaction.

(3) Foreign currencies

1) Functional currencies and presentation currencies

The financial statements of Group entity are prepared using their functional currency, which is the currency of the primary economic environment in which the entity operates. The presentation currency of the Group’s consolidated financial statements is Japanese yen, which is the Company’s functional currency.

2) Transactions denominated in foreign currencies

Transactions denominated in foreign currencies are translated into the functional currency using the exchange rates at the date of the transaction. Monetary assets and liabilities denominated in foreign currencies at the end of the fiscal year are translated into the functional currency using the exchange rate at the end of the fiscal year.

Non-monetary assets and liabilities denominated in foreign currencies measured at historical cost are translated into the functional currency using the exchange rate at the dates of the transaction.

Non-monetary assets and liabilities denominated in foreign currencies measured at fair value are translated into the functional currency using the exchange rate at the date when the fair value was measured. Exchange differences arising from translations are recognized in profit or loss. However, exchange differences arising from the translations of financial instruments measured at fair value through other comprehensive income are recorded in other comprehensive income.

3) Foreign operations

The assets and liabilities of foreign operations are translated into Japanese yen using the exchange rate at the end of the fiscal year. The income and expenses of foreign operations are translated into Japanese yen using the average rate for the fiscal year, except for cases of significant exchange rate movements during the fiscal year.

Exchange differences arising from the translation of financial statements of foreign operations are recognized as other comprehensive income and recorded in other components of equity. These exchange differences are reclassified to profit or loss when a foreign operation is disposed.

(4) Cash and cash equivalents

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

(5) Inventories

Inventories are measured at the lower of cost and net realizable value. The cost is determined mainly based on the weighted average method and includes costs of purchase, costs of production, costs of conversion and other costs incurred in bringing the inventories to their present location and condition.

Net realizable value is the estimated selling price in the ordinary course of business less the estimated costs of completion and the estimated costs necessary to make the sale.

(6) Financial instruments

1) Non-derivative financial assets

The Group initially recognizes financial assets at the transaction date when it becomes a party to the contract concerning the financial instruments.

Financial assets are initially measured at fair value. For financial assets that are not measured at fair value through profit or loss after initial recognition, transaction costs directly incurred for the acquisition of the financial assets are included in the amount initially measured.

(a) Financial assets measured at amortized cost

Financial assets are classified as measured at amortized cost if the following conditions are met:

・the financial asset is held within a business model whose objective is to hold financial assets in order to collect contractual cash flows; and

・the contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

These financial assets are measured after initial recognition at amortized cost applying the effective interest method.

A loss allowance is recognized for expected credit losses on financial assets measured at amortized cost.

At the end of each fiscal year, the Group assesses whether there has been a significant increase in credit risk for financial assets by comparing the credit risk of such assets at the end of the fiscal year and at the date of initial recognition.

A loss allowance for financial assets is measured at an amount equal to the lifetime expected credit losses if the credit risk has increased significantly since initial recognition, or at an amount equal to 12-month expected credit losses if the credit risk of such assets has not increased significantly. However, notwithstanding the above, a loss allowance for trade receivables and contract assets that include no significant financing components is measured at an amount equal to the lifetime expected credit losses. Provision of the loss allowance for financial assets is recognized in profit or loss. In cases where an event to reduce the loss allowance occurs, the reversal of the loss allowance is recognized in profit or loss.

(b) Financial assets measured at fair value through other comprehensive income

The Group has elected to recognize changes in the fair value of equity instruments, in principle, in other comprehensive income at initial recognition unless the instrument is held for trading purposes. The Group designates those equity instruments as measured through other comprehensive income, and such designations are applied irrevocably and consistently. These financial assets are measured after initial recognition at fair value through other comprehensive income.

When the financial assets are sold, the cumulative gain or loss previously recognized in other comprehensive income is reclassified to retained earnings at the time of the sale. Dividends from the financial assets are recognized in profit or loss.

(c) Financial assets measured at fair value through profit or loss

Financial assets that do not fall into the category (a) or (b) above are classified as financial assets measured at fair value through profit or loss. These financial assets are measured after initial recognition at fair value through profit or loss.

The Group derecognizes financial assets when the contractual rights to the cash flows expire or are transferred, or when substantially all the risks and rewards of ownership are transferred.

2) Non-derivative financial liabilities

The Group initially recognizes debt securities issued by the Group at the date of issuance. All other financial liabilities are recognized at the transaction date when the Group becomes a party to the contract of the financial instruments.

The Group’s non-derivative financial liabilities, which are composed mainly of bonds and borrowings, are all classified as financial liabilities measured at amortized cost. Financial liabilities measured at amortized cost are measured initially at fair value plus or minus direct transaction costs and subsequently at amortized cost applying the effective interest method.

The Group derecognizes financial liabilities when the contractual obligation is discharged, cancelled or expired.

3) Derivative financial instruments

The Group mainly holds derivative financial instruments to avert and mitigate the risks from fluctuations in foreign exchange and interest rates.

Derivatives are initially recognized at fair value, and any related transaction costs are recognized in profit or loss as incurred. Derivatives instruments are measured after initial recognition at fair value through profit or loss.

(7) Property, plant and equipment

1) Recognition and measurement

Property, plant, and equipment are measured at cost less accumulated depreciation and accumulated impairment losses using the cost model.

The cost includes the following costs directly related to the acquisition of the asset:

・costs of employee benefits, installation and assembly costs arising directly from the production of the asset;
・estimated costs of dismantlement and removal when having an obligation to remove the asset; and
・capitalized borrowing costs

2) Depreciation

Property, plant and equipment are depreciated using the straight-line method over the estimated useful life of each item.

Depreciation is determined based on the depreciable amount, which is calculated as the cost of the asset less its residual value.

The estimated useful lives are as follows:

Buildings and structures:	3 to 50 years
Machinery, equipment and vehicles:	4 to 17 years
Tools, furniture and fixtures:	2 to 20 years

Depreciation methods, useful lives and residual values are reviewed at the end of each fiscal year and revised as necessary.

(8) Goodwill and intangible assets

1) Goodwill

The measurement at initial recognition is described in "(2) Business combinations".

After initial recognition, goodwill is presented at cost less accumulated impairment losses. Goodwill is not subject to amortization but is tested for impairment each fiscal year and whenever there is an indication of impairment. Impairment losses for goodwill are not reversed.

2) Research and development costs

Expenditure on research activities with the aim of gaining new scientific or technological knowledge and understanding is recognized in profit or loss as incurred.

3) Other intangible assets

Other intangible assets are measured at cost less accumulated amortization and accumulated impairment losses using the cost model.

The cost of intangible assets recognized separately from goodwill in a business combination is measured at their fair value at the acquisition date.

Such assets are amortized using the straight-line method over their estimated useful lives from the date on which the assets are available for use.

Amortization is determined based on the depreciable amount, which is calculated as the cost of the asset less its residual value.

The estimated useful lives are as follows:

Software:	3 to 5 years
Customer related assets:	8 years
Technology assets:	7 to 20 years
Others:	8 to 20 years

Amortization methods, useful lives and residual values are reviewed at the end of each fiscal year and revised as necessary.

Intangible assets with indefinite useful lives are presented at cost less accumulated impairment losses. Such assets are not subject to amortization but are tested for impairment each fiscal year and whenever there is an indication that the intangible asset may be impaired.

(9) Leases

1) Lease liabilities

Lease liabilities are recognized and measured at the present value of the lease payments that are not paid at the commencement date. Discount rate is based on the interest rate implicit in the leases, if that rate can be readily determined. If the interest rate implicit in the leases cannot be readily determined, the discount rate is based on the lessee's incremental borrowing rate. The lease liabilities may increase or decrease depending on the interest rate and lease payments on the lease liabilities after the commencement date.

2) Right-of-use assets

Right-of-use assets are recognized and measured at cost, which comprises the initial measurement of the lease liabilities adjusted for the initial direct costs and lease payments made at or before the commencement date. After the commencement date, the right-of-use assets are measured at cost less accumulated depreciation and accumulated impairment losses, applying the cost model. The right-of-use assets are depreciated using the straight-line method from the commencement date to the earlier of the end of the useful life of the right-of-use assets or the end of the lease term.

For short-term leases and leases for which the underlying asset is of low value, the right-of-use assets and lease liabilities are not recognized, applying the recognition exemptions. They are recognized as expenses using the straight-line method over the lease term.

(10) Investment property

Investment property is property held to earn rental income or for capital appreciation or both, which is measured and depreciated on the same basis as property, plant and equipment. The estimated useful lives of investment property are 8 - 40 years.

Depreciation methods, useful lives and residual values are reviewed at the end of each fiscal year and revised as necessary.

(11) Assets held for sale

A non-current asset or a disposal group that are highly probable to be sold and whose carrying amount will be recovered through a sale rather than through continuing use is classified as assets held for sale if the asset or disposal group must be available for immediate sale in its present condition, management of the Group must be committed to a sale and the sale is expected to be completed within one year.

(12) Impairment of non-financial assets

At the end of each fiscal year, it is determined whether there is any indication of impairment for the carrying amount of the Group's non-financial assets other than inventories, deferred tax assets and assets for retirement benefits. If there is any indication of impairment, the recoverable amount of the asset is estimated.

The recoverable amount of an asset or cash-generating unit is the higher of its value in use and its fair value less costs of disposal. Value in use is determined by discounting estimated future cash flows to their present value using a pre-tax discount rate that reflects the time value of money and the risks specific to the asset.

An impairment loss is recognized for an asset or cash-generating unit when its carrying amount exceeds its recoverable amount.

At the end of each fiscal year, it is assessed whether there is any indication that an impairment loss recognized in prior years may have decreased or may no longer exist. If there are any changes in the estimates used to determine the recoverable amount, the impairment loss is reversed to the extent of the carrying amount less depreciation that would have been determined if no impairment loss had been recognized.

The accounting treatment for impairment losses related to goodwill is described in "(8) Goodwill and intangible assets, 1) Goodwill". The policy of impairment loss of the intangible assets with indefinite useful life is described "(8) Goodwill and intangible assets 3) Other intangible assets".

(13) Employee benefits

1) Post-employment benefits

The Group has adopted retirement lump-sum payment plans and pension plans as post-employment benefit plans for employees. These plans are classified as either defined contribution plans or defined benefit plans.

(a) Defined contribution plans

Post-employment benefit costs for defined contribution plans are recognized as an expense for the period during which employees render services.

(b) Defined benefit plans

For each defined benefit plan, the Group determines the present value of its defined benefit obligations and the related current service cost and past service cost using the projected unit credit method. A discount period is set based on the expected term until the future benefit payments, and the discount rate is determined by reference to market yields at the end of the fiscal year on high-quality corporate bonds that have a term consistent with the discount period. Net defined benefit liabilities are determined by deducting the fair value of any plan assets from the present value of the defined benefit obligation. Remeasurements of the net defined benefit assets or liabilities are recognized collectively in other comprehensive income and reclassified to retained earnings in the period during in which they are incurred.

2) Short-term employee benefits

Short-term employee benefits are recognized as an expense on an undiscounted basis when the related service is provided.

Bonuses are recognized as liabilities for the amount estimated to be paid in accordance with the applicable plans when the Group has present legal or constructive obligations to pay as a result of past labor rendered by employees, and the obligations can be reliably estimated.

(14) Provisions and contingent liabilities

Provisions are recognized when the Group has, as a result of past events, a present legal or constructive obligation that can be reasonably estimated, and the settlement of the obligation is likely to give rise to an outflow of economic resources. When the time value of money is material, provisions are measured by discounting the estimated future cash flows to the present value using a pre-tax discount rate that reflects the time value of money and the risks specific to the liability. The unwinding of the discount due to the passage of time is recognized as a finance cost.

To provide against the payment of costs, including repair costs that may be incurred after the delivery of products, the costs are estimated and recorded as a provision for product warranties.

To provide against future losses on contracts received, expected losses on the contracts received at the end of the fiscal year are separately estimated and recorded as a provision for loss on orders received.

The Group discloses contingent liabilities in the notes to consolidated financial statements if there are possible obligations at the end of the fiscal year, whose existence cannot be confirmed at that date, or if the obligations do not meet the recognition criteria for provisions.

(15) Shareholders' equity

1) Ordinary shares

Ordinary shares are classified as equity. Additional costs related directly to the issuance of ordinary shares and share options are recognized net of tax as a deduction from equity.

2) Treasury shares

When treasury shares are acquired, the consideration paid, which includes any direct transaction costs (net of tax), is recognized as a deduction from equity. When treasury shares are disposed of, the difference between the consideration received and the carrying amount of the treasury shares are recognized as equity.

3) Share-based payment transactions

(a) Share option plan

The Company had been implementing share-based payment-type share option plan until the end of March 2017, under which the right to purchase the Company's shares can be exercised, for the Company's directors and executive officers (excluding outside directors; hereinafter, the "Directors"). As the share options under the plan vest at the date when the share-based payment is granted, they are estimated at fair value at a grant date and recognized collectively as an expense while the corresponding amount is recognized as equity. The fair value of options granted is determined using the Black-Scholes model, taking into account the terms and conditions of the options. The Company abolished the plan in March 2017. However, the share options granted to the Directors that have not been exercised remain

(b) Board Benefit Trust (Share settlement-type)

The Company has introduced a Board Benefit Trust under which the Company grants its treasury shares to the Company's Directors through the trust from May 2017. In the share-based payment plan, the Company measures the value of rendered services and the corresponding increase in equity at fair value of equity instruments at a grant date. The amount is recorded as an expense over the vesting period, and the same amount is recognized as an increase in equity.

(16) Revenues from contracts with customers

Following the application of IFRS 15, the Group recognizes revenues based on the five-step approach below.

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

1) Performance obligations that are satisfied at a point in time

The Group's main lines of business are the manufacture and sale of industrial robot components, equipment for construction machinery, brake systems and automatic door operating systems for railroad vehicles, aircraft components, brake systems and drive control units for vehicles, control systems for marine vessels, automatic door operating systems for buildings and general industry, and platform safety systems. In the sale of such products, the Group recognizes revenue principally at delivery of the product since the Group deems that performance obligation is satisfied when the customer gains control over the product at delivery in most cases. Revenue is measured by deducting discounts, rebates and returns from the compensation promised in the contract with customers.

2) Performance obligations that are satisfied over time

The Group satisfies its performance obligations and recognizes revenue over time if one of the following criteria is met, since control over a product or service is transferred over time:

a. the customer simultaneously receives and consumes all of the benefits provided by the Group as the Group performs;
b. the Group’s performance creates or enhances an asset that the customer controls as the asset is created or enhanced; or
c. the Group’s performance does not create an asset with an alternative use to the Group and the Group has an enforceable right to payment for performance completed to date.

The Group’s revenues concerning performance obligations that are satisfied over time include those for the performance obligation of platform safety systems. The revenue of platform safety systems is recognized by estimating the stage of completion. The stage of completion is calculated by the percentage of the actual cost of construction to the total estimated cost of construction (input method).

(17) Finance income and finance costs

Finance income mainly consists of interest income, dividends income, foreign exchange gains, gains on derivatives and gain from remeasurement relating to discontinuing the use of the equity method. Interest income is recognized when it occurs using the effective interest method. Dividend income is recognized when the Group’s right to receive payment is established.

Finance costs mainly consist of interest expenses, foreign exchange losses, losses on derivatives and loss on valuation of investment securities.

(18) Income taxes

Income taxes consist of current taxes and deferred taxes. These are recognized in profit or loss, except for items recognized in other comprehensive income, items recognized directly in equity and items recognized through business combinations.

Current taxes are determined by multiplying the current taxable income by the tax rates that have been enacted or substantially enacted by the end of the fiscal year.

Deferred taxes are recognized for temporary differences between the carrying amount of assets and liabilities in the financial statements and their tax base. Deferred tax assets are recognized for deductible temporary differences, unused tax credits and unused tax losses to the extent that it is probable that future taxable income will be available against which they can be utilized. Deferred tax liabilities are recognized, in principle, for taxable temporary differences.

However, deferred tax assets or liabilities are not recorded for:

・initial recognition of assets or liabilities in a transaction that is not related to business combination and that affects neither accounting profit nor taxable income;

・differences arising from investments in subsidiaries and joint arrangements to the extent that it is probable that the temporary difference will not reverse in the foreseeable future; and

・taxable temporary differences arising from the initial recognition of goodwill.

Deferred taxes are measured using the tax rates that are expected to be applied when the temporary differences will reverse, based on the laws that have been enacted or substantively enacted by the end of the fiscal year.

Deferred tax assets and deferred tax liabilities are offset when the Group has a legally enforceable right to set off current tax assets against current tax liabilities and when income taxes are levied by the same taxation authority on the same taxable entity.

(19) Earnings per share

Basic earnings per share is calculated by dividing profit attributable to the Company's ordinary shareholders by the weighted average number of ordinary shares (after adjusting for treasury shares) outstanding during the period. Diluted earnings per share is calculated by adjusting the effects of all dilutive potential ordinary shares. The Company’s potential ordinary shares include share options.

(20) New standards and interpretations not yet applied

The Group has not applied the new or amended standards and interpretations that are not effective as of December 31, 2021 in preparing these consolidated financial statements. New or revised major standards and interpretations that relate to the Group are set out in the table below.

The impacts adopting IAS 12 on the Group's consolidated financial statements cannot yet be estimated. The Group does not plan to early adopt these standards.

IFRS	Title	Reporting period on or after which the applications are required	Reporting periods of the application by the Group	Summaries of new IFRSs and amendments
IAS 12	Income taxes	January 1, 2023	December 31, 2023	Accounting treatment of deferred tax related to assets and liabilities arising from a single transaction

4. Significant accounting judgments, estimates and assumptions

In preparing consolidated financial statements in accordance with IFRS, management is required to make judgments, estimates and assumptions that may affect the application of accounting policies as well as the reported amounts of assets, liabilities, revenue and expenses. Actual results may differ from these estimates.

The estimates and the underlying assumptions are reviewed on an ongoing basis. Changes in accounting estimates are recognized in the period when such estimates are changed and future periods that are affected by the changes.

Major accounting judgments, estimates and assumptions are as follows:

(1) Valuation of inventories

In determining the net realizable value of inventories, the Group makes assumptions about the costs of completion and the costs necessary to make the sale in accordance with Note "3. Significant accounting policies".

These assumptions are based on the best estimates and judgments made by management. However, there is a possibility that they may be affected by changes in uncertain future economic conditions. When the reconsideration of the assumptions is required, it may have a material impact on the consolidated financial statements.

The amount of the write-down of inventories is described in Note "8. Inventories".

(2) Significant assumptions used in the calculation of expected discounted cash flows for the impairment tests of non-financial assets

The Group tests property, plant and equipment, as well as intangible assets and goodwill for impairment in accordance with "Note 3. Significant accounting policies".

The impairment testing of goodwill is described in Note "11. Goodwill and intangible assets". Impairment of other non-financial assets including goodwill is described in Note "12. Impairment of non-financial assets".

1) Non-financial assets of aircraft equipment business (Property, plant and equipment, Intangible assets, Right-of-use assets)

The Company identified an impairment indicator for the assets related to the aircraft equipment business within Transport Solutions Business segment and tested for impairment since the business was affected by a significant cut in the production of private-sector aircraft and demand decreased in the off-season period of defense equipment procurement plans in the current fiscal year. As a result of the test, the Company did not recognize the impairment loss since the value in use is more than the carrying amount ¥11,586 million (Property, plant and equipment of ¥11,481 million, Intangible assets of ¥100 million, Right-of-use assets of ¥5 million).

Recoverable amount of non-financial assets of the aircraft equipment business is measured at the value in use. The value in use is determined with future cash-flow, discounted by weighted average cost of capital, based on its business plan. The estimation of the value in use includes significant assumptions, such as projected sales, cost reduction measures, the projected growth date after the business plan period and weighted average cost of capital used as the discount rate. The Spread of COVID-19 is assumed that it will gradually recover in and after 2022, although it is unclear when the spread of infection will end.

These assumptions are based on the best estimates and judgments made by management. However, it may have a material impact on the amount of non-financial assets to be recognized in the consolidated financial statements for the next fiscal year in the case of decline in the business profitability without enough cash-flow, since there is a high degree of uncertainty with the projection demand in the main market condition.

2) Non-financial assets of OVALO Group (Property, plant and equipment, Intangible assets, Right-of-use assets)

The Company identified an impairment indicator for the assets related to OVALO GmbH and its subsidiary within Transport Solutions Business segment and tested for impairment since the business was affected by production reduction at main customers influenced by semiconductor shortage in the current fiscal year. As a result of the test, the Company did not recognize the impairment loss since the value in use is more than the carrying amount ¥2,292 million (Property, plant and equipment of ¥757 million, Intangible assets of ¥458 million, Right-of-use assets of ¥1,078 million).

Recoverable amount of non-financial assets of OVALO GmbH's business is measured at the value in use. The value in use is determined with future cash-flow, discounted by weighted average cost of capital, based on its business plan. The estimation of the value in use includes significant assumptions, such as projected sales to main customers incorporated in the business plan. The Spread of COVID-19 is assumed that it will gradually recover in and after 2022, although it is unclear when the spread of infection will end.

These assumptions are based on the best estimates and judgments made by management. However, it may have a material impact on the amount of non-financial assets to be recognized in the consolidated financial statements for the next fiscal year in the case of decline in the business profitability without enough cash-flow, since there is a high degree of uncertainty with the sales projection.

(3) Provisions and contingent liabilities

The Group recognizes various provisions such as the provision for product warranties, in the consolidated statement of financial position. These provisions are recorded based on the best estimates of the expenditures required to settling the obligations taking into account risks and uncertainty related to the obligations at the end of the fiscal year.

Expenditures required to settle the obligations are determined comprehensively by taking into account possible results. However, they may be affected by the occurrence of unexpected events or changes in circumstances. If the actual payment differs from the estimate, the amounts recognized in the future consolidated financial statements may be materially affected.

The Group discloses contingent liabilities taking into account all available evidence at the end of the fiscal year as well as the probability and monetary effects thereof.

The details and amounts of the provisions and contingent liabilities are provided in Note "17. Provisions" and Note "33. Contingent liabilities".

(4) Measurement of defined benefit obligations

The Group has various post-employment benefit plans including defined benefit plans. For each plan, the present value of the defined benefit obligations and the related costs including service cost are determined based on actuarial assumptions such as discount rates, and mortality rates and other factors. The actuarial assumptions are based on the best estimates and judgments made by management. However, there is a possibility that they may be affected by changes in uncertain future economic conditions. When the assumptions need to be reconsidered, it may have a material impact on the consolidated financial statements.

The amounts of the defined benefit obligations, and plan assets and the assumptions are used in Note "19. Employee benefits".

(5) Income taxes

The Group is affected by income taxes in a number of tax jurisdictions. When determining the estimated amount of income taxes in each jurisdiction, significant judgments are required. There may be uncertainty regarding the final tax amounts due to the nature of the transactions and the calculation methods. The Group recognizes liabilities for anticipated tax investigations when an estimate of additional tax payment is required. If the final tax amount related to these issues is different from the amount that has been initially recognized, the difference may have a material impact on the consolidated financial statements.

Deferred tax assets are recognized to the extent that it is probable that taxable income will be available against which deductible temporary differences can be utilized. In recognizing deferred tax assets, when assessing the probability taxable income will be available, the Group reasonably estimates the timing and amount of future taxable income and determines the amount accordingly.

The timing when taxable income arises and the amount of such income may be affected by changes in uncertain future economic conditions and may, if the timing and amount that have actually arisen differ from the estimates, have a material impact on the amounts recognized in the future consolidated financial statements.

Significant components of deferred tax assets are described in Note "20. Income taxes".

(6) Valuation of financial instrument

The fair value of specific financial instruments is measured based on valuation techniques that use unobservable inputs. The unobservable inputs may be affected by changes in uncertain future economic conditions and others. When the inputs need to be reconsidered, it may have a material impact on the consolidated financial statements.

The valuation of fair value of the specific financial instruments is described in Note "21. Financial instruments".

(7) Fair value of assets acquired and liabilities assumed in business combinations

Assets acquired and liabilities assumed in business combination are measured at fair value on the acquisition date. The future cash-flows, on which the calculation of fair value is based, reflect the time value of money and risk specific to the assets in a discount rate. Although the measurement of fair value is based on the best estimates made by management, there is a possibility that the measurements may be affected by changes in uncertain future economic conditions. There is a risk that the changes may have a material impact on the value of intangible assets and goodwill.

The fair value of assets acquired and liabilities assumed is described in Note "29. Business combinations".

(8) Scope of subsidiaries

The Group considers a specific company which is owned its voting rights less than 50% by the Company as a subsidiary, because the Company controls a company.

The specific company is described in Note "30. Subsidiaries".

(9) Scope of investments accounted for using the equity method

The Group accounts for investments in a specific company which is owned its voting rights less than 20% by the Company by the equity method, because the Company has significant influence on the specific company.

The investments in the specific company are described in Note "15. Investment accounted for using the equity method".

5. Business segments

(1) Overview of reportable segments

The reportable segments are components of the Group areas for which discrete financial information is available, and are regularly reviewed by the Board of Directors to make decisions about resource allocation and to assess its performance.

Based on the similarity of business models, the Group aggregates its business segments and classifies them into the following three reportable segments: "Component Solutions Business", "Transport Solutions Business" and "Accessibility Solutions Business".

The main lines of business of each reportable segment are as follows:

Business segment	Main lines of business
Component Solutions Business	Design, manufacture, sale, maintenance and repair of industrial robot components and equipment for construction machinery and its components
Transport Solutions Business	Design, manufacture, sale, maintenance and repair of brake systems and automatic door operating systems for railroad vehicles, aircraft components, brake systems and drive control units for vehicles, control systems for marine vessels and their components
Accessibility Solutions Business	Design, manufacture, sale, installation, maintenance and repair of automatic door operating systems for buildings and general industry, platform safety systems and their components

(2) Information on reportable segments

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

Inter-segment sales and transfers are based on actual market prices.

2021

(Millions of yen)

	Reportable segment				Others	Total	Adjustments	Amount stated in consolidated
	Component	Transport	Accessibility	Total				
Net sales								
Sales to external customers	138,130	67,744	75,108	280,982	18,820	299,802	—	299,802
Inter-segment sales	2,539	1,355	4	3,898	391	4,289	(4,289)	—
Total net sales	140,669	69,099	75,111	284,880	19,211	304,091	(4,289)	299,802
Segment income (Operating profit)	22,903	5,617	7,642	36,163	2,736	38,899	(8,882)	30,017
Finance income	—							126,977
Finance costs	—							(57,126)
Share of profit of investments accounted for using the equity method	—							2,099
Profit before tax	—							101,966
Other items								
Depreciation and amortization	5,166	3,943	2,229	11,338	451	11,789	1,477	13,266
Segment assets	112,697	78,060	75,661	266,418	12,802	279,219	202,499	481,718
Increase in tangible and intangible assets	5,263	1,952	1,009	8,224	166	8,390	1,181	9,571

Notes: 1. "Others" is a business segment that is not included in the reportable segments and consists of businesses that are engaged in design, manufacture, sale, maintenance and repair of packaging machinery, three-dimensional model production devices, machine tools and their components.

2. Adjustments for net sales are eliminations of inter-segment transactions.

3. Adjustments for segment income (operating profit) are corporate profit, loss and other adjustments that are not allocated to the respective segments.

4. Adjustments of depreciation and amortization are depreciation and amortization related to corporate assets that are not allocated to the respective segments.

5. Adjustments for segment assets include corporate assets of ¥202,499 million that are not allocated to the respective segments. The main items are surplus funds (cash and cash equivalents) and investment funds (investments securities) of the Company.

6. Adjustments of increase in tangible and intangible assets are capital investments in corporate assets that are not allocated to the respective segments.

2020

(Millions of yen)

	Reportable segment				Others	Total	Adjustments	Amount stated in consolidated
	Component	Transport	Accessibility	Total				
Net sales								
Sales to external customers	109,855	78,090	73,665	261,610	17,747	279,358	—	279,358
Inter-segment sales	2,014	1,110	9	3,133	266	3,399	(3,399)	—
Total net sales	111,869	79,200	73,675	264,743	18,014	282,757	(3,399)	279,358
Segment income (Operating profit)	17,673	3,338	7,733	28,744	2,329	31,073	(2,540)	28,533
Finance income	—							2,291
Finance costs	—							(573)
Share of profit of investments accounted for using the equity method	—							3,467
Profit before tax	—							33,718
Other items								
Depreciation and amortization	4,771	4,757	2,160	11,688	441	12,129	1,601	13,730
Impairment losses	—	3,885	—	3,885	—	3,885	—	3,885
Segment assets	120,468	74,493	83,270	278,232	16,813	295,045	56,678	351,723
Increase in tangible and intangible assets	9,470	2,697	1,178	13,345	279	13,624	1,434	15,059

Notes: 1. "Others" is a business segment that is not included in the reportable segments and consists of businesses that are engaged in design, manufacture, sale, maintenance and repair of packaging machinery, three-dimensional model production devices, machine tools and their components.
2. Adjustments for net sales are eliminations of inter-segment transactions.
3. Adjustments for segment income (operating profit) are corporate profit, loss and other adjustments that are not allocated to the respective segments.
4. Adjustments of depreciation and amortization are depreciation and amortization related to corporate assets that are not allocated to the respective segments.
5. Adjustments for segment assets include corporate assets of ¥56,678 million that are not allocated to the respective segments. The main items are surplus funds (cash and cash equivalents) and investment funds (investments securities) of the Company.
6. Adjustments of increase in tangible and intangible assets are capital investments in corporate assets that are not allocated to the respective segments.

(3) Income from major products and services

The description of income from major products and services is omitted as similar information is disclosed in "(1) Overview of reportable segments" and "(2) Information on reportable segments" and Note "23. Revenues from contracts with customers".

(4) Geographic information

Net sales

(Millions of yen)

	2021	2020
Japan	162,588	155,159
China	59,510	52,868
Other Asia	16,546	15,300
North America	16,623	16,374
Europe	42,259	37,655
Other regions	2,277	2,002
Total	299,802	279,358

Note: Net sales are classified by country or region based on the customer's locations.

Non-current assets

(Millions of yen)

	2021	2020
Japan	102,466	101,659
China	8,697	7,306
Other Asia	1,949	1,886
North America	1,441	1,079
Europe	6,637	6,828
Total	121,190	118,757

Note: Non-current assets are classified the locations of the assets and exclude financial assets, deferred tax assets, assets for retirement benefits and other items.

(5) Information about major customers

Information about major customers is omitted as there is no specific customer that accounts for 10% or more of net sales in the consolidated statement of profit or loss.

6. Cash and cash equivalents

Cash and cash equivalents as of December 31, 2021 and 2020 consist of the following:

(Millions of yen)

	2021	2020
Cash and deposits	72,773	45,666
Short-term investments due within three months from the date of acquisition	39,998	18,999
Total	112,771	64,665

Note: The balance of "Cash and cash equivalents" in the consolidated statement of financial position and that in the consolidated statement of cash flows are equal.

7. Trade receivables and other receivables

(1) Trade receivables

Trade receivables as of December 31, 2021 and 2020 consist of the following:

(Millions of yen)

	2021	2020
Accounts receivable	65,312	65,789
Notes receivable	10,135	9,462
Less: Loss allowance	(490)	(619)
Total	74,957	74,632

(2) Other receivables

Other receivables as of December 31, 2021 and 2020 consist of the following:

(Millions of yen)

	2021	2020
Accounts receivable-others	1,300	1,114
Total	1,300	1,114

8. Inventories

Inventories as of December 31, 2021 and 2020 consist of the following:

(Millions of yen)

	2021	2020
Finished goods and merchandise	9,809	8,563
Work in progress	15,129	13,483
Raw materials and supplies	16,942	14,459
Total	41,880	36,505

Note: There is no significant of write-down of inventories recorded in cost for the year ended December 31, 2021. The amounts of write-down of inventories recorded in cost of sales are ¥85 million for the year ended December 31, 2020. There is no significant reversal of write-down for the years ended December 31, 2021 and 2020.

9. Assets held for sale

Assets held for sale as of December 31, 2021 and 2020 consist of the following:

(Millions of yen)

	2021	2020
Other financial assets	44,519	—

Note: With respect to the partial sale of Harmonic Drive Systems Inc’s shares (9,160,200 shares) determined by the management on February 10, 2021, the transfer of risks and rewards of ownership of the shares from the Company to the purchaser is expected to be completed within a year from December 31, 2021. Therefore, the Company classifies the shares as assets held for sale.

10. Property, plant and equipment

(1) Reconciliation of carrying amounts

(Millions of yen)

	Buildings and structures	Machinery, equipment and vehicles	Tools, furniture and fixtures	Land	Construction in progress	Total
Balance as of January 1, 2020	27,036	29,415	5,225	12,145	13,261	87,083
Additions	—	—	—	5,749	7,808	13,557
Depreciation (Note 1)	(2,097)	(5,105)	(2,281)	—	—	(9,484)
Impairment loss (Note 2)	(46)	(1,303)	(14)	(20)	(15)	(1,398)
Reclassification	5,991	3,336	2,137	—	(11,464)	—
Disposals	(24)	(97)	(75)	(42)	—	(238)
Exchange differences on translation of foreign operations	46	(26)	17	(20)	(13)	3
Balance as of December 31, 2020	30,905	26,219	5,009	17,811	9,578	89,522
Additions	—	—	—	75	7,919	7,995
Depreciation (Note 1)	(2,303)	(4,828)	(2,216)	—	—	(9,347)
Reclassification	947	4,550	2,140	(22)	(7,656)	(43)
Disposals	(92)	(185)	(51)	—	—	(328)
Exchange differences on translation of foreign operations	439	619	107	37	19	1,221
Balance as of December 31, 2021	29,896	26,375	4,989	17,901	9,859	89,020

Notes: 1. Depreciation of property, plant and equipment is included in "Cost of sales" and "Selling, general and administrative expenses" in the consolidated statement of profit or loss.

2. Impairment loss of property, plant and equipment is included in "Cost of sales" and "Selling, general and administrative expenses" in the consolidated statement of profit or loss.

(2) Cost

(Millions of yen)

	Buildings and structures	Machinery, equipment and vehicles	Tools, furniture and fixtures	Land	Construction in progress	Total
Balance as of January 1, 2020	59,563	87,845	30,515	12,145	13,261	203,328
Balance as of December 31, 2020	65,289	87,994	30,417	17,811	9,578	211,089
Balance as of December 31, 2021	66,316	91,648	30,931	17,901	9,859	216,655

(3) Accumulated depreciation and accumulated impairment losses

(Millions of yen)

	Buildings and structures	Machinery, equipment and vehicles	Tools, furniture and fixtures	Land	Construction in progress	Total
Balance as of January 1, 2020	32,527	58,430	25,289	—	—	116,246
Balance as of December 31, 2020	34,384	61,775	25,408	—	—	121,567
Balance as of December 31, 2021	36,420	65,273	25,942	—	—	127,636

11. Goodwill and intangible assets

(1) Reconciliation of carrying amounts

(Millions of yen)

	Goodwill	Software	Customer related assets	Technology assets	Others	Total
Balance as of January 1, 2020	14,161	2,639	1,635	347	507	19,288
Additions	—	1,481	—	—	21	1,502
Amortization (Note 2)	—	(948)	(316)	(29)	(143)	(1,436)
Impairment losses (Note 3)	—	(0)	(1,031)	—	(253)	(1,285)
Exchange differences on translation of foreign operations	497	(45)	6	15	21	494
Balance as of December 31, 2020	14,658	3,126	293	333	153	18,562
Additions	—	1,542	—	—	33	1,575
Acquisitions through business combinations	658	—	—	—	—	658
Amortization (Note 2)	—	(1,253)	(63)	(30)	56	(1,290)
Exchange differences on translation of foreign operations	869	36	22	12	(10)	929
Balance as of December 31, 2021	16,184	3,451	253	315	232	20,434

Notes: 1. There are no significant intangible assets with indefinite useful lives.

2. Amortization of intangible assets is included in "Cost of sales" and "Selling, general and administrative expenses" in the consolidated statement of profit or loss.

3. Impairment losses of software, customer related assets and others are included in "Cost of sales" and "Selling, general and administrative expenses" in the consolidated statement of profit or loss.

(2) Cost

(Millions of yen)

	Goodwill	Software	Customer related assets	Technology assets	Others	Total
Balance as of January 1, 2020	24,357	7,915	2,654	419	1,446	36,791
Balance as of December 31, 2020	25,246	7,369	2,751	434	1,438	37,237
Balance as of December 31, 2021	27,259	7,883	2,827	446	1,709	40,125

(3) Accumulated amortization and accumulated impairment losses

(Millions of yen)

	Goodwill	Software	Customer related assets	Technology assets	Others	Total
Balance as of January 1, 2020	10,196	5,276	1,019	73	939	17,503
Balance as of December 31, 2020	10,588	4,243	2,457	102	1,285	18,675
Balance as of December 31, 2021	11,075	4,432	2,574	132	1,477	19,690

(4) Impairment test

Carrying amounts of goodwill as of December 31, 2021 and 2020 allocated to each cash-generating unit are as follows:

(Millions of yen)

Reportable segment	Cash-generating unit	2021	2020
Component	Nabtesco Power Control Company	2,582	2,582
Accessibility	Gilgen Group	12,945	12,076
Total		15,526	14,658

Note: Goodwill derived from the acquisition of Engilico group of ¥658 million is not included in the above table as of December 31, 2021. The amount of goodwill is provisional because the identifiable assets acquired and liabilities assumed at the date of the business combination are still under review and the allocation of consideration is yet to be completed as of December 31, 2021.

The Group tests goodwill for impairment in accordance with Note "3. Significant accounting policies". Goodwill is not subject to amortization but is tested for impairment whenever there is an indication of impairment and annually irrespective of whether there is any indication of impairment. The Group compares the carrying amount of each cash-generating unit group including goodwill and the recoverable amount. An impairment loss is recognized by reducing the carrying amount to the recoverable amount.

The recoverable amount of goodwill is measured at its value in use. The value in use is the present value calculated by discounting the estimated future cash flows based on a business plan authorized by management. The period of the business plan is limited to 4 years, reflecting management's assessments of future industry trends and historical data based on internal and external information. The growth rate subsequent to the last year of the business plan is granted as zero or is determined based on growth rate estimated within long-term average growth rate of the market to which the cash-generating unit belongs (1.0%).

The Group did not recognize impairment loss as of December 31, 2021 as a result of the impairment testing of goodwill, under which the estimated cash flows are discounted by the pre-tax weighted average cost of capital of the cash-generating unit (8.6% to 10.5%). However, there is a risk that a change in key assumptions may result in impairment. If the pre-tax weighted average cost of capital increases by 1.6%, there is a possibility that an impairment loss may be incurred.

The Group did not recognize impairment loss as of December 31, 2020 as a result of the impairment testing of goodwill, under which the estimated cash flows are discounted by the pre-tax weighted average cost of capital of the cash-generating unit (7.9% to 8.7%). However, there is a risk that a change in key assumptions may result in impairment. If the pre-tax weighted average cost of capital increases by 1.4%, there is a possibility that an impairment loss may be incurred.

12. Impairment of non-financial assets

For the year ended December 31, 2021

There are no impairment of non-financial assets that need disclosure as of December 31, 2021.

For the year ended December 31, 2020

(Millions of yen)

Reportable segment	Asset type	Amount of impairment losses
Transport	Machinery, equipment and vehicles	1,303
	Others (Property, plant and equipment)	95
	Customer related assets	1,031
	Others (Intangible assets)	253
	Right-of-use assets	1,203
	Total	3,885

Impairment loss of non-financial assets in 2020 mainly consists of the following:

During 2020, the Group recognized an impairment loss by ¥3,421 million (¥943 million with Property, plant and equipment, ¥1,284 million with Intangible assets and ¥1,194 million with Right-of-use assets) allocated to the cash-generating unit of OVALO GmbH, as a result of impairment test based on a business plan forecasted in 2020, which the estimated revenue decreases and the recoverable amount is less than the carrying amount.

The impairment loss is included in "Cost of sales" and "Selling, general and administrative expenses" in the consolidated statement of profit or loss. The impairment loss is recognized in the Transport Solutions Business. The recoverable value of this cash-generating unit is based on the value in use (pre-tax discount rate: 13.6%).

13. Leases

(1) Book value and profit or loss of right-of-use assets

The details of book value and profit or loss of right-of-use assets are as follows.

The Group uses the underlying assets of the leases mainly for its business activities.

(Millions of yen)

Book value of right-of-use assets	2021	2020
Buildings and structures	7,171	5,868
Machinery, equipment and vehicles	1,005	1,013
Tools, furniture and fixtures	54	78
Land	648	598
Total	8,877	7,558

(Millions of yen)

	2021	2020
Depreciations of right-of-use assets		
Buildings and structures	2,169	2,250
Machinery, equipment and vehicles	335	437
Tools, furniture and fixtures	41	40
Land	27	25
Total of depreciations	2,573	2,751
Impairment loss of right-of-use assets		
Buildings and structures	—	1,194
Machinery, equipment and vehicles	—	9
Total of impairment loss	—	1,203
Interest expense on lease liabilities	70	78
Expense relating to short-term leases	650	587
Expense relating to leases of low-value assets	1,042	1,090
Total cash outflow for leases	4,214	4,224
Additions to right-of-use assets	4,069	3,167

(2) Extension and cancellation options

Extension and cancellation options are included in each lease contract of the Group. Each lease contract is managed by each management of the Group, and the terms and conditions of the leases are individually negotiated and include a wide range of contractual terms. The extension and cancellation options are included in the lease liabilities only when they were exercisable and the Group is reasonably certain to exercise them.

A maturity analysis of the lease liabilities is described in Note "21. Financial instruments (2) Liquidity risk management".

14. Investment property

(1) Overview of investments property

The Group has a part of an office building and land for lease in Ehime.

(2) Reconciliation of carrying amount

(Millions of yen)

Balance as of January 1, 2020	3,928
Acquisitions	—
Depreciation	(58)
Sale	(1,678)
Balance as of December 31, 2020	2,192
Acquisitions	1
Depreciation	(56)
Sale	(17)
Reclassification (Note)	43
Balance as of December 31, 2021	2,162

Note: Reclassification to Property, plant and equipment.

(3) Cost

(Millions of yen)

Balance as of January 1, 2020	7,257
Balance as of December 31, 2020	5,515
Balance as of December 31, 2021	4,816

(4) Accumulated depreciation and accumulated impairment losses

(Millions of yen)

Balance as of January 1, 2020	3,329
Balance as of December 31, 2020	3,323
Balance as of December 31, 2021	2,653

(5) Fair value

(Millions of yen)

	2021	2020
Fair value	1,169	1,166

The fair value of investment property as of December 31, 2021 and 2020 is mainly based on appraisal values calculated by independent real estate appraisers, which are typically determined by the appraisal values derived from the observable market values of similar assets. The appraised values are all categorized as Level 3 of the fair value hierarchy. The levels of the fair value hierarchy are described in Note "21. Financial instruments".

15. Investments accounted for using the equity method

(1) Major associates accounted for using the equity method of the Group

Major associates accounted for using the equity method of the Group as of December 31, 2021 and 2020 are as follows.

For the year ended December 31, 2021

Company name	Location	Main business	Percentage of voting rights (%)
TMT Machinery, Inc. (Note)	Chuo-ku, Osaka city Osaka-hu	Manufacturing, sales and others of synthetic fiber machinery and systems	33.0

Note: The Company's Board of Directors resolved to dissolve the cooperative relationship with Harmonic Drive Systems Inc. (hereinafter, "HDS") and not to exercise the first share options issued by HDS requesting HDS to purchase all of them in accordance with the subscription contract on January 29, 2021. The company exercised the options on the same date. As a result of the above, HDS was excluded from the Company's equity-method affiliates as of January 29, 2021 since the Company lost significant influence over HDS due to the decrease in the Company's share of voting rights (including potential voting rights) in HDS.

For the year ended December 31, 2020

Company name	Location	Main business	Percentage of voting rights (%)
TMT Machinery, Inc. (Note)	Chuo-ku, Osaka city Osaka-hu	Manufacturing, sales and others of synthetic fiber machinery and systems	33.0
Harmonic Drive Systems Inc.	Shinagawa-ku, Tokyo	Production and sales of mechatronics products in industrial robots and others	19.0

(2) Investments in significant associates for the Group

There were no investments in significant associates for the Group as of December 31, 2021 and 2020.

(3) Investments in non-significant associates for the Group

(Millions of yen)

	2021	2020
The Group's share of profit for the year	2,099	3,467
The Group's share of other comprehensive income	—	516
The Group's share of comprehensive income	2,099	3,983
Carrying amount of investments in associates	15,475	34,887

(4) Reporting date of associates accounted for using the equity method

The reporting date is March 31 for three associates accounted for using the equity method. The reporting date is June 30 for one associate accounted for using the equity method. The reporting date is November 30 for one associates accounted for using the equity method. The Group uses their provisional financial statements on the consolidated reporting date, December 31, because it is impracticable to conform their reporting dates to the Group's reporting date.

16. Trade and other payables

(1) Trade payables

Trade payables as of December 31, 2021 and 2020 consist of the following:

(Millions of yen)

	2021	2020
Accounts payable	18,121	16,347
Notes payable	1,089	1,154
Electronically recorded obligations	32,765	27,337
Total	51,974	44,838

(2) Other payables

Other payables as of December 31, 2021 and 2020 consist of the following:

(Millions of yen)

	2021	2020
Accounts payable-others	5,275	4,470
Accrued expenses	2,655	2,354
Electronically recorded obligations-equipment	1,317	1,430
Others	1,529	1,470
Total	10,776	9,723

17. Provisions

(1) Details of provisions

Provisions as of December 31, 2021 and 2020 consist of the following:

(Millions of yen)

	2021	2020
Current liabilities	1,206	1,065

(2) Changes in provisions

(Millions of yen)

	Provision for product warranties	Provision for losses on order received	Total
Balance as of January 1, 2021	862	203	1,065
Additional provisions made during the year	393	243	636
Provisions used during the year	(239)	(128)	(367)
Provisions reversed during the year	(113)	(40)	(154)
Exchange differences on translation of foreign operations	25	—	25
Balance as of December 31, 2021	928	278	1,206

(3) Overview of the provisions and the expected timing of resulting outflow of economic resources

1) Provision for product warranties

To provide against the payment of repair costs and other costs that may be incurred after the delivery of products, the costs are separately estimated and recorded as a provision for product warranties. Outflows of economic resources are expected to occur within one year.

2) Provision for losses on orders received

To provide against future losses on contracts received, the expected losses on the contracts at the end of the fiscal year are separately estimated and recorded as a provision for loss on orders received. Outflows of economic resources are expected to occur within one year.

18. Bonds, borrowings and lease liabilities

(1) Details of bonds and borrowings

Bonds and borrowings as of December 31, 2021 and 2020 consist of the following:

(Millions of yen)

	2021	2020
Current liabilities		
Short-term borrowings	14,459	26,789
Current portion of long-term borrowings	232	222
Current portion of long-term bonds	—	9,991
Total	14,690	37,001
Non-current liabilities		
Long-term borrowings	2,897	2,865
Total	2,897	2,865

(2) Bonds

The issuance of bonds is summarized as follows:

(Millions of yen)

Company	Name	Issue date	Balance as of December 31, 2021	Balance as of December 31, 2020	Coupon rate (%)	Collateral	Maturity date
Nabtesco Corporation	2nd series of unsecured straight bonds (with inter-bond pari passu clauses)	December 13, 2016	—	9,991	0.14	Unsecured	December 13, 2021

(3) Borrowings

Weighted average interest rates on "Short-term borrowings", "Current portion of long-term borrowings" and "Long-term borrowings" were 0.28%, 0.63% and 0.60%, respectively, for the year ended December 31, 2021. The repayment terms of "Long-term borrowings" are from 2023 to 2026.

(4) Changes in liabilities arising from financial activities

The changes in liabilities arising from financial activities are as follows:

(Millions of yen)

	Short-term borrowings	Long-term borrowings (Note 1)	Bonds	Lease liabilities (Note 2)	Derivatives (Note 3)	Total
Balance as of January 1, 2020	30,496	3,458	9,981	8,804	67	52,807
Changes from financing cash flow	(3,805)	(250)	―	(2,547)	―	(6,602)
Additions to right-of-use assets	―	―	―	2,863	―	2,863
Decrease by cancelation	―	―	―	(745)	―	(745)
Exchange differences on translation of foreign operations	98	(122)	―	125	―	101
Change in fair value	―	―	―	―	3	3
Others	―	―	9	―	―	9
Balance as of December 31, 2020	26,789	3,087	9,991	8,501	69	48,436
Changes from financing cash flow	(12,601)	(192)	(10,000)	(2,522)	―	(25,314)
Additions to right-of-use assets	―	―	―	3,995	―	3,995
Decrease by cancelation	―	―	―	(455)	―	(455)
Exchange differences on translation of foreign operations	271	234	―	214	―	719
Change in fair value	―	―	―	―	(234)	(234)
Others	―	―	9	―	―	9
Balance as of December 31, 2021	14,459	3,129	―	9,733	(165)	27,156

Note1: Long-term borrowings include current portion of long-term borrowings.

2 Lease liabilities include current portion of lease liabilities.

3 Derivatives is owned to hedge a currency fluctuation risk with borrowings in foreign currency.

19. Employee benefits

(1) Overview of the adopted post-employment benefit plans

The Company and some of its consolidated subsidiaries have adopted funded and unfunded defined benefit plans as well as defined contribution plans for employee's post-retirement benefits. Defined benefit plans provide lump-sum payments or pensions based on positions and service periods of employees.

Funded defined benefit plans are managed by independent pension funds from the Group, in compliance with laws and ordinances. The Group accumulates contributions that are actuarially calculated using certain rates of wages and salaries. The board of administration and pension fund trustees must operate the pension funds in the best priority to the benefit of its participants laws and ordinances are obliged to manage the plan assets based on predetermined policies.

(2) Defined benefit plans

The Group has defined benefit plans. The amounts of benefits are determined based on evaluation factors, such as the number of years of service, performance and job grades and titles.

1) Risks associated with defined benefit plans

The Group is exposed to various risks associated with defined benefit plans. Major risks are as follows. The Group is not exposed to significant concentration risk in respect of plan assets.

Changes in plan assets	Investments in equity instruments, debt instruments and other assets are exposed to fluctuation risk.
Changes in market yields on bonds	A decrease in market yields on bonds causes an increase in defined benefit obligations.

2) Amounts in the consolidated statement of financial position

(Millions of yen)

	2021	2020
Present value of defined benefit obligations	36,627	34,262
Fair value of plan assets	(29,355)	(24,156)
Effect of the asset ceiling	1,699	—
Net defined benefit liabilities	9,079	10,211
Net defined benefit assets	(108)	(106)
Net amount of liabilities and assets in the consolidated statement of financial position	8,970	10,105

3) Changes in the present value of defined benefit obligations

(Millions of yen)

	2021	2020
Balance at the beginning of the year	34,262	32,882
Current service cost	1,839	1,503
Interest cost	95	87
Remeasurement		
Actuarial gains and losses arising from changes in demographic assumptions	(464)	3
Actuarial gains and losses arising from changes in financial assumptions	152	(23)
Actuarial gains and losses arising from experience adjustments	(620)	300
Benefits paid	(210)	(54)
Past service cost	—	(244)
Decrease by the end of a part of post-employment benefit plans	—	(1,009)
Exchange differences on translation of foreign operations	1,574	817
Balance at the end of the year	36,627	34,262

The weighted average duration of defined benefit obligations was 13.7 years as of the year ended December 31, 2021 and 13.7 years as of the year ended December 31, 2020.

4) Changes in the fair value of plan assets

(Millions of yen)

	2021	2020
Balance at the beginning of the year	24,156	23,625
Interest income	50	58
Remeasurement		
Income from plan assets	2,269	(499)
Return on plan assets excluding interest income	1,076	860
Contributions by employees	496	457
Benefits paid	(282)	(156)
Decrease by the end of a part of post-employment benefit plans	—	(988)
Exchange differences on translation of foreign operations	1,589	799
Balance at the end of the year	29,355	24,156

The Group plans to contribute ¥1,616 million to the defined benefit plans for the year ending December 31, 2022.

5) Details of plan assets

(Millions of yen)

	2021			2020		
	With quoted market prices in active markets	Without quoted market prices in active markets	Total	With quoted market prices in active markets	Without quoted market prices in active markets	Total
Cash and cash equivalents	1,585	—	1,585	1,928	—	1,928
Equity instruments						
Domestic shares	—	574	574	—	343	343
Foreign shares	10,139	301	10,440	7,110	257	7,367
Debt instruments						
Domestic bonds	—	1,615	1,615	—	1,673	1,673
Foreign bonds	11,525	261	11,787	9,758	550	10,309
Others	—	3,355	3,355	—	2,537	2,537
Total	23,250	6,106	29,355	18,796	5,360	24,156

Plan assets are managed for the purpose of securing the sustainability of defined benefit plans. Risk and return targets of investments in plan assets are determined as policies. The investment results are appropriately monitored, and the policies are regularly reviewed.

6) Changes in adjustments for asset ceiling

(Millions of yen)

	2021	2020
Balance at the beginning of the year	—	—
Interest revenue	—	—
Remeasurement		
Effect of limiting a net defined benefit asset to the asset ceiling	1,699	—
Exchange differences on translation of foreign operations	—	—
Balance at the end of the year	1,699	—

7) Amounts in the consolidated statement of profit or loss

(Millions of yen)

	2021	2020
Defined benefit cost	1,388	1,074

8) Significant actuarial assumptions

Significant actuarial assumptions as of December 31, 2021 and 2020 are as follows:

	2021	2020
Discount rate	0.3%	0.3%

The following table shows a sensitivity analysis of the impacts of changes in the aforementioned actuarial assumptions on defined benefit obligations as of December 31, 2021 and 2020. The sensitivity analysis based on the premise that the other actuarial assumptions are unchanged. Accordingly, changes in other factors on multiple assumptions may influence to defined benefit obligations.

(Millions of yen)

	2021	2020
0.25% increase in discount rate	(1,141)	(1,081)
0.25% decrease in discount rate	1,217	1,151

9) Asset-liability matching strategy adopted by the Group

The Group's investment strategy is to reduce discrepancies between assets and liabilities by setting expected medium and long-term investment returns above discount rates. This investment strategy primarily focuses on mitigating the investment risk, rather than maximizing the profit. This investment policy is expected to generate income sufficient to fulfill long-term contracts.

(3) Defined contribution plans

(Millions of yen)

	2021	2020
Amounts recognized as an expense for defined contribution plans for the year	1,014	985

20. Income taxes

(1) Income taxes

1) Income taxes recognized in profit or loss

(Millions of yen)

	2021	2020
Current tax expense for the year		
Current fiscal year	25,274	10,002
Recognition of previously unrecognized tax losses	(110)	(372)
Sub-total	25,164	9,630
Deferred tax expense for the year		
Origination and reversal of temporary differences	8,909	576
Sub-total	8,909	576
Total	34,073	10,206

2) Reconciliation of effective statutory tax rates and average effect tax rates

Reconciliation of effective statutory tax rates and average effective tax rates of the Group is as follows. The average effective tax rates represent the percentage of income tax expense to profit before tax.

	2021	2020
Effective statutory tax rate for the year	30.6	30.6
(Adjustments)		
Effect of tax rates in foreign jurisdictions	(1.0)	(2.0)
Changes in unrecognized deferred tax assets	0.3	3.8
Non-deductible expenses for tax purposes such as meals and entertainment	0.4	0.5
Share of profit of investments accounted for using the equity method	(0.6)	(3.1)
Tax credit	(0.8)	(1.8)
Undistributed earnings on foreign operations and associates	0.3	2.0
Excess on tax base in Investments accounted for equity method	3.8	—
Others	0.4	0.3
Average effective tax rate for the year	33.4	30.3

(2) Deferred taxes

1) Details of changes in deferred tax assets and liabilities

Changes in deferred tax assets and liabilities consist of the following:

2021

(Millions of yen)

	Balance as of January 1, 2021	Amount recognized in profit or loss	Amount recognized in other comprehensive income	Balance as of December 31, 2021
Deferred tax assets				
Loss allowance	47	42	—	90
Loss on valuation of inventories	119	1	—	121
Accrued expenses	710	606	—	1,317
Provision for product warranties	165	18	—	183
Other current liabilities	440	(21)	—	419
Net defined benefit liabilities	2,964	132	(282)	2,814
Loss on valuation of investments in associates	166	(0)	—	166
Loss on valuation of golf club membership rights	23	(20)	—	3
Impairment loss	139	4	—	143
Tax loss carried forward	331	(21)	—	310
Others (assets)	880	736	—	1,616
Total	5,985	1,478	(282)	7,181
Deferred tax liabilities				
Deferred taxation on government grants for acquisition of property, plant and equipment	1,245	(133)	—	1,112
Other financial assets - effect of remeasurement relating to discontinuing the use of the equity method and valuation differences due to net changes in fair value- (Note2)	1,415	10,582	66	12,063
Unrealized gains on land	1,152	(181)	—	971
Adjustments for taxable income related to foreign operations (inventories)	186	20	—	207
Undistributed earnings on foreign operations and associates	4,206	(300)	—	3,906
Identifiable intangible assets	224	(32)	—	192
Others (liabilities)	489	165	—	655
Total	8,918	10,122	66	19,106
Net deferred tax assets (liabilities)	(2,933)	(8,644)	(348)	(11,925)

Note1: The difference between the net amount of deferred tax assets and liabilities recognized in profit or loss and the sub-total of deferred tax expense in "(1) Income taxes 1) Income taxes recognized in profit or loss" are a result of changes in exchange rates and other factors.

2 Other financial assets - effect of remeasurement relating to discontinuing the use of the equity method and valuation differences due to changes in fair value- includes the net change of the shares of HDS, which were excluded from the Company’s equity-method affiliates at January 29, 2021 and measured at fair value.

2020

(Millions of yen)

	Balance as of January 1, 2020	Amount recognized in profit or loss	Amount recognized in other comprehensive income	Balance as of December 31, 2020
Deferred tax assets				
Loss allowance	3	44	—	47
Loss on valuation of inventories	167	(47)	—	119
Accrued expenses	535	176	—	710
Provision for product warranties	202	(38)	—	165
Other current liabilities	770	(330)	—	440
Net defined benefit liabilities	2,731	97	136	2,964
Loss on valuation of investments in associates	166	—	—	166
Loss on valuation of golf club membership rights	20	3	—	23
Impairment loss	—	139	—	139
Tax loss carried forward	851	(520)	—	331
Others (assets)	814	66	—	880
Total	6,258	(410)	136	5,985

Deferred tax liabilities				
Deferred taxation on government grants for acquisition of property, plant and equipment	1,240	5	—	1,245
Other financial assets - valuation differences due to changes in fair value	1,703	48	(336)	1,415
Unrealized gains on land	971	181	—	1,152
Adjustments for taxable income related to foreign operations (inventories)	250	(64)	—	186
Undistributed earnings on foreign operations and associates	3,555	651	—	4,206
Identifiable intangible assets	682	(458)	—	224
Others (liabilities)	530	(123)	83	489
Total	8,931	240	(253)	8,918
Net deferred tax assets (liabilities)	(2,673)	(650)	389	(2,933)

Note: The difference between the net amount of deferred tax assets and liabilities recognized in profit or loss and the sub-total of deferred tax expense in "(1) Income taxes 1) Income taxes recognized in profit or loss" are a result of changes in exchange rates and other factors.

2) Deductible temporary differences and unused tax losses for which no deferred tax assets are recognized

Deductible temporary differences and unused tax losses for the year for which no deferred tax assets are recognized are as follows. Deductible temporary differences do not expire under the current tax regulations. Deferred tax assets relating to these items are not recognized as it is not probable that future taxable income will be available against which the Group can utilize the benefits therefrom.

(Millions of yen)

	2021	2020
Deductible temporary differences	2,287	2,224
Tax loss carry forward	11,923	10,153
Total	14,210	12,377

Tax losses for the year for which no deferred tax assets are recognized expire as follows:

(Millions of yen)

	2021	2020
1st year	—	109
2nd year	—	—
3rd year	—	19
4th year	24	—
5th year	42	24
More than 5 years	11,858	10,001
Total	11,923	10,153

21. Financial instruments

To avert or mitigate the financial risks (credit risk, liquidity risk and market risk) associated with business activities, the Group manages financial risks as follows:

(1) Credit risk management

Credit risk is the risk that the Group incurs financial losses due to the default of business partners on obligations.

The credit risk on cash and cash equivalents and time deposits with deposit terms of over three months included in other financial assets (current) is limited, because the Group has such transactions with functional institutions only with high credit rating.

Trade receivables, contract assets and other receivables are exposed to credit risk of business partners. The Group manages credit risk on trade receivables consisting of notes receivables, accounts receivables and contract assets by setting credit lines for business partners in accordance with its internal rules on credit risk management. Credit lines for new business partners are set at the inception of transactions, and those for existing business partners are set through internal deliberation and approval procedures while their credit conditions are monitored regularly. For business partners with unfavorable credit conditions, the Group takes measures, such as receiving guarantee deposits and collateral, as necessary. The Group recognizes and measures expected credit losses, taking into account in the macroeconomic situation, such as the number of corporate bankruptcies, in addition to the information on the business partners' business conditions and financial positions through the credit risk management. Accounts receivable-others included in other receivables are also exposed to credit risk of business partners, but the Group has determined that such credit risk is limited because most of the settlements are scheduled in the short term.

The Group calculates the amount of loss allowance separately for trade receivables, contract assets and other receivables.

The Group always records a loss allowance for the trade receivables and contract assets at an amount equal to the lifetime expected credit losses. The Group records a loss allowance for other receivables at an amount equal to 12-month expected credit losses in principle. However, if the credit risk on other receivables has increased significantly, the Group estimates the lifetime expected credit losses for each receivable and records loss allowance. The Group determines whether the credit risk has increased significantly or not based on whether there are significant increases in the risk of a default on the financial assets since initial recognition. When assessing the change in the risk of a default, the Group takes into account the following:

- financial difficulty of business partners due to the deterioration of their business performance;
- significant delinquency; and
- significant change in external credit rating.

When the Group determined that the collection of the whole of part of the asset is impossible or extraordinarily difficult, such financial assets are determined to be in default and treated as credit-impaired financial assets.

The Group’s maximum exposure to credit risk is the carrying amount of financial assets presented in the consolidated statement of financial position. The Group is not exposed to excessively concentrated credit risk for specific business partners.

1) Exposure to credit risk

Changes in trade receivables and loss allowance are as follows:

2021

(Millions of yen)

Trade receivables	With loss allowance measured at an amount equal to lifetime expected credit losses
Balance as of January 1, 2021	75,251
Increase and collections (Net)	(2,132)
Exchange differences on translation of foreign operations	2,328
Balance as of December 31, 2021	75,447

(Millions of yen)

Loss allowance for trade receivables	With loss allowance measured at an amount equal to lifetime expected credit losses
Balance as of January 1, 2021	619
Increase due to recognition	25
Decrease (Written-down)	—
Decrease (Others)	(208)
Exchange differences on translation of foreign operations	55
Balance as of December 31, 2021	490

The amount of loss allowance for contract assets and other receivables excluding trade receivables is not described because it is not material.

The amounts of provision for, and reversal of, loss allowance are included in "Selling, general and administrative expenses" in the consolidated statement of profit or loss.

2020

(Millions of yen)

Trade receivables	With loss allowance measured at an amount equal to lifetime expected credit losses
Balance as of January 1, 2020	69,676
Increase and collections (Net)	5,307
Exchange differences on translation of foreign operations	268
Balance as of December 31, 2020	75,251

(Millions of yen)

Loss allowance for trade receivables	With loss allowance measured at an amount equal to lifetime expected credit losses
Balance as of January 1, 2020	501
Increase due to recognition	142
Decrease (Written-down)	(31)
Decrease (Others)	(1)
Exchange differences on translation of foreign operations	9
Balance as of December 31, 2020	619

The amount of loss allowance for contract assets and other receivables excluding trade receivables is not described because it is not material.

The amounts of provision for, and reversal of, loss allowance are included in "Selling, general and administrative expenses" in the consolidated statement of profit or loss.

(2) Liquidity risk management

Liquidity risk is the risk that the Group becomes unable to pay for the settlement of financial liabilities on due dates.

The Group manages liquidity risk related to raising funds by using financing plans prepared and updated by the Accounting and Finance Department in a timely manner based on reports from respective departments. Furthermore, in certain regions, regional headquarters or regional bases have implemented a cash management system to intensively and efficiently manage funds retained in their region, thereby making efforts to mitigate liquidity risk.

The maturity analysis of the Group's financial liabilities as of December 31, 2021 and 2020 is as follows:

(Millions of yen)

2021	Carrying amount	Contractual cash flows	Within 1 year	1-2 years	2-3 years	3-4 years	4-5 years	Over 5 years
Trade payables	51,974	51,974	51,974	—	—	—	—	—
Other financial liabilities	77,862	77,862	77,862	—	—	—	—	—
Other payables	8,123	8,123	8,123	—	—	—	—	—
Borrowings	17,587	17,643	14,720	2,549	216	156	1	1
Lease liabilities	9,733	10,387	2,277	1,524	1,028	668	552	4,337
Total	165,279	165,989	154,956	4,073	1,244	824	554	4,338

(Note) The amount of derivative financial liabilities is not described because it is insignificant.

(Millions of yen)

2020	Carrying amount	Contractual cash flows	Within 1 year	1-2 years	2-3 years	3-4 years	4-5 years	Over 5 years
Trade payables	44,838	44,838	44,838	—	—	—	—	—
Other payables	7,374	7,374	7,374	—	—	—	—	—
Borrowings	29,875	29,984	27,067	240	2,309	206	156	7
Bonds	9,991	10,014	10,014	—	—	—	—	—
Lease liabilities	8,501	9,026	2,287	1,458	754	546	446	3,536
Total	100,579	101,237	91,580	1,698	3,062	752	602	3,543

(3) Market risk management

1) Foreign currency risk

The Group operates its businesses globally and sells its products overseas. Therefore, the Group is exposed to the fluctuation risk of exchange rates ("foreign currency risk") associated with the translation of trade receivables, trade payables and other items generated from transactions in currencies other than the functional currency, using the exchange rates at the end of the reporting period.

The Group's trade receivables, trade payables and other items are denominated in foreign currencies are exposed to foreign currency risk. The Group hedges the risk by ascertaining the foreign currency-denominated balances by currency and by month, and by using forward exchange contracts, currency swap and other hedging instruments for the netted positions in principle. For this reason, the Group has determined that its exposure to the foreign currency risk is limited.

Derivatives

The overview of the main derivatives used by the Group to control foreign currency risk as of December 31, 2021 and 2020 is as follows:

Derivative transactions to which hedge accounting is not applied

(Millions of yen)

	2021			2020		
	Contract amount	Over 1 year	Fair value	Contract amount	Over 1 year	Fair value
Forward exchange contract (put) USD	1,020	–	(16)	733	–	10
Currency and interest rate swap Receipt and pay in foreign currency	2,152	2,152	165	2,152	2,152	(69)

Note: There are no derivative transactions to which hedge accounting is applied.

Sensitivity analysis on exchange rates

In case each currency excluding the functional currency appreciates against the functional currency by 1% at the end of each consolidated fiscal year, impacts on the profit before tax and equity are as follows.

This sensitivity analysis on exchange rates shows the impact caused by the translation of foreign currency-denominated financial instruments (including intragroup transactions) for which exchange differences are recognized in profit or loss. The analysis does not include the impacts of revenue and expenses denominated in foreign currencies. This analysis is based on fluctuations in foreign exchanges rates that the Group considers to be reasonably possible at the end of the consolidated fiscal year and on the premise that the other factors do not change.

(Millions of yen)

Currency	2021		2020	
	Profit before tax	Equity	Profit before tax	Equity
USD	13	9	14	10
CNY	41	28	56	39
EUR	32	24	8	6
JPY	(24)	(19)	(29)	(27)

Note: The amount of JPY is related to yen-denominated financial assets and liabilities held by foreign operations.

2) Interest rate risk

Interest rate risk is defined as the risk of changes in the fair values of financial instruments or future cash flows generated from financial instruments due to fluctuations in market interest rates. A part of the Group's interest-bearing debt is borrowings with a floating rate of interest. As the amount of the interest is affected by the fluctuations in market interest rates, the Group is exposed to the interest rate risk that may change the future cash flows of the interest.

The Group manages its surplus funds in excess of the amount of floating-interest borrowings mainly by making short-term deposits. When the interest rates rise due to changes in the financial market environment in the future, the Group is able to cut future financing costs by using the surplus funds as a source of repayment to reduce the interest-bearing debt and using interest rate swap.

Therefore, the Company believes that the interest rate risk at the end of the consolidated fiscal year is not material. The Group has determined that the exposure to interest rate risk is limited.

3) Price risks

The Group is exposed to the risk of changes in market prices arising from equity instruments (shares). The equity instruments held by the Group mainly consist of corporate shares. The Group regularly monitors the fair value and the financial condition of the issuer (business partner) and takes into account the relationship with the business partner, thereby reviewing its shareholding status.

In case each share appreciates against the fair value in share market by 1% at the end of each consolidated fiscal year, impacts on the profit before tax and other comprehensive income are as follows.

(Millions of yen)

	2021	2020
Profit before tax	707	—
-Other comprehensive income	67	71

(4) Fair value of financial instruments

1) Method of measuring fair value measurement

(a) Financial assets measured at amortized cost

i) Other financial assets

The fair value of other financial assets is mainly classified by certain periods of time and assessed based on the present value calculated by discounting their cash flows with an interest rate that reflects the credit risk.

(b) Financial assets measured at fair value through profit or loss

i) Golf club memberships

The fair value of golf club memberships is mainly measured based on market prices. Golf club memberships are included in "Other financial assets" in the consolidated statement of financial position.

ii) Derivative financial assets

The fair value of share options is mainly measured based on Monte Carlo simulation considering market price, historical volatility, etc. The fair value of currency and interest rate swap is measured by the price presented by a financial institution in business. Derivative financial assets are included in "Other financial assets" in the consolidated statement of financial position.

iii) Investment securities

Investment securities are equity instruments mainly consisting of shares held for sale. The fair value of listed shares is determined based on market prices at shares exchanges. Therefore, the investment securities are exposed to the risk from fluctuation of market prices. The investment securities are included in "Assets held for sale" and "Other financial assets" in the consolidated statement of financial position.

(c) Financial assets measured at fair value through other comprehensive income

Investment securities

Investment securities are equity instruments mainly consisting of shares held not for sale. The fair value of listed shares is determined based on market prices at shares exchanges, and the fair value of unlisted shares are determined using valuation techniques based on the market prices of similar entities or net asset values. The investment securities are included in "Other financial assets" in the consolidated statement of financial position.

(d) Financial liabilities measured at amortized cost

i) Bonds and borrowings

The fair value of bonds issued by the Company is measured based on market prices. The fair value of borrowings is determined as the present value calculated by discounting the total of principal and interest with an assumed interest rate for similar new borrowings.

ii) Other financial liabilities

The fair value of other financial liabilities is measured based on cash-flow discounted by the Company's incremental borrowing rate.

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

Derivative financial liabilities

The fair value of forward exchange contracts is measured based on forward exchange rates. The fair value of currency and interest rate swap is measured by the price presented by a financial institution in business. Derivative financial liabilities are included in "Other financial liabilities" in the consolidated statement of financial position.

2) Carrying amount and fair value of financial instruments by classification

The carrying amount and fair value of financial assets and financial liabilities included in the consolidated statement of financial position are as follows:

(Millions of yen)

	2021		2020	
	Carrying amount	Fair value	Carrying amount	Fair value
Financial assets				
Financial assets measured at amortized cost				
Other financial assets (Note 1)	10,139	10,132	4,700	4,700
Total financial assets measured at amortized cost	10,139	10,132	4,700	4,700
Financial assets measured at fair value through profit or loss				
Golf club memberships	134	134	130	130
Derivative financial assets	165	165	3,272	3,272
Investment in securities (Notes 2)	89,057	89,057	—	—
Total financial assets measured at fair value through profit or loss	89,355	89,355	3,403	3,403
Financial assets measured at fair value through other comprehensive income				
Investment in securities	6,705	6,705	7,125	7,125
Total financial assets measured at fair value through other comprehensive income	6,705	6,705	7,125	7,125
Total financial assets	106,199	106,192	15,228	15,228
Financial liabilities				
Financial liabilities measured at amortized cost				
Bonds and borrowings	17,587	17,587	39,866	39,874
Other financial liabilities (Note 1)	77,862	77,772	—	—
Total financial liabilities measured at amortized cost	95,449	95,359	39,866	39,874
Financial liabilities measured at fair value through profit or loss				
Derivative financial liabilities	16	16	69	69
Total financial liabilities measured at fair value through profit or loss	16	16	69	69
Total financial liabilities	95,466	95,376	39,935	39,943

Note1: Relating to the partial sale of HDS's shares, other financial asset increases by ¥6,499 million and other financial liabilities increase by ¥77,862 million from December 31, 2020 to December 31, 2021. Increase and decrease of other financial assets are included in "Payments of leasehold and guarantee deposits" and "Proceeds from refund of leasehold and guarantee deposits", and increase of other financial liabilities is included in "Proceeds from sale of investment securities" on Consolidated statement of cash flows.

2 Financial assets (Investment in securities) measured at fair value through profit or loss, include assets held for sale. Assets held for sale is described in Note "9. Assets held for sale".

The Group does not have any financial assets and liabilities irrevocably designated at initial recognition as financial assets and liabilities measured at fair value through profit or loss. Financial instruments measured at amortized cost, cash and equivalents, trade receivables, contract assets, other receivables, trade payables and other payables, are not included in the table above, because they are settled in the short-term and their book values reasonably approximate their fair values.

3) Classification by the levels in the fair value hierarchy

The fair value of financial assets and financial liabilities is measured and analyzed on a recurring basis as follows. These fair value amounts are categorized into three levels of the fair value hierarchy based on the inputs (available market data) used in valuation techniques. The respective levels are defined as follows:

Level 1: Fair value measured at quoted prices in active markets

Level 2: Fair value calculated, either directly or indirectly, using observable prices other than Level 1

Level 3: Fair value calculated using valuation techniques based on unobservable inputs

Transfers between the levels of the fair value hierarchy are recognized on the dates when events or changes causing the transfers occur.

The fair value hierarchy of financial assets and financial liabilities measured at fair value on a recurring basis as of December 31, 2021 and 2020 are as follows:

(Millions of yen)

2021	Level 1	Level 2	Level 3	Total
Other financial assets				
Financial assets measured at fair value through profit or loss	89,037	299	19	89,355
Financial assets measured at fair value through other comprehensive income	3,232	—	3,473	6,705
Other financial liabilities				
Financial liabilities measured at fair value through profit or loss	—	16	—	16

(Millions of yen)

2020	Level 1	Level 2	Level 3	Total
Other financial assets				
Financial assets measured at fair value through profit or loss	—	141	3,262	3,403
Financial assets measured at fair value through other comprehensive income	3,812	—	3,313	7,125
Other financial liabilities				
Financial liabilities measured at fair value through profit or loss	—	69	—	69

The fair value of financial instruments measured at amortized cost disclosed in "2) Carrying amounts and fair value of financial instruments by classification" are categorized as Level 2 for bonds and mainly Level 3 for the other instruments.

There were no transfers between Level 1, Level 2 and level 3 for the years ended December 31, 2021 and 2020.

No significant assets or liabilities were measured at fair value on a non-recurring basis as of December 31, 2021 and 2020.

4) Information on fair value measurement categorized as Level 3

(a) Valuation techniques and inputs

Other financial assets categorized as Level 3 are mainly unlisted shares and share options. The fair value of unlisted shares are determined using valuation techniques based on market prices of similar entities or net asset values. In measuring the fair value of unlisted shares, unobservable inputs such as valuation multiples are used. The fair value of share options is mainly determined based on Monte Carlo simulation using market price, historical volatility, etc. as input.

(b) Valuation process

The fair value of financial instruments categorized as Level 3 is measured in accordance with relevant internal rules and regulations. In measuring the fair value, the Group uses valuation techniques and inputs that most appropriately reflect the nature, characteristics and risks of the financial instruments to be measured.

(c) Information on the sensitivity of the recurring fair value measurement categorized as Level 3

Significant unobservable inputs related to the measurement of the fair value of financial instruments categorized as Level 3 on a recurring basis include an EBIT ratio based on financial forecast, illiquidity discount and historical volatility. The fair value increases (decreases) when the EBIT ratio and historical volatility increases (decreases). The fair value decreases (increases) when the illiquidity discount increases (decreases).

There is no significant impact on the fair value of financial instruments categorized as Level 3 even if unobservable inputs are changed to reasonable alternative assumptions.

(d) Reconciliation from the beginning balances to the ending balances for financial instruments categorized as Level 3

(Millions of yen)

	2021	2020
Balance at the beginning of the year	6,575	4,026
Total gains or losses	(2,162)	2,376
Profit for the year (Note 1)	(2,385)	1,986
Other comprehensive income for the year (Note 2)	223	390
Purchase	483	178
Sales	(1,404)	(5)
Balance at the end of the year	3,492	6,575

Note: 1. Gains and losses recognized in profit or loss mainly consist of gains or losses on valuation of financial instruments sold during the year, and are included in "Finance income" and "Finance costs" in the consolidated statement of profit or loss.

2. Gains and losses recognized in other comprehensive income are included in "Net changes in financial assets measured at fair value through other comprehensive income" in the consolidated statement of comprehensive income.

(5) Other financial assets

The details of other financial assets as of December 31, 2021 and 2020 are as follows:

(Millions of yen)

	2021	2020
Time deposits with deposit terms of more than three months	1,322	2,554
Golf club memberships	134	130
Investment securities	51,243	7,125
Others	8,982	5,419
Total	61,681	15,228
Current	7,821	2,582
Non-current	53,860	12,646
Total	61,681	15,228

Investment securities held by the Group are equity instruments mainly consisting of corporate shares. Investment securities held for sale are measured at fair value through profit or loss. Other investment securities are held mainly to facilitate business relationships, and are not held for short-term trading. Therefore, they are measured at fair value through other comprehensive income.

The details of major investments and their fair values as of December 31, 2021 and 2020 are as follows:

1) The details of equity instruments measured through profit or loss

(Millions of yen)

	2021	2020
Harmonic Drive Systems Inc.	89,037	—
Total	89,037	—
Dividend income	183	—

Note: Financial assets (investment securities) measured at fair value through profit or loss include assets held for sale. Assets held for sale is described in Note "9. Assets held for sale".

2) The details of equity instruments measured through other comprehensive income

(Millions of yen)

	2021	2020
Central Japan Railway Company	1,535	1,459
NABCO KANAGAWA PTY,LTD.	651	590
WEST JAPAN RAILWAY TECHSIA Co., Ltd.	650	714
WEST JAPAN RAILWAY TECHNOS Co., Ltd.	536	513
Kyodo Yushi Co., Ltd.	536	504
SINFONIA TECHNOLOGY CO., LTD.	525	647
R.K.deep Sea Technologies Limited	457	—
Keio Corporation	340	536
WEST JAPAN RAILWAY COMPANY	216	243
East Japan Railway Company	180	348
Spear Power Systems, Inc.	—	447
Others	1,078	1,124
Total	6,705	7,125
Dividend income	59	65

The Group periodically reviews capital efficiency and its business partnerships. As a result, the Group sells and derecognizes some financial assets measured at fair value through other comprehensive income. Equity instruments measured at fair value through other comprehensive income that the Group sold for the years ended December 31, 2021 and 2020 are as follows.

(Millions of yen)

	2021	2020
Fair value	885	5
Cumulative gains (losses)	460	—
Dividend income	4	—

The Group recognizes the cumulative gains or losses on the financial instruments measured at fair value through other comprehensive income as other components of equity. When the Group disposes of and derecognizes the financial instruments, or determines that the fair value of the financial instruments has apparently declined, it transfers them from other components of equity to retained earnings. The amount of cumulative gains or losses in other comprehensive income transferred to retained earnings were ¥388 million and ¥-2 million for the years ended December 31, 2021 and 2020, respectively.

22. Capital and other components of equity

(1) Total number of shares authorized and total number of shares issued

The total number of shares authorized and the total number of shares issued are as follows:

	Total number of shares authorized (shares)	Total number of shares issued (shares)
As of January 1, 2020	400,000,000	125,133,799
Increase	—	—
Decrease	—	—
As of December 31, 2020	400,000,000	125,133,799
Increase	—	—
Decrease (Note:3)	—	4,069,700
As of December 31, 2021	400,000,000	121,064,099

Note:1. Shares issued by the Company are no par value ordinary shares.

2. Issued shares are fully paid-up.

3. Decrease by cancellation of treasury shares authorized by the Company's Board of Directors on January 29, 2021 and July 15, 2021.

(2) Share premium

Share premium is the amount generated from equity transactions and not incorporated into share capital.

The Japanese Companies Act ("Companies Act") stipulates that no less than 50% of the amount of payment received or the value of property delivered by the issuance of shares shall be incorporated into share capital and the remaining amount shall be incorporated into legal capital surplus included in share premium. In addition, the Companies Act provides that legal capital surplus may be reclassified to share capital by a resolution of a shareholders' meeting.

(3) Retained earnings

Retained earnings consist of legal retained earnings and other retained earnings. Other retained earnings are mainly an accumulation of profit earned by the Group.

Under the Companies Act, a company shall accumulate an amount equivalent to one-tenth of the dividends paid from surplus as legal capital surplus or legal retained earnings until the total amount accumulated is equivalent to up to one-fourth of the amount of share capital. The accumulated legal retained earnings may be apportioned to offset deficits. In addition, legal retained earnings may be reversed by a resolution of a shareholders' meeting.

(4) Treasury shares

Changes in the number and balance of treasury shares are as follows:

	Number of shares (shares)	Amount (millions of yen)
As of January 1, 2020	1,013,362	2,536
Acquisitions through purchasing request of shares less than one unit	491	2
Decrease through Board Benefit Trust	(13,588)	(45)
Decrease through exercise of share options	(9,516)	(21)
As of December 31, 2020	990,749	2,471
Acquisition based on authorization of Board of Directors	4,069,700	20,000
Cancelation based on authorization of Board of Directors	(4,069,700)	(18,314)
Acquisitions through purchasing request of shares less than one unit	1,427	6
Sale through selling request of shares less than one unit	(40)	(0)
Acquisition through Board Benefit Trust	188,400	904
Decrease through Board Benefit Trust	(59,525)	(199)
Decrease through exercise of share options	(29,800)	(84)
As of December 31, 2021	1,091,211	4,784

Note: The details of the share option and the Board Benefit Trust are described in Note "27. Share-based payment". The Group discloses Nabtesco share owned by Board Benefit Trust as treasury shares on equity. The balance of the treasury shares was ¥1,427 million and the number of the treasury shares was 345,115 shares as of December 31, 2021.

(5) Other components of equity

1) Remeasurements of net defined benefit liabilities

Remeasurements of net defined benefit liabilities mainly consist of actuarial gains and losses on defined benefit obligations and returns on plan assets (excluding amount included in interest income from plan assets).

2) Net changes in financial assets measured at fair value through other comprehensive income

Net changes in financial assets measured at fair value through other comprehensive income are the amount of changes in the fair value of equity financial instruments measured at fair value through other comprehensive income.

3) Exchange differences on translation of foreign operations

Exchange differences on translation of foreign operations are exchange differences that arise when consolidating the foreign currency-denominated financial statements of foreign operations.

(6) Dividends

Dividend payments during the years ended December 31, 2021 and 2020 are as follows:

2021

Resolution	Total amount of dividends (millions of yen)	Dividend per share (yen)	Record date	Effective date
Ordinary General Meeting of Shareholders on March 23, 2021 (Note 1)	4,228	34	December 31, 2020	March 24, 2021
Board of Directors' Meeting on July 30, 2021 (Note 2)	4,572	38	June 30, 2021	August 31, 2021

Note:1. The total amount of dividends determined by the Ordinary General Meeting of Shareholders on March 23, 2021 includes the dividends of ¥7 million on the Company's shares held by the trust account of Mizuho Trust & Banking Co., Ltd. in relation to the Board Benefit Trust.

2. The total amount of dividends determined by the Board of Directors Meeting on July 31, 2021 includes the dividends of ¥13 million on the Company's shares held by the trust account of Mizuho Trust & Banking Co., Ltd. in relation to the Board Benefit Trust.

Dividends whose record date is in the current fiscal year but whose effective date in the following year are as follow:

Resolution	Total amount of dividends (millions of yen)	Dividend per share (yen)	Record date	Effective date
Ordinary General Meeting of Shareholders on March 24, 2022	4,692	39	December 31, 2021	March 25, 2022

Note: The total amount of dividends determined by the Ordinary General Meeting of Shareholders on March 24, 2022 includes the dividends of ¥13 million on the Company's shares held by the trust account of Mizuho Trust & Banking Co., Ltd. in relation to the Board Benefit Trust.

2020

Resolution	Total amount of dividends (millions of yen)	Dividend per share (yen)	Record date	Effective date
Ordinary General Meeting of Shareholders on March 24, 2020 (Note 1)	4,601	37	December 31, 2019	March 25, 2020
Board of Directors' Meeting on July 30, 2020 (Note 2)	5,099	41	June 30, 2020	August 31, 2020

Note:1. The total amount of dividends determined by the Ordinary General Meeting of Shareholders on March 24, 2020 includes the dividends of ¥9 million on the Company's shares held by the trust account of Mizuho Trust & Banking Co., Ltd. in relation to the Board Benefit Trust.

2. The total amount of dividends determined by the Board of Directors Meeting on July 31, 2020 includes the dividends of ¥9 million on the Company's shares held by the trust account of Mizuho Trust & Banking Co., Ltd. in relation to the Board Benefit Trust.

Dividends whose record date is in the current fiscal year but whose effective date in the following year are as follow:

Resolution	Total amount of dividends (millions of yen)	Dividend per share (yen)	Record date	Effective date
Ordinary General Meeting of Shareholders on March 23, 2021	4,228	34	December 31, 2020	March 24, 2021

Note: The total amount of dividends determined by the Ordinary General Meeting of Shareholders on March 23, 2021 includes the dividends of ¥7 million on the Company's shares held by the trust account of Mizuho Trust & Banking Co., Ltd. in relation to the Board Benefit Trust.

(7) Other comprehensive income for the year

The amounts incurred during the year, reclassification adjustments to profit or loss and tax effects of items in comprehensive income for the years ended December 31, 2021 and 2020 are as follows:

2021

(Millions of yen)

	Before tax	Tax (expense) benefit	After tax
Items that will not be reclassified to profit or loss			
Remeasurements of net defined benefit liabilities (assets)	1,430	(282)	1,148
Net changes in financial assets measured at fair value through other comprehensive income	340	(66)	274
Sub-total	1,770	(348)	1,422
Items that may be reclassified subsequently to profit or loss			
Exchange differences on translation of foreign operations	6,480	—	6,480
Sub-total	6,480	—	6,480
Total	8,250	(348)	7,902

Note: No reclassification adjustments arose from the above items.

2020

(Millions of yen)

	Before tax	Tax (expense) benefit	After tax
Items that will not be reclassified to profit or loss			
Remeasurements of net defined benefit liabilities (assets)	(714)	136	(578)
Net changes in financial assets measured at fair value through other comprehensive income	(864)	336	(528)
Share of other comprehensive income of investments accounted for using the equity method	599	(83)	516
Sub-total	(979)	389	(590)
Items that may be reclassified subsequently to profit or loss			
Exchange differences on translation of foreign operations	368	—	368
Sub-total	368	—	368
Total	(611)	389	(222)

Note: No reclassification adjustments arose from the above items.

(8) Capital management

The Group operates its business based on the targeted level of return on assets (ROA) and return on equity (ROE) in order to maintain and improve its market value. To prepare for sudden changes in the economic environment, it also aims to achieve an appropriate percentage of equity attributable to owners of the parent that can maintain high credit ratings to raise funds regardless of the financial situation surrounding the Group.

The Group's ROA, ROE, Percentage of equity attributable to owners of the parent for the years ended December 31, 2021 and 2020 are as follows.

	2021	2020
ROA (%)	15.6	5.9
ROE (%)	29.6	10.6
Percentage of equity attributable to owners of the parent (%)	49.8	56.3

23. Revenue from contracts with customers

(1) Disaggregation of revenue

The Group's businesses are comprised of the Component Solutions Business, Transport Solutions Business, Accessibility Solutions Business and Others. The Board of Directors regularly makes decisions on the allocation of management resources and assesses its performance.

The Group presents revenue obtained through these businesses as sales. Sales are broken down by main products. The following table shows relationship between the disaggregated sales and the sales for the year ended December 31, 2021 by segment described in Note "5. Business segments".

The Group has no performance obligation as an agent.

(Millions of yen)

Business segments	Main products	2021	2020
Component Solutions Business	Precision reduction gear	77,495	55,831
	Hydraulic equipment	60,626	53,996
	Others	8	28
	Sub-total	138,130	109,855
Transport Solutions Business	Railroad vehicle equipment	25,761	29,488
	Aircraft equipment	13,174	18,782
	Commercial vehicle equipment	12,087	12,040
	Marine vessel equipment	11,349	10,730
	Others	5,373	7,049
	Sub-total	67,744	78,090
Accessibility Solutions Business	Automatic doors	75,108	73,665
	Sub-total	75,108	73,665
Others	Packaging machines	16,594	14,997
	Others	2,226	2,750
	Sub-total	18,820	17,747
Total		299,802	279,358

Note: The amounts of sales are showed based on external sales.

(2) Contract balances

The following table shows information about accounts receivable, contract assets and contract liabilities from contracts with customers.

(Millions of yen)

	December 31, 2021	December 31, 2020
Accounts receivable from contracts with customers	74,957	74,632
Contract assets	2,065	1,230
Contract liabilities	5,704	5,763

The contract assets primarily relate to the Group's right to consideration for performance obligations that have been satisfied over time. The contract assets are transferred to receivables when the right becomes unconditional. Accounts receivable from contracts with customers is mainly paid within one year from the date which performance obligations are satisfied, in accordance to payment terms specified in a contract. In addition, the accounts receivable from contracts with customers contain no significant financing components.

Contract liabilities primarily relate to the consideration received from customers before delivery of the product.

The amount of revenue recognized for the year ended December 31, 2021, which was included in contract liabilities at the beginning of the year ended December 31, 2021 is ¥4,945 million. In addition, the amount of revenue recognized from performance obligations satisfied (or partially satisfied) in previous period is not significant.

Impairment loss (increase due to recognition of loss allowance) recognized for receivables from contracts with customers for the year ended December 31, 2021 is ¥25 million, and there are no impairment losses recognized for contract assets.

(3) Transaction price allocated to the remaining performance obligations

The transaction price for each remaining period to satisfy the obligation is as follows. The transaction price does not include estimates of variable consideration amounts. In addition, as the Group uses practical expedients, the following amounts do not include transaction amounts for which the individual expected contract period is within one year.

(Millions of yen)

	2021	2020
Within one year	24,966	22,769
More than one year	23,271	31,986
Total	48,237	54,755

(4) Assets recognized from the costs of obtaining or fulfilling contracts with customers

There are no assets recognized from the costs for obtainment or fulfillment of contracts with customers for the year ended December 31, 2021. If the amortization period of the assets to be recognized is within one year, practical expedients are applied, and the incremental costs of obtaining contracts are recognized as an expense when incurred.

24. Details of expenses by nature

Cost of sales and selling, general and administrative expenses for the years ended December 31, 2021 and 2020 consist of the following:

(Millions of yen)

	2021	2020
Cost of materials and others allocated	143,910	138,779
Employee benefit expenses (Note 1)	62,623	58,371
Research and development costs (Note 2)	9,618	8,968
Depreciation and amortization	12,174	12,721
Impairment loss (Note 3)	—	3,885
Travel and transportation costs	1,492	1,567
Others	40,462	32,529
Total	270,280	256,821

Note:1. Employee benefit expenses include the benefits expenses for directors and corporate auditors of the Group.

2. Research and development costs include employee benefit expenses, depreciation and amortization relating to research and development.

3. The details of this impairment loss are described in Note "12. Impairment of non-financial assets".

25. Other income and expenses

(1) Other income

Other income for the years ended December 31, 2021 and 2020 consists of the following:

(Millions of yen)

	2021	2020
Rental income	145	320
Gain on sales of property, plant and equipment	25	60
Gain on sales of investment property	—	4,892
Insurance proceeds received	—	41
Government grant income	158	515
Compensation received	221	221
Others	632	467
Total	1,180	6,515

(2) Other expenses

Other expenses for the years ended December 31, 2021 and 2020 consist of the following

(Millions of yen)

	2021	2020
Loss on sale and disposal of property, plant and equipment	407	164
Rental costs	5	31
Others	273	323
Total	686	519

26. Finance income and finance costs

(1) Finance income

Finance income for the years ended December 31, 2021 and 2020 consists of the following:

(Millions of yen)

	2021	2020
Interest income		
Financial assets measured at amortized cost	286	236
Dividend income		
Financial assets measured at fair value through profit or loss	183	—
Financial assets measured at fair value through other comprehensive income	59	65
Gain on valuation of investment securities		
Financial assets measured at fair value through profit or loss	19	—
Gain on sale of investment securities		
Financial assets measured at fair value through profit or loss	143	—
Gain from changes in fair value of golf club membership		
Financial assets measured at fair value through profit or loss	8	4
Gain from changes in fair value of derivatives		
Financial assets measured at fair value through profit or loss	4	1,986
Gain from remeasurement relating to discontinuing the use of the equity method (Note)	125,107	—
Net foreign exchange gain	1,168	—
Total	126,977	2,291

Note: Gain on valuation of HDS's shares based on share price (fair value) on the date of discontinuing the use of the equity method.

(2) Finance costs

Finance costs for the years ended December 31, 2021 and 2020 consist of the following:

(Millions of yen)

	2021	2020
Interest expenses		
Financial liabilities measured at amortized cost	98	127
Lease liabilities	70	78
Loss on valuation of derivatives (Note 1)		
Financial assets measured at fair value through profit or loss	2,546	—
Loss on valuation of investment in securities (Note 2)		
Financial assets measured at fair value through profit or loss	54,412	—
Net foreign exchange loss	—	365
Others	—	3
Total	57,126	573

Note1: Valuation loss on reversal of gain on valuation of HDS's share options recognized in prior years as a result of selling share options by payment price. The company exercised the options on the same date.

2: Loss on valuation of HDS's shares measured based on share price (fair value) as of December 31, 2021.

27. Share-based payment

(1) Share-based payment-type share option plan

1) Overview of share-based payment-type share option plan

The Company grants share options, which give the holder the right to purchase the Company's shares, to its directors and executive officers (excluding outside directors; hereafter "Directors"). This plan does not have any vesting conditions. With the approval of the 14th Ordinary General Meeting of Shareholders held on March 28, 2017, the Company abolished the share-based payment-type share option plan (however, any unexercised subscription rights to shares already granted to directors as share-based payment-type share options remain). One unit of share option is exchanged for 100 ordinary shares when it is exercised.

The details of share options as of December 31, 2021 are as follows:

Date of grant	Number of board of directors entitled	Number of ordinary shares	Method of settlement	Exercise period
August 19, 2011	20	70,000	Equity- settled	August 20, 2011 - August 19, 2036
August 20, 2012	22	77,700	Equity- settled	August 21, 2012 - August 20, 2037
August 20, 2013	22	64,500	Equity- settled	August 21, 2013 - August 20, 2038
August 20, 2014	21	55,500	Equity- settled	August 21, 2014 - August 20, 2039
August 20, 2015	19	29,300	Equity- settled	August 21, 2015 - August 20, 2040
May 20, 2016	19	53,000	Equity- settled	May 21, 2016 - May 20, 2041

2) Number of share options and weighted averaged exercise price

	2021		2020	
	Number of share options	weighted average exercise price	Number of share options	weighted average exercise price
Balance at the beginning of the year	621	1	715	1
Exercised (Note 1)	(298)	1	(94)	1
Balance at the end of the year (Note 2)	323	1	621	1
Exercisable balance at the end of the year	323	1	621	1

Note:1. The weighted average share prices of the share options exercised is ¥4,761 and ¥2,754 for the years ended December 31, 2021 and 2020, respectively.

2. The weighted average exercise price of unexercised shares options is ¥1 each as of December 31, 2021 and 2020. The weighted average of the remaining contractual years is 19.0 years and 19.7 years for the years ended December 31, 2021 and 2020.

3) Fair value, measurement and assumptions of share options granted during the year

There were no granted share options for the year ended December 31, 2021 and December 31, 2020.

4) Share-based payment expenses

No share-based payment expenses is for the year ended December 31, 2021 and December 31, 2020.

(2) Board Benefit Trust (Equity settled-type)

1) Overview of Board Benefit Trust

The Company introduced the Board Benefit Trust.

The plan was introduced to further motivate Directors to improve the medium- to long-term business performance of the Group as a whole and to raise the corporate value, as well as further increase shareholder-centric management awareness. Compared with the existing share-based payment type share options, the plan has the potential to achieve this purpose by additionally clarifying the link between compensation for Directors and the business performance and share value of the Company, and by enabling Directors to share with the shareholders not only benefits of rising share prices but also risks of falling share prices.

Under the plan, the Company's shares are acquired through the trust using the money contributed by the Company, and points ("share grant points") are awarded to Directors every year based on their position and business performance in accordance with the regulations for the provision of shares to officers formulated by the Company. Company shares and the cash equivalent of Company shares will be granted or provided through the trust at prescribed times in accordance with the number of share grant points. One share grant point is exchanged for one ordinary share when the Company shares are granted.

2) Number of Share grant points

	2021	2020
	Number of points	Number of points
Balance at the beginning of the year	193,587	152,885
Granted	49,450	56,579
Exercised	(62,742)	(15,877)
Balance at the end of the year	180,295	193,587

In the plan, there is no exercise price, because the Company's shares or cash equivalent to the shares will be obtained or provided through the trust.

3) Fair value of share grant points granted during the year

Fair value is measured based on an observable market price.

Expected dividends are not considered because the term between the grant date and expected exercise date is short. The weighted average exercise price of the points granted is ¥4,789 and ¥2,514 for the years ended December 31, 2021 and 2020, respectively.

4) Cost associated with the Board Benefit Trust

Cost associated with the Board Benefit Trust for the years ended December 31, 2021 and 2020 is ¥267 million and ¥145 million, respectively. The cost is included in "Selling, general and administrative expenses" in the consolidated statement of profit or loss.

28. Earnings per share

(1) Calculation basis of basic earnings per share

Basic earnings per share for the year and the calculation basis are as follows:

		2021	2020
Profit for the year attributable to owners of the parent	(millions of yen)	64,818	20,505
Weighted average number of ordinary shares	(thousand shares)	121,228	124,137
Basic earnings per share	(yen)	534.67	165.18

(2) Calculation basis of diluted earnings per share

Diluted earnings per share for the year and the calculation basis are as follows:

		2021	2020
Diluted profit for the year attributable to owners of the parent	(millions of yen)	64,818	20,505
Weighted average number of ordinary shares	(thousand shares)	121,229	124,137
Effect of share options in the form of subscription rights to shares	(thousand shares)	32	62
Diluted weighted average number of ordinary shares	(thousand shares)	121,261	124,199
Diluted earnings per share	(yen)	534.53	165.09

29. Business combinations

There are no significant business combinations for the year ended December 31, 2021 and December 31, 2020.

30. Subsidiaries

(1) Major subsidiaries of the Group

Major subsidiaries of the Group as of December 31, 2021 and 2020 are as follows;

Company name	Location	Main business	Percentage of voting rights (%)	
			2021	2020
NABCO DOOR Ltd.	Nishi-ku, Osaka, Japan	Accessibility	100.0	100.0
Nabtesco Automotive Corporation	Chiyoda-ku, Tokyo, Japan	Transport	100.0	100.0
Nabtesco Service Co., Ltd.	Shinagawa-ku, Tokyo, Japan	Transport	100.0	100.0
NABCO SYSTEM Co., LTD.	Chiyoda-ku, Tokyo, Japan	Accessibility	85.9	85.9
PACRAFT Co., Ltd.	Minato-ku, Tokyo, Japan	Others	100.0	100.0
Nabtesco (China) Precision Equipment Co., Ltd.	Jiangsu, China	Component	67.0	67.0
Jiangsu Nabtesco KTK Railroad Products Co., Ltd. (Note 2)	Jiangsu, China	Transport	50.0	50.0
Shanghai Nabtesco Hydraulic Co., Ltd.	Shanghai, China	Component	55.0	55.0
Shanghai Nabtesco Hydraulic Equipment Trading Co., Ltd.	Shanghai, China	Component	67.0	67.0
Nabtesco Aerospace Inc.	Washington U.S.A.	Transport	100.0	100.0
NABCO Entrances, Inc.	Wisconsin U.S.A.	Accessibility	100.0	100.0
Gilgen Door Systems AG	Schwarzenburg, Switzerland	Accessibility	100.0	100.0
Nabtesco Precision Europe GmbH	Duesseldorf, Germany	Component	100.0	100.0
Nabtesco Power Control (Thailand)Co., Ltd.	Chonburi, Thailand	Component	70.0	70.0

Note:1. In the "Main business" column, the names of reportable segments are stated.

2. Jiangsu Nabtesco KTK Railroad Products Co., Ltd. ("Jiangsu Nabtesco") is consolidated as the Company determines that it has control over Jiangsu Nabtesco based on the fact that the Company has 50% of the voting rights of Jiangsu Nabtesco and Jiangsu Nabtesco depends on the Company’s technologies.

3. Toyo Jidoki Co., Ltd. changed its company name to PACRAFT Co., Ltd. at April 1, 2021.

31. Related parties

(1) Transaction with associates

The balance of receivables and payables and the amounts of transactions with associates are as follows,

1) Balances of receivables and payables with associates

(Millions of yen)

	2021	2020
Outstanding receivables	776	722
Outstanding payables	447	332

Note: The Company has no collaterals or guarantees for the associates. The Company has no loss allowance or receivables due from the associates.

2) Amounts of related party transaction

(Millions of yen)

	2021	2020
Sales	3,943	2,622
Purchases	3,938	3,946

Note: Related party transactions are priced on an arm's length basis.

(2) Key management personnel compensation

Compensation of the Company's key management personnel for the year comprised the following:

2021

(Millions of yen)

	Total amounts of compensation and others	Total amount of compensation and others by type	
		Basic compensation	Board Benefit Trust
Key management personnel compensation	363	250	112

Note: The key management personnel are the directors of the Company.

2020

(Millions of yen)

	Total amounts of compensation and others	Total amount of compensation and others by type	
		Basic compensation	Board Benefit Trust
Key management personnel compensation	298	247	50

Note: The key management personnel are the directors of the Company.

32. Commitments

The Group's commitments as of December 31, 2021 and 2020 are as follows:

(Millions of yen)

	2021	2020
Commitments	188	1,179

33. Contingent liabilities

There are no contingent liabilities that need disclosure as of December 31, 2021 and 2020.

34. Subsequent events

There are no subsequent events that need disclosure as of December 31, 2021.

Independent auditor's report

To the Board of Directors of Nabtesco Corporation :

Opinion

We have audited the accompanying consolidated financial statements of Nabtesco Corporation ("the Company") and its consolidated subsidiaries (collectively referred to as "the Group"), which comprise the consolidated statement of financial position as at December 31, 2021, and the consolidated statements of profit or loss, comprehensive income, changes in equity and cash flows for the year then ended, and notes, comprising significant accounting policies and other explanatory information.

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Group as at December 31, 2021, and its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with International Financial Reporting Standards prescribed in Article 93 of "the Regulation on Terminology, Forms, and Preparation Methods of Consolidated Financial Statements" (hereinafter referred to as "IFRS").

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 our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Appropriateness of the Company's valuation of property, plant and equipment, intangible assets and right-of-use assets related to the aircraft equipment business within the Transport Solutions Business

The key audit matter	How the matter was addressed in our audit
Property, plant and equipment of ¥89,020 million, intangible assets of ¥4,251 million and right-of-use assets of ¥8,877 million were recorded in the consolidated statement of financial position of Nabtesco Corporation (the "Company") for the current fiscal year. As described in Note 4, "Significant accounting judgments, estimates and	The primary procedures we performed to assess whether the Company's valuation of property, plant and equipment, intangible assets and right-of-use assets related to the aircraft equipment business within the Transport Solutions Business was appropriate, included the following:

assumptions, (2) Significant assumptions used in the calculation of expected discounted cash flows for the impairment tests of non-financial assets" to the consolidated financial statements, property, plant and equipment of ¥11,481 million, intangible assets of ¥100 million and right-of-use assets of ¥5 million were related to the aircraft equipment business within the Transport Solutions Business, which represented 2% of total assets in the consolidated financial statements. As described in Note 3, "Significant accounting policies, (12) Impairment of non-financial assets" to the consolidated financial statements, the Company determines whether there is an impairment indicator for non-financial assets at the end of each fiscal year and, whenever there is an impairment indicator, estimates the recoverable amount of the non-financial assets. The recoverable amount is the higher of either the value in use or fair value less cost of sales. When the carrying amount of the asset or cash-generating unit exceeds the recoverable amount, the resulting difference is recognized as an impairment loss. The Company identified an impairment indicator for the assets related to the aircraft equipment business and estimated the recoverable amount since the business was affected by a significant cut in the production of private-sector aircraft and demand decreased in the off-season period of defense equipment procurement plans in the current fiscal year. The recoverable amount was estimated at the value in use, which was the discounted present value of future cash flows measured based on the business plan of the aircraft equipment business developed by management, and involved a high degree of uncertainty because the business plan included key assumptions which involved management's judgments, such as: ● projected sales; ● cost reduction measures; ● the projected growth rate after the business plan period; and ● the weighted average cost of capital used as the discount rate. We, therefore, determined that our assessment of the appropriateness of the Company's valuation of property, plant and equipment, intangible assets	**(1) Internal control testing** We tested the design and operating effectiveness of certain of the Company's internal controls relevant to the valuation of the property, plant and equipment, intangible assets and right-of-use assets. **(2) Assessment of the reasonableness of the recoverable amount** In order to assess the reasonableness of the estimated recoverable amount of the property, plant and equipment, intangible assets and right-of-use assets, we inquired of the personnel responsible for the aircraft equipment business about key assumptions adopted in estimating the recoverable amount and inspected relevant documents. In addition, we: ● analyzed the achievement of past business plans of the aircraft equipment business including the causes of any differences from actual results, and verified whether the effects of the differences were appropriately considered in developing the business plan that formed the basis for estimating future cash flows; ● compared the future sales plan that formed the basis for estimating sales in the business plan with the trends of past sales results, and confirmed that the future sales plan was consistent with the purchase orders received with its production plans obtained from customers; ● in order to assess the feasibility of the cost reduction measures in the business plan, inquired of management and the personnel responsible for the aircraft equipment business about the details of the measures, inspected relevant documents and checked the implementation status of the measures by performing onsite inspections of the manufacturing plant for the business; ● compared the projected growth rate after the business plan period with relevant market forecast data published by external organizations; and ● assessed the appropriateness of the selection of models and input data for estimating the weighted average cost of capital by engaging a valuation specialist within our domestic network firms.

and right-of-use assets related to the aircraft equipment business within the Transport Solutions Business was the most significant in our audit of the consolidated financial statements for this fiscal year, and accordingly, a key audit matter.	

Responsibilities of Management and Corporate Auditors and the Board of Corporate Auditors for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with IFRS, 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, disclosing, as applicable, matters related to going concern in accordance with IFRS and using the going concern basis of accounting unless management either intends to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

Corporate auditors and the board of corporate auditors are responsible for overseeing the directors' performance of their duties with regard to the design, implementation and maintenance of 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. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with auditing standards generally accepted in Japan will always detect a material misstatement when it exists. 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 our 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. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, while the objective of the audit is not to express 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 whether the presentation and disclosures in the consolidated financial statements are in accordance with IFRS, 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.

- 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 corporate auditors and the board of corporate auditors regarding, among other matters, the planned scope and timing of the audit, significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide corporate auditors and the board of corporate auditors with a statement that we have complied with relevant ethical requirements regarding independence, and 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 corporate auditors and the board of corporate auditors, 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 Company and its subsidiaries which are required to be disclosed pursuant to the provisions of the Certified Public Accountants Act of Japan.

Ayumu Nakajima
Designated Engagement Partner
Certified Public Accountant

Takashi Inoue
Designated Engagement Partner
Certified Public Accountant

KPMG AZSA LLC
Tokyo Office, Japan
May 31, 2022

Notes to the Reader of Independent Auditor's Report:
This is a copy of the Independent Auditor's Report and the original copies are kept separately by the Company and KPMG AZSA LLC.

Independent auditor's report

To the Board of Directors of Nabtesco Corporation :

Opinion

We have audited the accompanying consolidated financial statements of Nabtesco Corporation ("the Company") and its consolidated subsidiaries (collectively referred to as "the Group"), which comprise the consolidated statement of financial position as at December 31, 2021, and the consolidated statements of profit or loss, comprehensive income, changes in equity and cash flows for the year then ended, and notes, comprising significant accounting policies and other explanatory information.

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Group as at December 31, 2021, and its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with International Financial Reporting Standards prescribed in Article 93 of "the Regulation on Terminology, Forms, and Preparation Methods of Consolidated Financial Statements" (hereinafter referred to as "IFRS").

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 our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Appropriateness of the Company's valuation of property, plant and equipment, intangible assets and right-of-use assets related to the aircraft equipment business within the Transport Solutions Business

The key audit matter	How the matter was addressed in our audit
Property, plant and equipment of ¥89,020 million, intangible assets of ¥4,251 million and right-of-use assets of ¥8,877 million were recorded in the consolidated statement of financial position of	The primary procedures we performed to assess whether the Company's valuation of property, plant and equipment, intangible assets and right-of-use assets related to the aircraft equipment

Nabtesco Corporation (the "Company") for the current fiscal year. As described in Note 4, "Significant accounting judgments, estimates and assumptions, (2) Significant assumptions used in the calculation of expected discounted cash flows for the impairment tests of non-financial assets" to the consolidated financial statements, property, plant and equipment of ¥11,481 million, intangible assets of ¥100 million and right-of-use assets of ¥5 million were related to the aircraft equipment business within the Transport Solutions Business, which represented 2% of total assets in the consolidated financial statements.

As described in Note 3, "Significant accounting policies, (12) Impairment of non-financial assets" to the consolidated financial statements, the Company determines whether there is an impairment indicator for non-financial assets at the end of each fiscal year and, whenever there is an impairment indicator, estimates the recoverable amount of the non-financial assets. The recoverable amount is the higher of either the value in use or fair value less cost of sales. When the carrying amount of the asset or cash-generating unit exceeds the recoverable amount, the resulting difference is recognized as an impairment loss.

The Company identified an impairment indicator for the assets related to the aircraft equipment business and estimated the recoverable amount since the business was affected by a significant cut in the production of private-sector aircraft and demand decreased in the off-season period of defense equipment procurement plans in the current fiscal year. The recoverable amount was estimated at the value in use, which was the discounted present value of future cash flows measured based on the business plan of the aircraft equipment business developed by management, and involved a high degree of uncertainty because the business plan included key assumptions which involved management's judgments, such as:

- projected sales;
- cost reduction measures;
- the projected growth rate after the business

business within the Transport Solutions Business was appropriate, included the following:

(1) Internal control testing

We tested the design and operating effectiveness of certain of the Company's internal controls relevant to the valuation of the property, plant and equipment, intangible assets and right-of-use assets.

(2) Assessment of the reasonableness of the recoverable amount

In order to assess the reasonableness of the estimated recoverable amount of the property, plant and equipment, intangible assets and right-of-use assets, we inquired of the personnel responsible for the aircraft equipment business about key assumptions adopted in estimating the recoverable amount and inspected relevant documents. In addition, we:

- analyzed the achievement of past business plans of the aircraft equipment business including the causes of any differences from actual results, and verified whether the effects of the differences were appropriately considered in developing the business plan that formed the basis for estimating future cash flows;
- compared the future sales plan that formed the basis for estimating sales in the business plan with the trends of past sales results, and confirmed that the future sales plan was consistent with the purchase orders received with its production plans obtained from customers;
- in order to assess the feasibility of the cost reduction measures in the business plan, inquired of management and the personnel responsible for the aircraft equipment business about the details of the measures, inspected relevant documents and checked the implementation status of the measures by performing onsite inspections of the manufacturing plant for the business;
- compared the projected growth rate after the business plan period with relevant market forecast data published by external organizations; and
- assessed the appropriateness of the selection

plan period; and ● the weighted average cost of capital used as the discount rate. We, therefore, determined that our assessment of the appropriateness of the Company's valuation of property, plant and equipment, intangible assets and right-of-use assets related to the aircraft equipment business within the Transport Solutions Business was the most significant in our audit of the consolidated financial statements for this fiscal year, and accordingly, a key audit matter.	of models and input data for estimating the weighted average cost of capital by engaging a valuation specialist within our domestic network firms.

Responsibilities of Management and Corporate Auditors and the Board of Corporate Auditors for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with IFRS, 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, disclosing, as applicable, matters related to going concern in accordance with IFRS and using the going concern basis of accounting unless management either intends to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

Corporate auditors and the board of corporate auditors are responsible for overseeing the directors' performance of their duties with regard to the design, implementation and maintenance of 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. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with auditing standards generally accepted in Japan will always detect a material misstatement when it exists. 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 our 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. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, while the objective of the audit is not to express 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 whether the presentation and disclosures in the consolidated financial statements are in accordance with IFRS, 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.

- 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 corporate auditors and the board of corporate auditors regarding, among other matters, the planned scope and timing of the audit, significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide corporate auditors and the board of corporate auditors with a statement that we have complied with relevant ethical requirements regarding independence, and 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 corporate auditors and the board of corporate auditors, 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 Company and its subsidiaries which are required to be disclosed pursuant to the provisions of the Certified Public Accountants Act of Japan.

中嶋 歩

Ayumu Nakajima

Designated Engagement Partner

Certified Public Accountant

井上 喬

Takashi Inoue

Designated Engagement Partner

Certified Public Accountant

KPMG AZSA LLC

Tokyo Office, Japan

May 31, 2022

Nabtesco
moving it. stopping it.

Toward the achievement of the medium-term management plan launched in FY2022 under the theme "TIME FOR CHALLENGE," we selected "挑戦" (meaning "Challenge") as the title of this integrated report. The two Kanji characters in the title were written in Japanese traditional style calligraphy-brush by Atsushi Habe, Managing Executive Officer of Nabtesco, who is responsible for the report.