(English translation and a part of summary of the Annual Securities Report for the twelve-month period ended March 31, 2017 pursuant to the Financial Instruments and Exchange act of Japan.)

Annual Financial Report

For the fiscal year ended March 31, 2017

Advantest Corporation

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As used in this annual financial report, the term “fiscal” preceding a year means the twelve-month period ended March 31 of the year subsequent to the year referred to. For example, “fiscal 2016” refers to the twelve-month period ended March 31, 2017. All other references to years refer to the applicable calendar year.

“¥” or “yen” means Japanese yen.

Unless otherwise noted, all references and discussions of the financial position of Advantest Corporation (the “Company”) and its consolidated subsidiaries (collectively, “Advantest”), results of operations and cash flows in this annual financial report are made with reference to Advantest’s consolidated financial statements prepared in accordance with the International Financial Reporting Standards (“IFRS”).

Cautionary Statement with Respect to Forward-Looking Statements

This annual financial report contains “forward-looking statements” that are based on Advantest’s current expectations, estimates and projections. These statements include, among other things, the discussion of Advantest’s business strategy, outlook and expectations as to market and business developments, production and capacity plans. Generally, these forward-looking statements can be identified by the use of forward-looking terminology such as “anticipate,” “believe,” “estimate,” “expect,” “intend,” “project,” “should” and similar expressions. Forward-looking statements are subject to known and unknown risks, uncertainties and other factors that may cause Advantest’s actual results, levels of activity, performance or achievements to be materially different from those expressed or implied by such forward-looking statements, including:

• changes in demand for the products and services produced and offered by Advantest’s customers, including semiconductors, communications services and electronic goods;

• circumstances relating to Advantest’s investment in technology, including its ability to timely develop products that meet the changing needs of semiconductor manufacturers and communications network equipment and components makers and service providers;

• the environment in which Advantest purchases materials, components and supplies for the production of its products, including the availability of necessary materials, components and supplies during a significant expansion in the market in which Advantest operates; and

• changes in economic conditions, competitive environment, currency exchange rates or political stability in the major markets where Advantest produces, distributes or sells its products.

These risks, uncertainties and other factors also include those identified in “Risk Factors” and set forth elsewhere in this annual financial report.

1. Consolidated Financial Statements

(1) Consolidated Statements of Financial Position

Millions of Yen

	Note	As of March 31, 2016	As of March 31, 2017
Assets			
Current assets			
Cash and cash equivalents	7, 28	85,430	95,324
Trade and other receivables	8, 28	28,005	32,451
Inventories	9	33,912	39,093
Other current assets		3,049	2,976
Subtotal		150,396	169,844
Assets held for sale	11	–	1,295
Total current assets		150,396	171,139
Non-current assets			
Property, plant and equipment, net	12	31,451	29,915
Goodwill and intangible assets	13	16,726	16,479
Other financial assets	10, 28	3,542	3,625
Deferred tax assets	16	8,038	10,282
Other non-current assets		298	163
Total non-current assets		60,055	60,464
Total assets	6	210,451	231,603
Liabilities and Equity			
Liabilities			
Current liabilities			
Trade and other payables	17, 28	22,101	28,489
Bonds	18, 28	–	15,000
Income tax payables		1,548	1,927
Provisions	19	1,709	1,643
Other financial liabilities	28	487	626
Other current liabilities		3,589	3,749
Total current liabilities		29,434	51,434
Non-current liabilities			
Bonds	18, 28	44,618	29,745
Other financial liabilities	28	65	39
Retirement benefit liabilities	20	41,076	38,865
Deferred tax liabilities	16	358	420
Other non-current liabilities		1,281	1,583
Total non-current liabilities		87,398	70,652
Total liabilities		116,832	122,086
Equity			
Share capital	21	32,363	32,363
Share premium	21	44,478	44,319
Treasury shares	21	(94,585)	(86,039)
Retained earnings	21	105,190	113,676
Other components of equity	21	6,173	5,198
Total equity attributable to owners of the parent		93,619	109,517
Total equity		93,619	109,517
Total liabilities and equity		210,451	231,603

(2) Consolidated Statements of Profit or Loss and Consolidated Statements of Comprehensive Income

Consolidated Statements of Profit or Loss

Millions of Yen

	Note	Fiscal year ended March 31, 2016	Fiscal year ended March 31, 2017
Net sales	6	162,111	155,916
Cost of sales	12, 13, 20	(70,636)	(66,176)
Gross profit		91,475	89,740
Selling, general and administrative expenses	12, 13, 19, 20, 23, 24	(79,109)	(76,174)
Other income		630	501
Other expenses		(399)	(162)
Operating income	6	12,597	13,905
Financial income	25	475	1,344
Financial expenses	25	(1,305)	(227)
Income before income taxes		11,767	15,022
Income taxes	16	(5,073)	(821)
Net income		6,694	14,201
Net income attributable to:			
Owners of the parent		6,694	14,201
Earnings per share:	27		Yen
Basic		38.35	81.07
Diluted		35.38	73.95

Consolidated Statements of Comprehensive Income

Millions of Yen

	Note	Fiscal year ended March 31, 2016	Fiscal year ended March 31, 2017
Net income		6,694	14,201
Other comprehensive income			
Items that will not be reclassified to profit or loss			
Remeasurements of defined benefit pension plans	20, 26	(4,869)	2,918
Items that may be subsequently reclassified to profit or loss			
Exchange differences on translation of foreign operations	26	(6,002)	(1,381)
Net change in fair values of available-for-sale financial assets	26	(555)	406
Total other comprehensive income		(11,426)	1,943
Total comprehensive income for the year		(4,732)	16,144
Comprehensive income attributable to:			
Owners of the parent		(4,732)	16,144

(3) Consolidated Statements of Changes in Equity

Millions of Yen

	Note	Equity attributable to owners of the parent						
		Share capital	Share premium	Treasury shares	Retained earnings	Other components of equity	Total	Total Equity
Balance at April 1, 2015		32,363	44,487	(94,686)	106,916	12,730	101,810	101,810
Net income					6,694		6,694	6,694
Other comprehensive income						(11,426)	(11,426)	(11,426)
Total comprehensive income for the year		—	—	—	6,694	(11,426)	(4,732)	(4,732)
Purchase of treasury shares	21			(1)			(1)	(1)
Disposal of treasury shares	21		(9)	102	(60)		33	33
Dividends	22				(3,491)		(3,491)	(3,491)
Transfer from other components of equity to retained earnings	21				(4,869)	4,869	—	—
Total transactions with the owners		—	(9)	101	(8,420)	4,869	(3,459)	(3,459)
Balance at March 31, 2016		32,363	44,478	(94,585)	105,190	6,173	93,619	93,619
Net income					14,201		14,201	14,201
Other comprehensive income						1,943	1,943	1,943
Total comprehensive income for the year		—	—	—	14,201	1,943	16,144	16,144
Purchase of treasury shares	21			(2)			(2)	(2)
Disposal of treasury shares	21		(868)	8,548	(4,611)		3,069	3,069
Dividends	22				(4,022)		(4,022)	(4,022)
Share-based payments	24		682				682	682
Other			27				27	27
Transfer from other components of equity to retained earnings	21				2,918	(2,918)	—	—
Total transactions with the owners		—	(159)	8,546	(5,715)	(2,918)	(246)	(246)
Balance at March 31, 2017		32,363	44,319	(86,039)	113,676	5,198	109,517	109,517

(4) Consolidated Statements of Cash Flows

Millions of Yen

	Note	Fiscal year ended March 31, 2016	Fiscal year ended March 31, 2017
Cash flows from operating activities:			
Income before income taxes		11,767	15,022
Adjustments to reconcile income before income taxes to net cash provided by (used in) operating activities:			
Depreciation and amortization		4,965	5,158
Shared-based payment expense		—	682
Gain on sales of available-for-sale financial assets		(174)	(250)
Changes in assets and liabilities:			
Trade and other receivables		(2,726)	(4,618)
Inventories		3,621	(5,268)
Trade and other payable		(6,784)	6,403
Warranty provisions		189	(67)
Retirement benefit liabilities		864	1,491
Other		(152)	(36)
Subtotal		11,570	18,517
Interest and dividends received		303	267
Interest paid		(117)	(95)
Income taxes paid		(4,028)	(2,856)
Net cash provided by (used in) operating activities		7,728	15,833
Cash flows from investing activities:			
Proceeds from sale of available-for-sale financial assets		503	653
Proceeds from sale of property, plant and equipment		509	190
Purchases of property, plant and equipment		(3,116)	(4,018)
Purchases of intangible assets		(449)	(391)
Other		158	45
Net cash provided by (used in) investing activities		(2,395)	(3,521)
Cash flows from financing activities:			
Proceeds from disposal of treasury shares		33	3,063
Redemption of bonds	18	(10,000)	—
Dividends paid	22	(3,488)	(4,016)
Other		(76)	(49)
Net cash provided by (used in) financing activities		(13,531)	(1,002)
Net effect of exchange rate changes on cash and cash equivalents		(3,946)	(1,416)
Net change in cash and cash equivalents		(12,144)	9,894
Cash and cash equivalents at beginning of year		97,574	85,430
Cash and cash equivalents at end of year	7	85,430	95,324

Notes to the Consolidated Financial Statements

1. Reporting Entity

Advantest Corporation (the “Company”) is a public company located in Japan.

The Company’s consolidated financial statements consist of the Company and its subsidiaries (collectively, “Advantest”).

Advantest manufactures and sells semiconductor and component test system products and mechatronics-related products such as test handlers and device interfaces. Advantest also engages in research and development activities and provides maintenance and support services associated with these products.

2. Basis of Preparation

(1) Compliance with IFRS

Advantest prepares consolidated financial statements in accordance with the International Financial Reporting Standards (“IFRS”) issued by the International Accounting Standard Board. As Advantest meets the requirements of a “Specified Companies applying Designated IFRS” pursuant to Article 1-2 of the “Ordinance on Terminology, Forms, and Preparation Methods of Consolidated Financial Statements”, Advantest adopts Article 93 of the same ordinance.

The consolidated financial statements were approved on June 28, 2017 by Representative Director, Yoshiaki Yoshida, and Chief Financial Officer, Atsushi Fujita, of the Company.

(2) Basis of Measurement

The consolidated financial statements have been prepared on the historical cost basis except for certain financial assets and liabilities measured at their fair values, as included in Significant Accounting Policies (see note 3 for additional details).

(3) Functional Currency and Presentation Currency

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

3. Significant Accounting Policies

(1) Basis of Consolidation

Advantest’s consolidated financial statements include financial statements of the Company and its subsidiaries, all of which are wholly owned. Subsidiaries are entities controlled by the Company. Control is obtained when the Company has risks or rights to variable returns from its involvement with the entity and has the ability to use its power over the entity to affect the variable returns.

The Company consolidates all subsidiaries from the date on which the Company acquires control until the date on which the Company loses control.

Inter-company balances and transactions are eliminated in consolidation.

Subsidiaries’ financial statements are adjusted, if necessary, when their accounting policies differ from those of the Company. For subsidiaries with different reporting dates from that of the Company, the financial statements based on provisional settlement of accounts made as of the reporting date are used in the preparation of the consolidated financial statements. The reporting date of the subsidiaries is not more than 3 months earlier than that of the Company.

(2) Business combinations

Business combinations are accounted for using the acquisition method. Goodwill is measured as the excess of the total amount of the consideration transferred, the amount of any non-controlling interests in the acquiree and, if a business combination is achieved in stages, the amount of the fair value at the date of acquisition of acquirer’s previously held equity interest in the acquiree over the net amounts recognized of the identifiable acquired assets and assumed liabilities (which is usually measured at fair value). If the initial accounting for a business combination is incomplete by the end of the reporting period in which the business combination occurs, the Company reports provisional amounts for the items for which the accounting is incomplete. During the measurement period, which does not exceed one year from the acquisition date, the Company retrospectively adjusts the provisional amounts recognized at the acquisition date. Acquisition-related costs are recognized as expenses in the period in which they are incurred.

(3) Foreign Currency Translation

1) Translation of Foreign Currency Transactions

Monetary assets and liabilities denominated in foreign currencies are converted into the functional currency of each company using the exchange rate at the end of the reporting period. Foreign currency transactions are converted into the functional currency using the exchange rate prevailing at the transaction date. Foreign exchange gains and losses resulting from the currency conversion and settlement are recognized as financial income (expenses).

2) Translation of Foreign Operations

Assets and liabilities of foreign operations are translated into Japanese Yen using the exchange rate at the end of the reporting period, and revenue and expense items are translated using the average exchange rates during the period. Gains or losses derived from translating foreign operations' financial statements are recognized in other comprehensive income, and presented in other components of equity.

(4) Financial Instruments

1) Non-derivative Financial Assets

Advantest classifies non-derivative financial assets into the following categories: loans and receivables and available-for-sale financial assets.

Advantest initially recognizes loans and receivables on the date that they originate. All other financial assets are recognized initially on the trade date, the date on which Advantest becomes party to the contractual provisions.

Advantest derecognizes a financial asset when contractual rights to the cash flows from the asset expire. In transferring contractual rights to the cash flows from a financial asset, Advantest will derecognize the financial asset if Advantest neither transfers nor retains substantially all the risks and rewards of ownership of the financial asset and does not retain control of the financial asset.

Financial assets and liabilities are offset and presented net in the consolidated statements of financial position only when Advantest has a legally enforceable right to offset the recognized amounts and intends to settle on a net basis or to realize the asset and settle the liability simultaneously.

Financial Assets Measured at Fair Value through Profit or Loss

Financial assets measured at fair value through profit or loss are financial assets designated as held for trading purposes or measured at fair value through profit or loss.

These assets are measured at fair value, and the changes in fair value are recognized as profit or loss. Advantest does not hold such assets.

Loans and Receivables

Loans and receivables are financial assets with fixed or determinable payments that are not quoted in an active market; this category includes trade and other receivables.

Such assets are initially measured at fair value, plus any directly attributable transaction costs and subsequently at amortized cost using the effective interest method, less any impairment losses. The amortization charge for each period is recognized as financial income in profit or loss.

Available-for-sale Financial Assets

Available-for-sale financial assets are those financial assets initially designated as available for sale or are not classified in one of the other categories of non-derivative financial assets above.

These assets are initially measured at fair value plus any directly attributable transaction costs and subsequently measured at fair value. Changes in fair value are recognized in other comprehensive income and presented in other components of equity.

Upon derecognition of the assets, the gains and losses accumulated in other comprehensive income are reclassified to profit or loss.

2) Non-derivative Financial Liabilities

Advantest recognizes debt securities on the day that they are issued. All other financial liabilities are initially recognized on the trade date, the date on which Advantest becomes party to contractual provisions. Other financial liabilities include loans and borrowings and trade and other payables.

Advantest derecognizes a financial liability when its contractual obligations are discharged, cancelled, or expire.

These financial liabilities are measured initially at fair value, less any directly attributable transaction costs and subsequently measured at amortized cost using the effective interest method. The amortization charge for each period is recognized as financial expenses in profit or loss.

3) Equity

Share capital

Share capital is included in equity. The direct issuance costs of share capital are deducted, net of tax, from share premium.

Treasury shares

Treasury shares are recognized at cost and deducted from equity. No gain or loss is recognized at purchase, sale and retirement of treasury shares.

4) Compound Financial Instruments

The compound financial instruments issued by Advantest include corporate bonds with subscription rights to new shares that can be converted to equity at the option of the holder and for which the number of new shares to be issued is not affected by changes in fair value. The liability element of a compound financial instrument is initially recognized at the fair value of a similar liability that does not have an equity conversion option. The equity element of a compound financial instrument is initially recognized at the difference between the fair value of the compound financial instrument as a whole and the fair value of the liability element. Any directly attributable transaction costs are allocated to each element in proportion to the initial carrying amounts. After initial recognition, the liability element of a compound financial instrument is measured at amortized cost using the effective interest method. The equity element of a compound financial instrument is not remeasured after initial recognition.

5) Derivative Financial Instruments

Advantest uses derivative instruments primarily to manage exposures to foreign currency. The primary objective in holding derivatives is to reduce the volatility of earnings and cash flows associated with changes in foreign currency. The instruments are not designated for trading or speculative purposes. Derivative financial instruments contain an element of risk in the event the counterparties are unable to meet the terms of the agreements. However, Advantest minimizes risk exposure by limiting the counterparties to major international banks and financial institutions meeting established credit guidelines. Management of the Company does not expect any counterparty to default on its obligations and, therefore, does not expect to incur any losses due to counterparty default on its obligations. Advantest generally does not require or provide collateral for these derivative financial instruments.

Derivative financial instruments are initially recognized at fair value, and remeasured after initial recognition to their fair value. If the derivative instrument is not designated as a hedge, the gain or loss is recognized in earnings in the period of change.

The accounting for changes in the fair value (that are, gains or losses) of a derivative instrument depends on the objective for holding such instrument and whether it meets the criteria for designation as a cash flow hedge or a fair value hedge.

If certain conditions are met, Advantest may elect to designate a derivative instrument as a hedge of exposures to changes in fair values, cash flows, or a net investment in a foreign operation.

(5) Impairment

1) Non-derivative Financial Assets

Financial assets not classified as at fair value through profit or loss are assessed for objective evidence of impairment at the reporting date and the amount of impairment loss is determined if any such evidence exists.

Objective evidence that financial assets are impaired includes significant financial difficulty of a debtor, restructuring of an amount due to Advantest on terms which Advantest would not consider otherwise, adverse changes in the payment status of borrowers or issuers such as bankruptcy, and other adverse changes in the economic climate impacting default of payment such as the disappearance of an active market for a security. In addition, equity investments are considered to be impaired if there is a significant or prolonged decline in its fair value in comparison with the original acquisition value.

Financial Assets Measured at Amortized Cost

Advantest assesses whether objective evidence of impairment exists individually for financial assets considered to be individually significant, or collectively if not considered to be individually significant.

If there is objective evidence that a financial asset has been impaired, the amount of the impairment loss is measured as the difference between the assets carrying amount and the present value of estimated future cash flows discounted at the assets original effective interest rate. The carrying amount is reduced either directly or through the use of an allowance account, and the impairment loss is recognized in profit or loss. If, in a subsequent period, the amount of the impairment loss decreases and the decrease can be related to an event occurring after the impairment was recognized, the previously recognized impairment loss is reversed in profit or loss.

Available-for-sale Financial Assets

Impairment losses on available-for-sale financial assets are recognized by reclassifying the cumulative losses previously recognized in net change in fair values of available-for-sale financial assets, a component of equity, to the profit or loss. The amount of cumulative losses reclassified from other comprehensive income to profit or loss is equal to the difference between the acquisition costs and its present fair value less the impairment losses previously recognized in profit or loss. The reversal of impairment losses of equity instruments is recognized in other comprehensive income.

2) Non-financial Assets

If there is any indication of impairment for non-financial assets other than inventories and deferred tax assets, the asset’s recoverable amount is estimated and the asset is tested for impairment. Goodwill is tested for impairment both annually and when there is any indication of impairment. An impairment loss is recognized if the recoverable amount of an asset, cash-generating unit (CGU) or CGU group is less than its carrying amount.

The recoverable amount of an asset, CGU or CGU group is the greater of its value in use and its fair value less costs to sell. In assessing value in use, the estimated future cash flows associated with the asset, CGU or CGU group are discounted to present value using a pre-tax discount rate which reflects current market assessments of the time value of money and any risks specific to the asset, CGU or CGU group. For impairment testing purposes, assets are grouped together into the smallest assets, CGU or CGU group that generates cash inflows independently of cash inflows of other assets, CGU or CGU group. Goodwill is grouped together so that the impairment is tested for the smallest group of units used for internal reporting purposes. Goodwill acquired in a business combination is allocated to CGU or CGU group that is expected to benefit from the synergies of the business combination.

Impairment losses are recognized in profit or loss. Impairment losses recognized in respect of CGU are allocated first to reduce the carrying amount of any goodwill allocated to that CGU or CGU group and then to reduce the carrying amounts of other assets in CGU or CGU group on a pro-rata basis.

Impairment losses on goodwill are not reversed. For all other assets, impairment losses are only reversed to the extent that the assets carrying amount does not exceed the carrying amount that would have been determined, net of depreciation or amortization, if no impairment loss had been recognized.

(6) Cash and Cash Equivalents

Cash and cash equivalents includes cash on hand, deposits at call with banks, and other short term highly liquid investments with maturities of three months or less from the date of acquisition that are readily convertible to known amounts of cash and which are subject to insignificant risk of changes in value.

(7) Inventories

The cost of inventories includes purchase costs, processing costs and all other costs incurred to bring inventories to their present location and condition.

Inventories are measured at the lower of cost or net realizable value. If net realizable value is less than the cost, that difference is accounted for as a write off and recognized as an expense. The weighted average method is used to calculate cost. Net realizable value represents the estimated selling price in the ordinary course of business, less all estimated costs of completion and estimated costs necessary to make the sale.

(8) Property, Plant and Equipment (Except Lease Asset)

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

The cost includes any costs directly attributable to the acquisition of the asset and dismantlement, removal and restoration costs.

Except for assets that are not subject to depreciation such as land, assets are depreciated using the straight-line method over their estimated useful lives. The estimated useful lives of major asset items are as follows:

・Buildings：15 to 50 years
・Machinery and equipment：4 to 10 years
・Tool, furniture and fixture：2 to 5 years

The estimated useful lives, depreciation method and residual value are reviewed at each fiscal year end and if there are any changes made to the estimated useful lives, depreciation method and residual value, such changes are accounted for on a prospective basis as changes in estimate.

(9) Goodwill and Intangible Asset

1) Goodwill

Details on the measurement of goodwill at initial recognition are included in Business Combinations (see note (2) for additional details).

Goodwill is not amortized. It is allocated to CGU or group of CGUs that are identified according to types of business and regions and tested for impairment each fiscal year or when there is any indication of impairment. Impairment losses on goodwill are recognized in profit or loss, and no subsequent reversal is made.

After initial recognition, goodwill is presented at cost less accumulated impairment losses.

2) Intangible Assets (Except Lease Asset)

Intangible assets acquired separately are measured at cost at the initial recognition, and the cost of intangible assets acquired through business combinations are recognized at fair value at the acquisition date.

Expenses on internally generated intangible assets are recognized as expense in the period when incurred, except for those that satisfy the criteria for recognition as assets. Internally generated intangible assets that satisfy the criteria for recognition as assets are stated at cost in the total amount of spending that is incurred after the assets first met recognition standards.

Intangible assets are subsequently measured at cost less accumulated amortization and accumulated impairment losses.

Intangible assets for which useful lives can be determined are amortized on a straight-line method over their estimated useful lives from the date the assets are available for use. These assets are also tested for impairment whenever there is any indication of impairment.

Estimated useful lives, residual values and amortization methods are reviewed at each fiscal year end and the effect of any changes in estimate are accounted for during the period in which the change occurred and on a prospective basis. The effect of any changes in estimate is recognized in the period in which the change occurs.

The estimated useful lives of major assets are as follows:

・Software：3 to 5 years

・Customer relationships：7 years

(10) Leases

The contract which should be subject to lease or including lease is defined based on the actual condition of the agreement at inception of lease. In the contract, the lease all risks and economic value accompany with possession of asset materially transfer to lessee is categorized as finance lease. The other leases are categorized as operating lease.

1) Leases-Lessor

Revenue from operating lease is recognized on the straight line basis over the leasing period.

2) Leases-Lessee

The lease payment amount on operating lease is recorded on a straight-line method over the leasing period.

(11) Post-Employment Benefits

The Company and certain of its subsidiaries have retirement and severance defined benefit plans covering substantially all of their employees. For each defined benefit plan, the present value of defined benefit obligations, related current service cost and past service cost are calculated using the projected unit credit method. The discount rates are the yields of high quality corporate bonds that have maturity terms approximating those of the obligations which the benefits are expected to be paid. Net defined benefit liability (asset) is measured at the present value of the defined benefit obligation less the fair value of plan assets. Remeasurements of net of liabilities or assets for defined benefit plans are recognized in full as other comprehensive income in the period when they are incurred and reclassified to retained earnings immediately. Past service costs are recognized immediately in profit or loss.

(12) Provisions

Provisions are recognized when Advantest has present legal or constructive obligations as a result of past events, it is probable that outflows of resources embodying economic benefits will be required to settle the obligations, and reliable estimates of the obligations can be made.

When the effect of the time value of money is material, provisions are measured at the present value of the expenditures expected to be required to settle the obligations.

1) Warranty Provisions

Advantest’s products are generally subject to warranty, and Advantest provides an allowance for such estimated costs when product revenue is recognized. To provide for future repairs during warranty periods, estimated repair expenses over the warranty period are accrued based on the historical ratio of actual repair expenses to corresponding sales, and any facts and circumstances that occurred.

2) Asset Retirement Obligation

Estimated amounts for the costs of removing hazardous substances related to property, plant and equipment and restoring rented offices to the original condition are recorded in the provision for asset retirement obligation costs.

(13) Share-Based Compensation

Advantest applies the fair-valued-based method of accounting for share-based compensation and recognizes share-based compensation expense in the consolidated statements of profit or loss. The cost of employee services received in exchange for an award of equity instruments is measured based on the grant-date fair value of the share options granted to employees. The cost is recognized on the straight line basis over the period during which an employee is required to provide service in exchange for the award. The Black Scholes pricing model is used to estimate the value of share options.

Expected dividend yield is determined by the Company’s dividend ratio of the past and other associated factors. Risk free interest rate is determined by Japanese government bond yield for the period corresponding to expected life. Expected volatility is determined by historical volatility and trend of the Company’s share prices, and other associated factors. Expected life is determined by the Company’s option exercise history, post vesting employment termination behavior for similar grants, and other pertinent factors.

(14) Revenue Recognition

1) Sales of Products

Sales of products which require installation are recognized when the related installation is completed and other sales recognition criteria are met since the installation is essential to the functionality of the equipment. When customer acceptance is uncertain, revenue is deferred until customer acceptance has been received.

Sales of products and component which do not require installation service by Advantest is recognized upon shipment if the terms of the sale are free on board (“FOB”) shipping point or upon delivery if the terms are FOB destination which coincide with the passage of title and risk of loss.

2) Rendering of Services

Revenue from long-term service contracts is recognized on the straight-line basis over the contract term.

3) Multiple Deliverables

Advantest’s revenue recognition policies provide that, when a sales arrangement contains multiple elements such as hardware and software products and services, Advantest allocates revenue to each element based on a selling price hierarchy and recognizes revenue when the criteria for revenue recognition have been met for each element.

(15) Financial Income and Expenses

Financial income mainly consists of dividend income, interest income, gains on sales of available-for-sale financial assets and foreign exchange gains. Dividend income is recognized on the date when the right of Advantest to receive the dividend is established. Interest income is recognized using the effective interest method as incurred.

Financial expenses mainly consist of interest expenses and foreign exchange losses. Interest expenses are recognized using the effective interest method as incurred.

(16) Income Taxes

Current and deferred taxes are stated as income taxes in the consolidated statements of profit or loss except when they relate to business combinations or on items recognized in other comprehensive income or directly in equity.

Current and deferred taxes related to items recognized in other comprehensive income are recognized as other comprehensive income.

1) Current Taxes

Current income taxes are measured at the amount that is expected to be paid to or refunded from the tax authorities. For the calculation of the tax amount, Advantest uses the tax rates and tax laws that have been enacted or substantively enacted by the end of the fiscal year.

2) Deferred Taxes

Deferred income taxes are calculated based on the temporary differences between the amounts used for tax purpose and the carrying amount for assets and liabilities at the fiscal year end. 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 profit will be available against which they can be utilized. Deferred tax liabilities are recognized for taxable temporary differences.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply to the fiscal year when the asset is realized or the liability is settled, based on the tax laws that have been enacted or substantively enacted by the fiscal year end.

Deferred tax assets and deferred tax liabilities are not recognized for the following temporary differences:

• taxable temporary differences on initially recognized goodwill
• temporary differences arising from the initial recognition of assets or liabilities in transactions that are not business combinations and at the time of transaction affect neither accounting profit nor taxable profit or tax loss
• taxable temporary differences on investments in subsidiaries to the extent that the timing of the reversal of the temporary difference is controlled and that it is probable the temporary difference will not reverse in the foreseeable future
• deductible temporary differences on investments in subsidiaries to the extent that it is not probable the temporary differences will reverse in the foreseeable future

Deferred tax assets and liabilities are offset when there is a legally enforceable right to set off current tax assets against current tax liabilities and when they relate to income taxes levied by the same tax authority on the same taxable entity (including consolidated tax payments).

(17) Earnings per Share

Basic earnings per share is calculated by dividing net income or loss attributable to owners of the parent by the weighted average number of shares outstanding during the year. Diluted earnings per share reflects the maximum possible dilution from conversion, exercise, or contingent issuance of securities. All potentially dilutive securities are excluded from the calculation in a situation where there is a net loss attributable to owners of the parent.

4. Significant Accounting Judgments, Estimates and Assumptions

The preparation of the consolidated financial statements requires Advantest to make judgments, accounting estimates and assumptions that affect the application of policies and reported amounts of assets, liabilities, income and expenses. These estimates and assumptions are based on the best judgment of management in light of historical experience and various factors deemed to be reasonable according to the situation. However, given their nature, actual results may differ from those estimates and assumptions.

The estimates and underlying assumptions are continuously reviewed. The effects of a change in these estimates and assumptions are recognized in the period of the change and subsequent periods.

The estimates and assumptions that could have a material effect on the amounts recognized in its consolidated financial statements are as follows:

(1) Inventories

Inventories are measured at the lower of cost or net realizable value. If net realizable value is less than the cost, that difference is accounted for as a write off and recognized as an expense. Advantest may experience substantial losses in cases where the net realizable value drops dramatically as a result of deterioration in the market environment against the forecast.

(2) Impairment of Property, Plant and Equipment, Goodwill and Intangible Assets

Advantest performs an impairment test for property, plant and equipment, goodwill and intangible assets when there is any indication that the recoverable amount is less than the carrying amount of the assets.

The impairment test is performed by comparing the carrying amount and the recoverable amount of assets. If the recoverable amount is less than the carrying amount, impairment loss is recognized. The recoverable amount is mainly calculated based on the discounted cash flow model. Certain assumptions are made for the useful lives and the future cash flows of the assets, discount rate and long-term growth rate. These assumptions are based on the best estimates and judgments of management, but they could be affected by variable and uncertain future economic conditions. Any changes in these assumptions may have a material impact on the consolidated financial statements in future periods.

The method of calculating the recoverable amount of goodwill is included in Goodwill and Intangible Assets (see note 13 for additional details).

(3) Post-Employment Benefits

The Company and certain of its subsidiaries have retirement and severance defined benefit plans covering substantially all of their employees. The present value of defined benefit obligations on each of these plans and the service costs are calculated based on actuarial assumptions. These actuarial assumptions require estimates and judgments on variables, such as discount rates.

The actuarial assumptions are determined based on the best estimates and judgments made by management. However, there is the possibility that these assumptions may be affected by changes in uncertain future economic conditions, which may have a material impact on the consolidated financial statements in future periods.

These actuarial assumptions and related sensitivity analysis are included in Post- Employment Benefits (see note 20 for additional details).

(4) Provisions

Advantest recognizes warranty provisions in the consolidated statements of financial position.

The provision is recognized based on the best estimates of the expenditures required to settle the obligations, taking into account risks and uncertainty related to the obligations as of the fiscal year end date.

Expenditures necessary for settling the obligations are calculated by taking all possible future results into account; however, they may be affected by unexpected events or changes in conditions which may have a material impact on the consolidated financial statements in future periods.

The nature and amount of recognized provisions are included in Provisions (see note 19 for additional details).

(5) Income Taxes

Advantest, which conducts business around the world, makes reasonable estimates of income tax to be paid to local tax authorities in accordance with local laws and regulations, and recognizes income tax payable and current tax expense based on these estimates.

Calculating income tax payable and current tax expense requires estimates and judgments on various factors, including, for example, the interpretation of tax regulations by taxable entities and the tax authority in the jurisdiction or experience of prior tax investigation.

Therefore, there may be differences between the amount recognized as income tax payable and current tax expense and the amount of actual income tax payable and current tax expense. These differences may have a material impact on the consolidated financial statements in future periods.

In addition, 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 the deferred tax assets, Advantest judges the possibility of future taxable income and reasonably estimate the timing and amount of future taxable income based on the business plan.

The timing and amount of taxable income may be affected by variable and uncertain future economic conditions, and changes may have a material impact on the consolidated financial statements in future periods.

The contents and amounts related to income taxes are included in the Income Taxes (see note 16 for additional details).

(6) Contingencies

With regard to contingencies, any items that may have a material impact on business in the future are disclosed in light of all the available evidence as of the fiscal year ended and by taking into account the probability of these contingencies and their impact on financial reporting.

5. New Accounting Standards and Interpretations Issued but not yet Applied

New or revised accounting standards and interpretations that were issued by the date of approval of the consolidated financial statements but have not yet been applied by Advantest as of March 31, 2017, are principally as follows:

Advantest is currently assessing the impacts of adopting these, and it is not possible to make estimates at this time.

Standards and Interpretations	Title	Date of mandatory application (fiscal year beginning on or after)	Reporting periods of application (end date of the reporting period)	Overview of new/revised Standards and Interpretations
IFRS 9	Financial Instruments	January 1, 2018	March 31, 2019	Revision of classification, measurement and recognition of financial instruments, and revision of hedge accounting
IFRS 15	Revenue from Contracts with Customers	January 1, 2018	March 31, 2019	New standard of revenue recognition that replaces IAS 18, IAS 11 and relevant interpretations.
IFRS 16	Leases	January 1, 2019	March 31, 2020	Amendments to accounting treatment for lease arrangements

6. Segment Information

(1) Overview of Reporting Segments

Advantest manufactures and sells semiconductor and component test system products and mechatronics-related products such as test handlers and device interfaces. Advantest also engages in research and development activities and provides maintenance and support services associated with these products. Advantest’s organizational structure consists of three reportable operating segments, which are the design, manufacturing, and sale of semiconductor and component test systems, mechatronics systems and services, support and others. These reportable operating segments are determined based on the nature of the products and the markets. Segment information is prepared on the same basis that management reviews financial information for operational decision making purposes.

The semiconductor and component test system segment provides customers with test system products for the semiconductor industry and the electronic parts industry. Product lines provided in the semiconductor and component test system segment include test systems for SoC semiconductors for non memory semiconductor devices and test systems for memory semiconductors for memory semiconductor devices.

The mechatronics system segment provides product lines such as test handlers, mechatronic-applied products, for handling semiconductor devices, device interfaces that serve as interfaces with the devices that are measured and operations related to nano-technology products.

The services, support and others segment consists of comprehensive customer solutions provided in connection with the above segments, support services, equipment lease business and others.

(2) Information of Reporting Segments

Accounting treatment applied to operating segments is the same as in the note “3. Significant Accounting Policies.”

Advantest uses the operating income (loss) before share option compensation expense for management's analysis of operating segment results.

Segment income (loss) is presented on the basis of operating income (loss) before share option compensation expense.

Inter-segment sales are based on market prices.

Fiscal year ended March 31, 2016 Millions of Yen

	Semiconductor and Component Test System Business	Mechatronics System Business	Services, Support and Others	Elimination and Corporate	Consolidated
Net sales					
Net sales to unaffiliated customers	100,706	31,482	29,923	—	162,111
Inter-segment sales	56	—	—	(56)	—
Total	100,762	31,482	29,923	(56)	162,111
Segment income (loss) (operating income (loss) before share option compensation expense)	10,514	2,599	4,944	(5,460)	12,597
Adjustment: Share option compensation expense	—	—	—	—	—
Operating income	—	—	—	—	12,597
Financial income	—	—	—	—	475
Financial expenses	—	—	—	—	(1,305)
Income before income taxes	—	—	—	—	11,767
（Other profit and loss items）					
Depreciation and amortization	2,027	710	1,960	268	4,965

Fiscal year ended March 31, 2017 Millions of Yen

	Semiconductor and Component Test System Business	Mechatronics System Business	Services, Support and Others	Elimination and Corporate	Consolidated
Net sales					
Net sales to unaffiliated customers	101,262	25,158	29,496	—	155,916
Inter-segment sales	4	34	—	(38)	—
Total	101,266	25,192	29,496	(38)	155,916
Segment income (loss) (operating income (loss) before share option compensation expense)	16,652	(1,529)	4,817	(5,353)	14,587
Adjustment: Share option compensation expense	—	—	—	—	(682)
Operating income	—	—	—	—	13,905
Financial income	—	—	—	—	1,344
Financial expenses	—	—	—	—	(227)
Income before income taxes	—	—	—	—	15,022
（Other profit and loss items）					
Depreciation and amortization	2,517	908	1,402	331	5,158

Adjustments to segment income in Corporate principally represent corporate general and administrative expenses and research and development expenses related to fundamental research activities that are not allocated to operating segments.

(3) Net Sales to Unaffiliated Customers by Segments of Products and Services

The segments of products and services are the same as the segments in the report.

(4) Net Sales to Unaffiliated Customers by Region

Millions of Yen

	Fiscal year ended March 31, 2016	Fiscal year ended March 31, 2017
Japan	12,979	18,443
Americas	29,551	14,840
Europe	6,181	8,510
Asia	113,400	114,123
Total	162,111	155,916

Net sales to unaffiliated customers are based on customer's location. Net sales indicated as Asia were mainly generated in Taiwan, Korea and China in the amount of ¥46,395 million, ¥28,013 million and ¥22,626 million for fiscal year ended March 31, 2016 and ¥46,592 million, ¥30,214 million and ¥15,792 million for fiscal year ended March 31, 2017, respectively. Substantially all net sales indicated as Americas were generated in the United States of America.

(5) Non-Current Assets（Property, Plant and Equipment, Goodwill and Intangible assets, Other Non-Current Assets）by Region

Millions of Yen

	As of March, 2016	As of March, 2017
Japan	34,220	32,316
Americas	3,224	3,415
Europe	2,302	2,322
Asia	8,729	8,504
Total	48,475	46,557

Non-current assets are those assets located in each geographic area.

Substantially all non-current assets indicated as Americas were located in the United States of America. Substantially all non-current assets indicated as Europe were located in Germany. Non-current assets in Asia were primarily located in Korea, Taiwan, China and Singapore.

(6) Information of Main Customers

Net sales to one customer mainly in the semiconductor and component test system segment and the mechatronics system segment was ¥18,160 million and ¥20,771 million for fiscal years ended March 31, 2016 and 2017, respectively. Net sales to another customer mainly in the semiconductor and component test system segment and the mechatronics system segment was ¥19,526 million and ¥9,170 million for fiscal years ended March 31, 2016 and 2017, respectively.

7. Cash and Cash Equivalents

The breakdown of cash and cash equivalents was as follows:

Millions of Yen

	As of March 31, 2016	As of March 31, 2017
Cash and short-term deposits with maturities of three months or less	85,430	95,324

Cash and cash equivalents are classified as financial assets measured at amortized cost. The balances of cash and cash equivalents on the consolidated statements of financial position agreed with the respective balances in consolidated statements of cash flows.

8. Trade and Other Receivables

The breakdown of trade and other receivables was as follows:

Millions of Yen

	As of March 31, 2016	As of March 31, 2017
Note Receivables	276	1,468
Trade Receivables	26,947	31,312
Other Receivables	1,120	119
Less allowance for doubtful accounts	(338)	(448)
Total	28,005	32,451

Trade and other receivables are presented net of the allowance for doubtful accounts in the consolidated statements of financial position.

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

9. Inventories

The breakdown of inventories was as follows:

Millions of Yen

	As of March 31, 2016	As of March 31, 2017
Finished goods	7,875	8,119
Work in process	13,778	16,033
Raw materials and supplies	12,259	14,941
Total	33,912	39,093

Inventory valuation losses recognized as an expense due to the decline in profitability for the fiscal years ended March 31, 2016 and 2017 were ¥2,185 million and ¥1,498 million, respectively.

10. Other Financial Assets

The breakdown of other financial assets was as follows:

Millions of Yen

	As of March 31, 2016	As of March 31, 2017
Available-for-sale financial assets	1,777	1,815
Others	1,950	1,859
Less allowance for doubtful accounts	(185)	(49)
Total	3,542	3,625
Non-current assets	3,542	3,625
Total	3,542	3,625

11. Assets held for sale

The breakdown of assets held for sale was as follows:

Millions of Yen

	As of March 31, 2016	As of March 31, 2017
Assets held for sale	—	1,295

Advantest decided to sell a business location and classified the land and buildings as assets held for sale. These assets are scheduled to be sold within one year from March 31, 2017.

12. Property, Plant and Equipment, Net

(1) Increase or Decrease Table

Changes in carrying amount of property, plant and equipment were as follows:

Fiscal year ended March 31, 2016 Millions of Yen

	Land	Buildings	Others	Construction in progress	Total
Balance at beginning of year	12,218	13,309	8,550	139	34,216
Acquisition	—	164	3,590	(48)	3,706
Sales and disposals	(269)	(197)	(499)	—	(965)
Depreciation	—	(1,021)	(3,334)	—	(4,355)
Exchange differences	(199)	(579)	(370)	(2)	(1,150)
Others	(1)	—	—	—	(1)
Balance at end of year	11,749	11,676	7,937	89	31,451

Fiscal year ended March 31, 2017 Millions of Yen

	Land	Buildings	Others	Construction in progress	Total
Balance at beginning of year	11,749	11,676	7,937	89	31,451
Acquisition	—	214	4,169	26	4,409
Sales and disposals	(14)	(8)	(149)	—	(171)
Reclassification to assets held for sale	(816)	(479)	—	—	(1,295)
Depreciation	—	(1,004)	(3,586)	—	(4,590)
Exchange differences	15	40	59	(2)	112
Others	(1)	—	—	—	(1)
Balance at end of year	10,933	10,439	8,430	113	29,915

Gross carrying amount, accumulated depreciation and impairment losses and carrying amount of property, plant and equipment were as follows:

Millions of Yen

	Land	Buildings	Others	Construction in progress	Total
As of March 31, 2016					
Gross carrying amount	12,858	35,499	47,318	89	95,764
Accumulated depreciation and impairment losses	1,109	23,823	39,381	—	64,313
Carrying amount	11,749	11,676	7,937	89	31,451
As of March 31, 2017					
Gross carrying amount	12,030	34,472	47,926	113	94,541
Accumulated depreciation and impairment losses	1,097	24,033	39,496	—	64,626
Carrying amount	10,933	10,439	8,430	113	29,915

Depreciation expense is included in cost of sales and selling, general and administrative expenses in the consolidated statements of profit or loss.

(2) Impairment Losses

No impairment indicators were recognized and, accordingly, no impairment losses were recorded on non-marketable equity securities for the year ended March 31, 2016 and 2017, respectively.

(3) Commitments Related to Acquisition of Fixed Assets

Commitments related to acquisition of fixed assets were as follows:

Millions of Yen

	As of March 31, 2016	As of March 31, 2017
Acquisition of Fixed Assets	575	108

13. Goodwill and Intangible Assets

(1) Increase or Decrease Table

Changes in carrying amount of goodwill and intangible assets were as follows:

Fiscal year ended March 31, 2016 — Millions of Yen

	Goodwill	Software	Customer relationships	Others	Total
Balance at beginning of year	15,988	929	614	644	18,175
Acquisition	—	266	—	4	270
Sales and disposals	—	—	—	(15)	(15)
Amortization	—	(349)	(206)	(55)	(610)
Exchange differences	(997)	(47)	(24)	(26)	(1,094)
Balance at end of year	14,991	799	384	552	16,726

Fiscal year ended March 31, 2017 — Millions of Yen

	Goodwill	Software	Customer relationships	Others	Total
Balance at beginning of year	14,991	799	384	552	16,726
Acquisition	—	287	—	100	387
Sales and disposals	—	—	—	—	—
Amortization	—	(340)	(191)	(37)	(568)
Exchange differences	(65)	(1)	(2)	2	(66)
Balance at end of year	14,926	745	191	617	16,479

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

Millions of Yen

	Goodwill	Software	Customer relationships	Others	Total
As of March 31, 2016					
Gross carrying amount	14,991	1,478	1,296	704	18,469
Accumulated amortization and impairment losses	—	679	912	152	1,743
Carrying amount	14,991	799	384	552	16,726
As of March 31, 2017					
Gross carrying amount	14,926	1,602	1,290	810	18,628
Accumulated amortization and impairment losses	—	857	1,099	193	2,149
Carrying amount	14,926	745	191	617	16,479

Amortization expense is included in cost of sales and selling, general and administrative expenses in the consolidated statements of profit or loss.

(2) Impairment Test for Goodwill

Carrying amount of goodwill allocated to CGU group was as follows:

Millions of Yen

CGU group	As of March 31, 2016	As of March 31, 2017
Semiconductor and component test system business		
-Japan	8,892	8,854
Services, support and others		
-Japan	6,099	6,072

The recoverable amount of CGU group is calculated by its value in use based on the business plan for 3 years approved by management and the growth rate. The business plan reflect the past experience using external and internal data, for the cash flows exceeding the period, its value in use is calculated by the growth rate that does not exceed the expected long-term growth rate of the market CGU group belongs to.

A pre-tax discount rate used for measuring its value in use for fiscal years ended March 31, 2016 and 2017 were 10.6% ~ 10.7% and 9.9%, respectively. Since the recoverable amount of CGU group is well above the carrying amount, the probability that the recoverable amount is less than the carrying amount is expected low even when the primary assumption of the goodwill changes to reasonable extent.

(3) Research and Development Expenses

Research and development expenses included in selling, general and administrative expenses for fiscal years ended March 31, 2016 and 2017 were ¥31,298 million and ¥31,170 million, respectively.

14. Leases

(1) Leases- Lessor

Advantest provides leases that enable its customers to use its semiconductor test systems. All leases are classified as operating leases. Lease terms range from 1 year to 5 years, and certain of the lease agreements are cancelable.

Future minimum lease income under noncancelable operating leases was as follows:

Millions of Yen

	As of March 31, 2016	As of March 31, 2017
Not later than 1 year	335	286
Later than 1 year and not later than 5 years	96	61
Later than 5 years	―	―
Total	431	347

(2) Leases- Lessee

Advantest has several noncancelable operating leases, primarily for office space and office equipment. Rent expense, including rental payments for cancelable leases, for fiscal years ended March 31, 2016 and 2017 was ¥2,203 million and ¥1,977 million, respectively.

Future minimum lease payments under noncancelable operating leases were as follows:

Millions of Yen

	As of March 31, 2016	As of March 31, 2017
Not later than 1 year	1,039	943
Later than 1 year and not later than 5 years	3,136	2,564
Later than 5 years	889	309
Total	5,064	3,816
Less sublease income to be received in the future under noncancelable subleases	124	—
Net minimum lease payments	4,940	3,816

15. Subsidiaries

Major subsidiaries were as follows:

Name	Location	Principal business	Ownership interest Voting rights (%)
Advanfacilities Co., Ltd.	Saitama, Japan	Providing welfare services	100.0
Advantest Laboratories Ltd.	Miyagi, Japan	Research and development of measuring and testing technologies	100.0
Advantest Finance Inc.	Tokyo, Japan	Leasing of the Company’s products and sales of used products	100.0
Advantest Kyushu Systems Co., Ltd.	Fukuoka, Japan	Development, sales and support of the Company’s products	100.0
Advantest Component, Inc.	Miyagi, Japan	Development and manufacturing of the parts	100.0
Cloud Testing Service Inc.	Tokyo, Japan	Planning and sales of testing services by testing IP licensing	100.0
Advantest America, Inc.	California, U.S.A.	Development and sales of the Company’s products	100.0
Advantest Europe GmbH	Munich, Germany	Development and sales of the Company’s products	100.0
Advantest Taiwan Inc.	Hsinchu, Taiwan	Sales of the Company’s products	100.0
Advantest (Singapore) Pte. Ltd.	Singapore	Sales of the Company’s products	100.0
Advantest (M) Sdn. Bhd.	Penang, Malaysia	Manufacturing of the Company’s products	100.0
Advantest Korea Co., Ltd.	Cheonan, Korea	Support for sales of the Company’s products	100.0
Advantest (China) Co., Ltd.	Shanghai, China	Support for sales of the Company’s products	100.0

16. Income Taxes

(1) Deferred Tax Assets and Liabilities

The breakdown of deferred tax assets and liabilities was as follows.

Millions of Yen

	As of March 31, 2016	As of March 31, 2017
Deferred tax assets		
Inventories	2,008	1,890
Warranty provisions	14	168
Retirement benefit liabilities	3,655	3,821
Accrued expenses	559	918
Research and development expenses capitalized for tax purposes	—	1,021
Operating loss carryforwards	1,237	854
Property, plant and equipment	487	501
Tax credits	415	780
Others	263	982
Total deferred tax assets	8,638	10,935
Deferred tax liabilities		
Intangible assets	(142)	(103)
Gains or losses on revaluation of available-for-sale financial assets to fair value	(189)	(240)
Undistributed earnings of foreign subsidiaries	(627)	(730)
Total deferred tax liabilities	(958)	(1,073)
Net deferred tax assets	7,680	9,862

Net deferred tax assets were included in the following line items in the consolidated statements of financial position.

Millions of Yen

	As of March 31, 2016	As of March 31, 2017
Deferred tax assets	8,038	10,282
Deferred tax liabilities	358	420

Changes in net deferred tax assets were as follows:

Millions of Yen

	Fiscal year ended March 31, 2016	Fiscal year ended March 31, 2017
Net deferred tax assets		
Balance at beginning of year	10,791	7,680
Recognized in profit or loss	(2,427)	1,980
Recognized in other comprehensive income	(298)	46
Others	(386)	156
Balance at end of year	7,680	9,862

Advantest recognizes deferred tax assets after taking into consideration taxable temporary differences, the forecasted future taxable profits and tax planning.

Deductible temporary differences, operating loss carryforwards and tax credits that are not recognized as deferred tax assets in the consolidated statements of financial position were as follows:

Millions of Yen

	As of March 31, 2016	As of March 31, 2017
Deductible temporary differences	59,187	59,055
Operating loss carryforwards	122,350	116,619
Tax credits	287	325

The expiration dates of operating loss carryforwards and tax credits that were not recognized as deferred tax assets in the consolidated statements of financial position were as follows:

Millions of Yen

	As of March 31, 2016	As of March 31, 2017
Operating loss carryforwards		
Not later than 1 year	—	34,492
Later than 1 year and not later than 5 years	75,655	55,687
Later than 5 years	46,695	26,440
Total	122,350	116,619
Tax credits		
Not later than 1 year	—	—
Later than 1 year and not later than 5 years	—	—
Later than 5 years	287	325
Total	287	325

The taxable temporary differences related to investments in subsidiaries for which deferred tax liabilities were not recognized as of March 31, 2016 and 2017 were ¥ 14,481 million and ¥ 6,244 million, respectively.

Deferred tax liabilities are not recognized for these differences for which Advantest can control timing of the reversal and that will unlikely reverse in the foreseeable future.

(2) Income Tax Expense

The breakdown of income tax expense was as follows:

Millions of Yen

	Fiscal year ended March 31, 2016	Fiscal year ended March 31, 2017
Income tax expense		
Current income tax expense	2,646	2,801
Deferred income tax expense		
Origination and reversal of temporary differences	1,004	1,356
Changes in unrecognized deferred tax assets	(1,274)	(3,336)
Adjustments to deferred tax assets and liabilities due to changes in tax rate	2,697	—
Total	5,073	821

(3) Reconciliations between Applicable Tax Rate and Effective Tax Rate

Reconciliations between the applicable tax rate and the effective tax rate were as follows:

	Fiscal year ended March 31, 2016	Fiscal year ended March 31, 2017
Applicable tax rate	32.8%	30.7%
Differences in statutory tax rate of foreign subsidiaries	(2.7)	(0.6)
Tax credits	(1.8)	(3.6)
Non-deductible expenses	1.1	1.3
Expiration of share options	(0.2)	(0.2)
Undistributed earnings of foreign subsidiaries	(0.5)	0.7
Changes in unrecognized deferred tax assets	(10.8)	(22.2)
Effect of tax rate changes	22.9	—
Others	2.3	(0.6)
Effective tax rate	43.1%	5.5%

The Company and its domestic subsidiaries are primarily affected by the corporation tax, resident tax, and business tax. As a result of revision of tax act in Japan, the statutory income tax rate calculated based on these rates were 32.8% and 30.7% for the years ended March 31, 2016 and 2017, respectively.

Its foreign subsidiaries are affected by the corporation tax and other taxes at the domicile of each subsidiary.

17. Trade and Other Payables

The breakdown of trade and other payables was as follows:

Millions of Yen

	As of March 31, 2016	As of March 31, 2017
Accounts payables	11,809	17,975
Accrued expenses	8,796	9,323
Other payables	1,496	1,191
Total	22,101	28,489

18. Bonds

(1) Breakdown Table

The breakdown of bonds was as follows:

Millions of Yen

	As of March 31, 2016	As of March 31, 2017
Current portion of bonds	―	15,000
Non-current portion of bonds	44,618	29,745
Total	44,618	44,745

(2) The Conditions of Bond Issuance

The summary of the conditions of bond issuance was as follows:

Millions of Yen

Company	Name	Issue date	As of March 31, 2016	As of March 31, 2017	Interest rate (%)	Mortgage	Redemption date
Advantest	No4 Unsecured Bonds	May 25, 2012	15,000	15,000	0.606	―	May 25, 2017
Advantest	Zero Coupon Convertible Bonds due 2019	March 14, 2014	29,618	29,745	0.000	―	March 14, 2019
Total	―	―	44,618	44,745	―	―	―

19. Provisions

The change in warranty provisions for the years ended March 31, 2017 was summarized as follows:

Millions of Yen

	Warranty Provisions
Balance at beginning of year	1,709
Increase during the year	2,820
Decrease due to intended use	(2,889)
Reversal during the year	—
Exchange differences	3
Balance at end of year	1,643
Current liabilities	1,643
Total	1,643

Advantest's products are generally subject to warranty, and Advantest provides an allowance for such estimated costs when product revenue is recognized.

To provide for future repairs during warranty periods, estimated repair expenses over the warranty period are accrued based on the historical ratio of actual repair expenses to corresponding sales, and any facts and circumstances that occurred.

Most of these expenses are expected to be incurred in the next fiscal year.

20. Post-Employment Benefits

The Company and its domestic subsidiaries have unfunded retirement and severance plans (point-based benefits system). Under a point-based benefits system, the benefits are calculated based on accumulated points allocated to employees each year according to their job classification and their performance. The Company and its domestic subsidiaries also have a defined benefit corporate pension plan covering substantially all employees.

In accordance with the Defined-Benefit Corporate Pension Act of Japan, the Company has an obligation to make contributions to Advantest Pension Fund (the Fund) which manages the corporate pension plans. The directors of the Fund are responsible for faithfully executing operations in compliance with laws and regulations, and any orders issued by the Minister of Health, Labor and Welfare, and the Director-General of Regional Bureaus of Health and Welfare based on laws and regulations, as well as the rules of the Fund and the resolution of the Board of Representatives. And the directors are jointly and severally liable for responsible if they fail to manage and operate the Fund. The actual management of the contributions is conducted by trustees in accordance with rules approved by the Board of Representatives.

The Company is required to make contributions to the Fund and obligated to make contributions in the amount stipulated by the Fund. Contributions are also regularly reviewed and adjusted as necessary to the extent permitted by laws and regulations.

Plan assets are managed on the basis of soundness. However, financial instruments have inherent investment risks. Discount rates and other aspects of defined benefit plan obligations are based on pension actuarial assumptions. There is a risk when these pension actuarial assumptions are changed.

Certain foreign subsidiaries also have defined benefit pension plans covering substantially all of their employees. Benefits payable under the plans are based on employee compensation levels and years of service.

(1) Defined Benefit Obligations and Plan Assets

The changes in present value of defined benefit obligations and fair value of plan assets of the Company and certain of its consolidated subsidiaries were as follows:

Japanese Plans

Millions of Yen

	Fiscal year ended March 31, 2016	Fiscal year ended March 31, 2017
Defined benefit obligations:		
Balance at beginning of year	51,290	58,269
Service cost	1,883	1,993
Interest cost	513	436
Remeasurements:		
Actuarial (gain) or loss – Changes in demographic assumptions	2,813	(730)
Actuarial (gain) or loss – Changes in financial assumptions	2,764	(1,513)
Benefits paid	(994)	(991)
Balance at end of year	58,269	57,464
Plan assets:		
Balance at beginning of year	31,288	31,463
Interest income	313	235
Remeasurements:		
Actual return on plan assets, excluding interest income	(358)	877
Employer contributions	972	834
Benefits paid	(752)	(655)
Balance at end of year	31,463	32,754
Effects of asset ceiling	—	—
Net liability amount recognized in the consolidated statements of financial position	26,806	24,710

Non-Japanese Plans

Millions of Yen

	Fiscal year ended March 31, 2016	Fiscal year ended March 31, 2017
Defined benefit obligations:		
Balance at beginning of year	22,400	21,081
Service cost	589	494
Interest cost	363	385
Remeasurements:		
Actuarial (gain) or loss – Changes in demographic assumptions	723	(46)
Actuarial (gain) or loss – Changes in financial assumptions	(2,591)	341
Benefits paid	(134)	(103)
Exchange differences	(403)	(1,263)
Other	134	153
Balance at end of year	21,081	21,042
Plan assets:		
Balance at beginning of year	7,007	6,811
Interest income	112	128
Remeasurements:		
Actual return on plan assets, excluding interest income	(286)	(17)
Employer contributions	41	286
Plan participants' contributions	135	153
Benefits paid	(62)	(36)
Exchange differences	(136)	(438)
Balance at end of year	6,811	6,887
Effects of asset ceiling	—	—
Net liability amount recognized in the consolidated statements of financial position	14,270	14,155

(2) Plan Assets

The fair value of pension plan assets by asset category was as follows:

Japanese Plans

Millions of Yen

	As of March 31, 2016			As of March 31, 2017		
	With quoted market price in an active market	With no quoted market price in an active market	Total	With quoted market price in an active market	With no quoted market price in an active market	Total
Cash and cash equivalents	2,417	－	2,417	1,629	－	1,629
Equity securities:						
Japanese companies	780	－	780	879	－	879
Pooled funds	－	10,283	10,283	－	11,105	11,105
Debt securities:						
Pooled funds	－	7,473	7,473	－	8,196	8,196
Hedge funds	－	7,796	7,796	－	8,437	8,437
Life insurance company general accounts	－	2,714	2,714	－	2,508	2,508
Total	3,197	28,266	31,463	2,508	30,246	32,754

Non-Japanese Plans

Millions of Yen

	As of March 31, 2016			As of March 31, 2017		
	With quoted market price in an active market	With no quoted market price in an active market	Total	With quoted market price in an active market	With no quoted market price in an active market	Total
Cash and cash equivalents	3,813	－	3,813	2,933	－	2,933
Equity securities:						
Pooled funds	－	1,952	1,952	－	2,772	2,772
Debt securities:						
Pooled funds	－	976	976	－	961	961
Commodities	－	70	70	－	221	221
Total	3,813	2,998	6,811	2,933	3,954	6,887

Investment policies of Advantest are designed to ensure adequate plan assets are available to provide future payments of pension benefits to eligible participants by attaining necessary long-term total returns on plan assets. Taking into consideration the expected returns, associated risks and correlations of returns between asset categories in plan assets, Advantest determines an optimal combination of equity, debt securities and other investments as Policy Asset Allocation (“PAA”). Plan assets are invested in accordance with PAA with mid-term to long-term viewpoint, which is revised periodically to the extent considered necessary to achieve the expected long-term rate of return on plan assets.

The Company and certain of its subsidiaries expects to contribute ¥ 860 million to defined benefit plans during the year ended March 31, 2018.

(3) Actuarial Assumptions

The significant actuarial assumptions used to determine the present value of defined benefit obligations were as follows:

Japanese Plans

	As of March 31, 2016	As of March 31, 2017
Discount rate (%)	0.7	0.9
Rate of compensation increase (%)	2.6	2.6

Non-Japanese Plans

	As of March 31, 2016	As of March 31, 2017
Discount rate (%)	2.0	1.9
Rate of compensation increase (%)	2.6	2.6

The effects on defined benefit obligations of 0.5% increase or decrease in the discount rate were as follows.

The sensitivity analysis is based on an assumption that all other variables other than the one analyzed are held constant. In reality, changes in other assumptions may impact the analysis.

Japanese Plans

Millions of Yen

	Changes in actuarial assumptions	As of March 31, 2016	As of March 31, 2017
Discount rate	0.5% increase	(5,298)	(4,951)
	0.5% decrease	6,102	5,682

Non-Japanese Plans

Millions of Yen

	Changes in actuarial assumptions	As of March 31, 2016	As of March 31, 2017
Discount rate	0.5% increase	(2,033)	(2,010)
	0.5% decrease	2,376	2,347

The weighted average duration of defined benefit obligations was as follows:

Japanese Plans

	As of March 31, 2016	As of March 31, 2017
Weighted average duration (Years)	19	18

Non-Japanese Plans

	As of March 31, 2016	As of March 31, 2017
Weighted average duration (Years)	24	23

(4) Employee Benefit Expenses

The total amount of employee benefit expenses in the consolidated statements of profit or loss for the ended March 31, 2016 and 2017 were ¥59,872 million and ¥56,747 million.

21. Equity and Other Equity Items

(1) Share Capital

1) Authorized Shares

The number of authorized shares as of March 31, 2016 and 2017 were 440,000,000 ordinary shares.

2) Fully Paid Issued Shares

The movement of the number of issued shares was as follows:

	Number of ordinary issued shares
As of April 1, 2015	199,566,770
Increase (decrease)	—
As of March 31, 2016	199,566,770
Increase (decrease)	—
As of March 31, 2017	199,566,770

The shares issued by the Company are non-par value ordinary shares that have no restriction of rights.

(2) Treasury Shares

The movement of treasury shares was as follows:

	Number of shares
As of March 31, 2016	24,994,162
As of March 31, 2017	22,736,166

(3) Surplus

1) Share Premium

Under the Companies Act of Japan, at least 50% of the proceeds of certain issues of common shares shall be credited to share capital. The remainder of the proceeds shall be credited to additional paid-in capital within share premium.

2) Retained Earnings

The Companies Act provides that a 10% dividend of retained earnings shall be appropriated as additional paid-in capital or as a legal reserve until the aggregate amount of the additional paid-in capital and the legal reserve within retained earnings equals 25% of share capital.

(4) Other Components of Equity

Millions of Yen

	Remeasurements of defined benefit pension plans （Note1）	Exchange differences on translation of foreign operations （Note2）	Net change in fair values of available-for-sale financial assets （Note3）	Total
As of April 1, 2015	―	11,674	1,056	12,730
Increase (decrease)	(4,869)	(6,002)	(555)	(11,426)
Transfer to retained earnings	4,869	―	―	4,869
As of March 31, 2016	―	5,672	501	6,173
Increase (decrease)	2,918	(1,381)	406	1,943
Transfer to retained earnings	(2,918)	―	―	(2,918)
As of March 31, 2017	―	4,291	907	5,198

(Note1) Remeasurements of defined benefit pension plans are differences in return on plan assets and interest income on plan assets due to differences between actuarial assumptions at the start of the year and actual results.

(Note2) Exchange differences on translation of foreign operations are exchange differences resulting from the translation of financial statements of foreign operations.

(Note3) Net change in fair values of available-for-sale financial assets is cumulative in nature.

22. Dividends

(1) Dividends Paid

Fiscal year ended March 31, 2016

Resolution	Class of shares	Amount of dividend (Millions of Yen)	Dividend per share （Yen）	Record date	Effective date
Board of Directors' meeting held on May 27, 2015	Ordinary shares	1,745	10	March 31, 2015	June 2, 2015
Board of Directors' meeting held on October 26, 2015	Ordinary shares	1,746	10	September 30, 2015	December 1, 2015

Fiscal year ended March 31, 2017

Resolution	Class of shares	Amount of dividend (Millions of Yen)	Dividend per share (Yen)	Record date	Effective date
Board of Directors' meeting held on May 25, 2016	Ordinary shares	1,746	10	March 31, 2016	June 2, 2016
Board of Directors' meeting held on October 26, 2016	Ordinary shares	2,277	13	September 30, 2016	December 1, 2016

(2) Dividends Whose Record Date is in the Fiscal Year under Review but Whose Effective Date is in the Following Fiscal Year

Resolution	Class of shares	Amount of dividend (Millions of Yen)	Dividend per share (Yen)	Record date	Effective date
Board of Directors' meeting held on May 22, 2017	Ordinary shares	2,122	12	March 31, 2017	June 2, 2017

23. Selling, General and Administrative Expenses

The breakdown of selling, general and administrative expenses was as follows:

Millions of Yen

	Fiscal year ended March 31, 2016	Fiscal year ended March 31, 2017
Employee benefit expenses	48,984	48,367
Depreciation and amortization	3,442	3,885
Others	26,683	23,922
Total	79,109	76,174

24. Share-Based Compensation

Advantest has share-based compensation plans using share options as incentive plans for directors (excluding directors who are audit and supervisory committee members and outside directors), executive officers and selected employees. Share options have been issued to directors, executive officers and certain employees of the Company and its subsidiaries under share option plans approved by the Board of Directors. Options were generally granted with an exercise prices of per share that were equal to the higher of (1) 1.05 times the average price of the Company’s common shares of the preceding month on the date of grant and (2) the closing price of the Company’s common shares traded on the Tokyo Share Exchange on the date of grant. The options have an exercise period of 4 years.

The exercisable share option plans were as follows:

No.	Number of shares to be issued/ delivered	Grant date	Exercise Period	Settlement Method	Vesting Conditions
11	2,521,000	July 12, 2012	From April 1, 2013 to March 31, 2017	Quotient Clearance	The persons who are director, auditor, executive officer, employee, adviser, part-time worker or any other similar position of the Company or its subsidiaries after grant date（July 12, 2012）to vesting date（March 31, 2013） are entitled.
12	2,763,000	July 12, 2013	From April 1, 2014 to March 31, 2018	Quotient Clearance	The persons who are director, auditor, executive officer, employee, adviser, part-time worker or any other similar position of the Company or its subsidiaries after grant date（July 12, 2013）to vesting date（March 31, 2014） are entitled.
13	1,924,000	August 16, 2016	From April 1, 2017 to March 31, 2021	Quotient Clearance	The persons who are director (excluding directors who are audit and supervisory committee members and outside directors), executive officer, employee, adviser, part-time worker or any other similar position of the Company or its subsidiaries after grant date（August 16, 2016）to vesting date（March 31, 2017） are entitled.

In connection with the acquisition of Verigy, the Company assumed the share options previously granted to Verigy directors and employees. Therefore, replacement options were granted for all 89 types of share options arrangements previously granted to the directors and employees of Verigy and its subsidiaries under a share option plan approved by the Board of Directors of Advantest. The terms and conditions of the granted options are substantially the same as those for the Verigy share options. The number of granted shares totaled 2,387,046. Options were granted with exercise prices from ¥880 to ¥3,900 per share. All options are exercisable from July 20, 2011. The options have expiration dates from July 29, 2011 to January 31, 2018.

The exercise price of the share options is subject to adjustment, if there is a share split or consolidation of shares, or if new shares are issued or treasury shares are sold at a price that is less than the market price. There is no exercisable at end of fiscal year ended March 31, 2017.

Share option activity was as follows:

	Fiscal year ended March 31, 2016		Fiscal year ended March 31, 2017	
	Number of shares	Weighted average exercise price (Yen)	Number of shares	Weighted average exercise price (Yen)
Outstanding at beginning of year	5,776,069	1,536	4,008,184	1,477
Granted	―	―	1,924,000	1,382
Exercised	(27,000)	1,207	(2,259,000)	1,359
Expired	(1,740,885)	1,644	(180,184)	1,290
Forfeited	―	―	(45,000)	1,382
Outstanding at end of year	4,008,184	1,477	3,448,000	1,513
Exercisable at end of year	4,008,184	1,477	1,569,000	1,669

Weighted-average share price as of exercised date was ¥1,386 and ¥1,869 for share option plans exercised during fiscal years ended March 31, 2016 and 2017, respectively.

The outstanding share options were as follows:

As of March 31, 2016

Exercise Price	Outstanding		Exercisable	
	Number of shares	Weighted average remaining contractual life (Years)	Number of shares	Weighted average remaining contractual life (Years)
1,139～1,668	1,676,184	1.0	1,676,184	1.0
1,669～2,351	2,332,000	2.0	2,332,000	2.0

As of March 31, 2017

Exercise Price	Outstanding		Exercisable	
	Number of shares	Weighted average remaining contractual life (Years)	Number of shares	Weighted average remaining contractual life (Years)
1,382	1,879,000	4.0	―	―
1,669	1,569,000	1.0	1,569,000	1.0

The fair value of share option was estimated using the Black Scholes pricing model with the following assumptions:

No.	13
Expected life (year)	3.72
Risk-free rate (%)	(0.19)
Expected volatility (%)	38.99
Expected dividend yield (%)	1.21

No share-based compensation expense was recognized for fiscal year ended March 31, 2016. Share-based compensation expense was ¥682 million for fiscal year ended March 31, 2017.

25. Financial Income and Expenses

(1) Financial Income

The breakdown of financial income was as follows:

Millions of Yen

	Fiscal year ended March 31, 2016	Fiscal year ended March 31, 2017
Interest income	257	312
Dividend income	44	15
Foreign exchange gain	—	767
Gains on sales of available-for-sale financial assets	174	250
Total	475	1,344

(2) Financial Expenses

The breakdown of financial expenses was as follows:

Millions of Yen

	Fiscal year ended March 31, 2016	Fiscal year ended March 31, 2017
Interest expense	216	221
Foreign exchange loss	1,059	—
Others	30	6
Total	1,305	227

26. Other Comprehensive Income

Each component of other comprehensive income, reclassification adjustments to net income and tax effects were as follows:

Millions of Yen

	Fiscal year ended March 31, 2016			Fiscal year ended March 31, 2017		
	Pretax amount	Tax (expense) or benefit	Net of tax amount	Pretax amount	Tax (expense) or benefit	Net of tax amount
Remeasurements of defined benefit pension plans						
Gains (losses) during the year	(4,406)	(463)	(4,869)	2,815	103	2,918
Reclassification adjustments to Net income	—	—	—	—	—	—
Net change during the year	(4,406)	(463)	(4,869)	2,815	103	2,918
Exchange differences on translation of foreign operations						
Gains (losses) during the year	(6,002)	—	(6,002)	(1,381)	—	(1,381)
Reclassification adjustments to Net income	—	—	—	—	—	—
Net change during the year	(6,002)	—	(6,002)	(1,381)	—	(1,381)
Net change in fair values of available-for-sale financial assets						
Gains (losses) during the year	(546)	114	(432)	713	(134)	579
Reclassification adjustments to Net income	(174)	51	(123)	(250)	77	(173)
Net change during the year	(720)	165	(555)	463	(57)	406
Total other comprehensive income	(11,128)	(298)	(11,426)	1,897	46	1,943

27. Earnings per Share

The basis of calculation of basic earnings per share and diluted earnings per share were as follows:

	Fiscal year ended March 31, 2016	Fiscal year ended March 31, 2017
Net income attributable to owners of the parent (Millions of Yen)	6,694	14,201
Net income not attributable to owners of the parent (Millions of Yen)	—	—
Net income to calculate basic earnings per share (Millions of Yen)	6,694	14,201
Dilutive effect of exercise of convertible bonds (Millions of Yen)	126	127
Net income to calculate diluted earnings per share (Millions of Yen)	6,820	14,328
Weighted average number of ordinary shares—basic	174,569,193	175,180,404
Dilutive effect of exercise of share options	61,173	368,002
Dilutive effect of exercise of convertible bonds	18,126,888	18,213,830
Weighted average number of ordinary shares—diluted	192,757,254	193,762,236
Basic earnings per share (Yen)	38.35	81.07
Diluted earnings per share (Yen)	35.38	73.95
Financial Instruments not included in the calculation of diluted earnings per share because they have anti-dilutive effect	Certain share options	Certain share options

28. Financial Instruments

(1) Capital Management

Advantest seeks out the most appropriate methods to enhance capital efficiency considering safety and liquidity for the sake of securing the fund.

Advantest raises fund through bonds. Derivative transactions for speculation purposes is prohibited by Advantest's policy, and limited to transactions to avoid the risks discussed later.

Advantest manages net interest-bearing debt, where cash and cash equivalents are deducted from interest-bearing debt, and capital. The amounts as of each fiscal year end were as follows:

Millions of Yen

	As of March 31, 2016	As of March 31, 2017
Interest-bearing debt	44,618	44,745
Cash and cash equivalents	(85,430)	(95,324)
Net interest-bearing debt(Note)	(40,812)	(50,579)
Capital (equity attributable to owners of the parent company)	93,619	109,517

(Note) The figure represents the net amount of cash and cash equivalents after deducting interest-bearing debt.

Advantest monitors financial indicators in order to maintain a well-balanced capital structure that ensures an appropriate return on equity and a stable and flexible financial condition for future investment.

Advantest monitors credit ratings for a financial stability and flexibility, and ROE (return on equity) for profitability, while focusing on changes in the domestic and overseas environment.

(2) Basic Policy on Financial Risk Management

Advantest is exposed to financial risks (credit risks, liquidity risks, foreign exchange risks, and market price fluctuation risks) in the process of its management activities and it manages risks based on a specific policy in order to avoid or reduce said risks. The results of risk management are regularly reported by the Accounting Department to management.

Advantest's policy limits derivatives to transactions for the purpose of mitigating risks from transactions based on actual demand. Therefore, Advantest does not transact derivatives for speculation purposes or trading purposes.

(3) Credit Risk

Receivables, such as notes and trade receivables, resulting from operating activities of Advantest are exposed to customers' credit risks.

Equity securities held for strategic purposes are exposed to the issuer's credit risks.

In addition, derivative transactions in order to hedge foreign exchange fluctuation risks are exposed to credit risks of counter party financial institutions.

Advantest strives to mitigate collection risk in accordance with credit management standards and procedures in selling goods and services.

Advantest assesses the credit standing of customers and manages collection date and outstanding balance for each customer to ensure smooth collection of trade receivables.

Advantest minimizes risk exposure by limiting the counterparties to major international banks and financial institutions meeting established credit guidelines.

Any maximum exposure to credit risk in financial assets is stated in the carrying amounts presented in the consolidated statements of financial position.

The change in aging of Trade and other receivables that are past due but not impaired was as follows:

Millions of Yen

	As of March 31, 2016	As of March 31, 2017
Within 90 days	2,804	2,717
Over 90 days, within 180 days	171	316
Over 180 days	15	400
Total	2,990	3,433

Impairment is accounted for using the allowance for doubtful accounts, not directly reducing the carrying amount of financial assets.

The allowance for doubtful accounts against the financial assets is included in "Trade and other receivables" and "Other financial assets" in the consolidated statement of financial position.

The change in the allowance for doubtful accounts was as follows:

Millions of Yen

	Fiscal year ended March 31, 2016	Fiscal year ended March 31, 2017
Balance at beginning of year	316	523
Increase during the year	327	140
Decrease due to intended use	(33)	−
Reversal during the year	(49)	(164)
Exchange differences	(38)	(2)
Balance at end of year	523	497
Current	338	448
Non-current	185	49
Total	523	497

The financial assets for which impairment was recognized individually at March 31, 2016 and 2017 were ¥634 million and ¥495 million, respectively. And their corresponding allowance for doubtful accounts were ¥486 million and ¥493 million, respectively.

(4) Liquidity Risk

Advantest establishes a financing plan based on the annual business plan and the Accounting Department monitors and collects information on the balance of liquidity-on-hand and interest-bearing debt and reports it to management.

In addition, Advantest manages liquidity risks with the balance of liquidity-on-hand maintained at a proper level by working out the financing plan on a timely basis, and by taking into consideration the financial environment.

The financial liability balance (including derivative financial instruments) by maturity was as follows:

As of March 31, 2016

Millions of Yen

	Carrying amount	Contractual cash flow	Due within 1 year	Due after 1 year through 2 years	Due after 2 years through 3 years	Due after 3 years through 4 years	Due after 4 years through 5 years	Due after 5 years
Non-derivative financial liabilities								
Trade and other payables	22,101	22,101	22,101	−	−	−	−	−
Bonds	44,618	45,136	91	15,045	30,000	−	−	−
Other financial liabilities	552	552	487	28	−	−	−	37
Total	67,271	67,789	22,679	15,073	30,000	−	−	37

As of March 31, 2017

Millions of Yen

	Carrying amount	Contractual cash flow	Due within 1 year	Due after 1 year through 2 years	Due after 2 years through 3 years	Due after 3 years through 4 years	Due after 4 years through 5 years	Due after 5 years
Non-derivative financial liabilities								
Trade and other payables	28,489	28,489	28,489	―	―	―	―	―
Bonds	44,745	45,045	15,045	30,000	―	―	―	―
Other financial liabilities	665	665	626	―	―	―	―	39
Total	73,899	74,199	44,160	30,000	―	―	―	39

(5) Foreign Exchange Risk

1) Foreign Exchange Risk Management

As part of developing its global business, Advantest has foreign currency receivables and payables, which are subject to foreign exchange fluctuation risk.

To manage this risk, Advantest determines its foreign exchange fluctuation risk in each currency every month and, in principle, hedges this risk by using forward exchange transactions.

Depending on foreign exchange market conditions, Advantest may also enter into forward exchange contracts on foreign currency receivables and payables for expected transactions it deems certain to occur.

2) Foreign Exchange Sensitivity Analysis

The table below shows the impact on income before income taxes of a 1% increase in value of the functional currency included U.S. Dollar and the Euro, due to its holdings of financial instruments at the end of each fiscal year, assumed no changes in currencies other than those used.

The impact from the translation of functional currency-denominated financial instruments, assets and liabilities of foreign operations into presentation currency is not included.

Millions of Yen

	Currency	Fiscal year ended March 31, 2016	Fiscal year ended March 31, 2017
Impact on income before income taxes	U.S. Dollar	(130)	(25)
	Euro	(10)	(16)

(6) Carrying Amounts and Fair Value of Financial Instruments

The carrying amounts and the fair values of the financial instruments were as follows:

Millions of Yen

	As of March 31, 2016		As of March 31, 2017	
	Carrying amount	Fair Value	Carrying amount	Fair Value
Financial liabilities measured at amortized cost				
Bonds(Note)	44,618	44,930	44,745	44,965

(Note)Bonds include balances redeemable or repayable within one year.

（Bonds）

Fair values of corporate bonds are calculated based on market prices. Fair values of convertible bonds are calculated based on resembling bonds without the option to convert to stocks.

（Other）

Financial instruments other than above mentioned are settled mainly on a short-term basis, and their fair values approximate their carrying amounts.

(7) Fair Value Hierarchy of Financial Instruments

Financial instruments measured at fair value on a recurring basis after the initial recognition are classified into three levels of the fair value hierarchy based on the measurement inputs' observability and materiality as follows:

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

When several inputs are used for a fair value measurement, the level is determined based on the input with the lowest level in the fair value measurement as a whole.

The transfers between levels in the fair value hierarchy are deemed at the beginning of each quarter period.

There were no transfers of financial instruments between Level 1 and Level 2 during the year ended March 31, 2016. During the year ended March 31, 2017, there was a transfer from Level 2 to Level 1 for the three months ended June 30, 2016, which was the result of a conversion of preferred shares into ordinary shares measured at fair value by market prices. All the shares transferred were sold for the three months ended September 30, 2016.

The assets measured at fair value on a recurring basis were classified by hierarchy as follows:

As of March 31, 2016

Millions of Yen

	Level 1	Level 2	Level 3	Total
Financial assets				
Available-for-sale financial assets	819	591	367	1,777
Total	819	591	367	1,777

As of March 31, 2017

Millions of Yen

	Level 1	Level 2	Level 3	Total
Financial assets				
Available-for-sale financial assets	1,416	–	399	1,815
Total	1,416	–	399	1,815

The movement of financial instruments categorized within Level 3 of the fair value hierarchy was as follows:

Millions of Yen

	Fiscal year ended March 31, 2016	Fiscal year ended March 31, 2017
Balance at beginning of year	352	367
Gains (losses) recognized in other comprehensive income	15	32
Balance at end of year	367	399

Gains or losses recognized in other comprehensive income are presented in net change in fair values of available-for-sale financial assets of the consolidated statements of comprehensive income.

(8) Derivatives and Hedge Accounting

There were no derivatives designated as hedging instruments at March 31, 2016 and 2017.

29. Related Party Disclosures

Management personnel compensation was as follows:

Millions of Yen

	Fiscal year ended March 31, 2016	Fiscal year ended March 31, 2017
Fixed compensation and bonus	373	359
Share option compensation expense	—	114
Total	373	473

TRANSLATION

This is an English translation of the original Independent Auditors Report filed under the Financial Instruments and Exchange Act of Japan, prepared in Japanese language. This report is presented merely as supplemental information. Ernst & Young ShinNihon LLC have not audited English language version of the consolidated financial statements of Advantest Corporation (the “Company”) applicable to the fiscal year from April 1, 2016 through March 31, 2017.

Independent Auditor’s Report

June 28, 2017

The Board of Directors
Advantest Corporation

Ernst & Young ShinNihon LLC

Certified Public Accountant
Designated and Engagement Partner Makoto Usui

Certified Public Accountant
Designated and Engagement Partner Kaeko Kitamoto

Certified Public Accountant
Designated and Engagement Partner Keiichi Wakimoto

Pursuant to Article 193-2, Paragraph 1 of the Financial Instruments and Exchange Act, we have audited the accompanying consolidated financial statements included in the Financial Section, which comprise the consolidated statement of financial position, the consolidated statement of profit or loss, the consolidated statement of comprehensive income, the consolidated statement of changes in equity, the consolidated statement of cash flows and the notes to the consolidated financial statements of Advantest Corporation (the “Company”) applicable to the fiscal year from April 1, 2016 through March 31, 2017.

Management’s Responsibility for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with International Financial Reporting Standards pursuant to the provision of Article 93 of the Regulation for Terminology, Forms and Preparation of Consolidated Financial Statements, and for designing and operating such internal control as management determines is necessary to enable the preparation and fair presentation of the consolidated financial statements that are free from material misstatement, whether due to fraud or error.

Auditor’s Responsibility

Our responsibility is to express an opinion on these consolidated financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in Japan. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on the auditor’s judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. The purpose of an audit of the consolidated financial statements is not to express an opinion on the effectiveness of the entity’s internal control, but in making these risk assessments the auditor considers internal controls relevant to the entity’s preparation and fair presentation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Advantest Corporation, which consisted of the Company and consolidated subsidiaries, as at March 31, 2017, and the results of their operations and their cash flows for the year then ended March 31, 2017 in conformity with International Financial Reporting Standards.

2. Management Policy, Business Environment and Issues to be Addressed etc.

(1) Advantest's Basic Management Policy

Advantest has established a corporate vision of “Technology Support on the Leading Edge”, and its corporate mission of “Quest for the Essence”. Guided by these principles, Advantest respects each of its stakeholders, strives to maintain harmony with society, and aims for the sustained development of the Company and the improvement of corporate value while contributing to the goal of a sustainable society.

(2) Target Financial Index

Advantest believes that improvement of profitability, financial soundness and efficient utilization of assets are source of corporate value. Therefore, Advantest sets ratio of operating income, return on equity (“ROE”) and cash flow as an important management indicator.

(3) Business Environment

During Advantest’s FY2016, the global economy continued its overall recovery trend, supported by strength in the US and other countries.

In semiconductor-related markets, the improving functionality and increasing sales volumes of smartphones, as well as progress in automotive electronics and growth in data center investment, have driven growth. As a result, the semiconductor market reversed its negative growth trend of 2015 to expand through 2016.

The expansion of high-speed wireless networks, the ongoing adoption of smartphones worldwide and the evolution of their performance, and the spread of Advanced Driver Assistance Systems, or ADAS, in the automotive industry, argue that a growing social emphasis on safety and comfort will drive continued growth in the semiconductor industry and related markets.

The near-term outlook for the semiconductor test equipment market, which is Advantest’s primary profit base, predicts that new investment in non-memory test systems will decline year-on-year due to the impact of presently occurring inventory adjustments for mobile devices. However, we anticipate robust demand for memory test systems against a backdrop of further expansion in the production of higher-speed, larger-capacity DRAM and NAND devices.

(4) Issues to be Addressed

With a core competence in measurement technologies developed over decades of R&D, Advantest aims to enhance corporate value through promoting two management policies.

The first policy is to continuously improve its cost structure such that it can generate stable profits even in the semiconductor test equipment market with high fluctuations in demand. Specifically, Advantest will seek to hold down its break-even point by reducing its cost of sales, flexibly optimizing overall costs in response to changes in the business environment, and improving work efficiency, among other measures.

The second policy is to reinforce and diversify Advantest’s profit sources to enable sustainable growth by implementing a two-pronged strategy of seeking deep demand in the test market that is expected to expand multidimensionally and creating new businesses that leverage its technological strengths. Digital evolution is underway, as reflected in the spread of use of smartphones, 5G and other high-speed networks, IoT, ADAS (advanced driver assistance systems) and artificial intelligence. In line with the progress of semiconductors offering larger data storage, more advanced data computation, faster wireless communication, and lower power consumption, assuring reliability of semiconductors will become increasingly important. Advantest sees this market shift as a business opportunity and will continue to rapidly develop and provide products and services attuned to the market needs. It will also aim to identify promising markets of new applications for its measurement technologies, and create and grow businesses to serve these markets. To support this reinforcement and diversification of its profit sources, Advantest is committed to R&D management from a medium- to long-term perspective, allowing for agile and strategic allocation of resources, while maintaining Advantest’s financial health and efficiency.

3. Business Review

(1) Important Accounting Policies and Estimates

Advantest's important accounting policies and estimates are described in "note 3 and note 4" under "Notes to Consolidated Financial Statements" in "1. Consolidated Financial Statements".

(2) Results of Operations

1) Analysis of Statement of Operations

	Fiscal year ended March 31, 2016 (Millions of Yen)	Fiscal year ended March 31, 2017 (Millions of Yen)	Change (Millions of Yen)	Change (%)
Net sales	162,111	155,916	(6,195)	(3.8)
Cost of sales	(70,636)	(66,176)	4,460	(6.3)
Selling, general and administrative expenses	(79,109)	(76,174)	2,935	(3.7)
Other income (expenses), net	231	339	108	46.8
Operating income	12,597	13,905	1,308	10.4
Financial income (expenses), net	(830)	1,117	1,947	―
Income before income taxes	11,767	15,022	3,255	27.7
Income taxes	(5,073)	(821)	4,252	(83.8)
Net income	6,694	14,201	7,507	112.1
Net income attributable to: Owners of the parent	6,694	14,201	7,507	112.1

Net sales

Advantest sought to improve performance, with a focus on capturing new demand from the memory sector, where customers are now highly motivated to invest.

As a result, Advantest's net sales decreased by ¥6,195 million, or 3.8%, compared to fiscal 2015 to ¥155,916 million in fiscal 2016 in spite of yen appreciation. It is estimated that the fluctuations in exchange rates during fiscal 2016 contributed to a decrease of Advantest's net sales by ¥12,942 million in fiscal 2016.

Cost of sales

In fiscal 2016, cost of sales decreased by ¥4,460 million, or 6.3%, compared to fiscal 2015 to ¥66,176 million. This decrease was mainly due to decrease in net sales and a more profitable sales mix.

Selling, general and administrative expenses

In fiscal 2016, selling, general and administrative expenses decreased by ¥2,935 million, or 3.7%, compared to fiscal 2015 to ¥76,174 million. This decrease was mainly due to the appreciation of the Japanese yen and corresponding decrease in cost in foreign currency-denominated costs.

Operating income

As a result of the above, in fiscal 2016, Advantest's operating income increased by ¥1,308 million, or 10.4%, compared to fiscal 2015, resulting in operating income of ¥13,905 million. Operating income to net sales ratio was 8.9%, an increase of 1.1 percentage points from fiscal 2015.

Financial income (expenses), net

In fiscal 2016, net financial income improved by ¥1,947 million compared to fiscal 2015 to a profit of

¥1,117 million. This improvement was mainly due to the foreign exchange gains in US dollar-denominated assets as the end of fiscal 2016 was lower than the end of fiscal 2015 due to the euro's weaker dollar.

Income before income taxes

As a result of the above, in fiscal 2016, income before income taxes increased by ¥3,255 million, or 27.7%, compared to fiscal 2015 to ¥15,022 million.

Income taxes

In fiscal 2016, Advantest's effective tax rate was 5.5%, while the effective income tax rate for fiscal 2015 was 43.1%. For a more details on income taxes of Advantest in fiscal 2016 and fiscal 2015, see note 16 under "Notes to Consolidated Financial Statements" in "1. Consolidated Financial Statements".

Net income attributable to owners of the parent

As a result of the above, in fiscal 2015, Advantest's net income attributable to owners of the parent increased by ¥7,507 million, or 112.1%, compared to fiscal 2015, resulting in an income of ¥14,201 million. Net income attributable to owners of the parent to net sales ratio was 9.1%, an increase of 5.0 percentage points from fiscal 2015.

2) Operations by Segment

Sales by Segment

	Fiscal year ended March 31, 2016 (Millions of Yen)	Fiscal year ended March 31, 2017 (Millions of Yen)	Change (Millions of Yen)	Change (%)
Semiconductor and Component Test System Segment	100,762	101,266	504	0.5
Mechatronics System Segment	31,482	25,192	(6,290)	(20.0)
Services, Support and Others Segment	29,923	29,496	(427)	(1.4)
Elimination	(56)	(38)	18	—
Total	162,111	155,916	(6,195)	(3.8)

Semiconductor and Component Test System Segment

In fiscal 2016, net sales of Advantest's Semiconductor and Component Test System Segment accounted for 64.9% of total net sales.

Advantest's non-memory semiconductor test system business remained solid through the third quarter against a backdrop of increased production of semiconductors smartphones. However, starting in the beginning of the fourth quarter, inventory adjustments for mobile devices suppressed sales of non-memory test systems, leading sales to finish at a slightly lower level than the previous fiscal year. In the memory sector, customer investment stayed flat at the beginning of the fiscal year, but the business environment grew more favorable from the summer.

As a result, net sales of Advantest's Semiconductor and Component Test System Segment for fiscal 2016increased by ¥504 million, or 0.5%, compared to fiscal 2015 to ¥101,266 million, and segment income increased by ¥6,138 million, or 58.4%, compared to fiscal 2015 to ¥16,652 million. It is estimated that fluctuations in exchange rates during fiscal 2016 contributed to a decrease of Advantest's net sales in its Semiconductor and Component Test System Segment by ¥8,010 million.

Mechatronics System Segment

In fiscal 2016, net sales of Advantest's Mechatronics System Segment accounted for 16.2% of total net sales.

Due to a drop in demand for photomask inspection equipment, Advantest's nanotechnology business remained sluggish throughout the year. In the device interface business, sales fell in comparison to the previous fiscal year due to the impact of lower DRAM investment at the beginning of the period.

As a result, net sales of Advantest's Mechatronics System Segment for fiscal 2016 decreased by ¥6,290 million, or 20.0%, compared to fiscal 2015 to ¥25,192 million, and segment income decreased by ¥4,128 million compared to an income of ¥2,599 million for fiscal 2015 to a loss of ¥1,529 million. It is estimated that fluctuations in exchange rates during fiscal 2016 contributed to a decrease of Advantest's net sales in its Mechatronics System Segment by ¥2,188 million.

Services, Support and Others Segment

In fiscal 2016, net sales of Advantest's Services, Support and Others Segment accounted for 18.9% of total net sales.

In the Services, Support and Others Segment, the profitability was also impacted by yen appreciation. However, demand for field services was robust against the backdrop of increased semiconductor production.

As a result, net sales of the Services, Support and Others Segment decreased by ¥427 million, or 1.4%, compared to fiscal 2015 to ¥29,496 million, and segment income decreased by ¥127 million, or 2.6%, compared to fiscal 2015 to ¥4,817 million. It is estimated that fluctuations in exchange rates during fiscal 2016 contributed to a decrease of Advantest's net sales in its Services, Support and Others Segment by ¥2,744 million.

3) Sales by Geographic Markets

Advantest's overseas sales as a percentage of total sales was 88.2% for fiscal 2016 (92.0% in fiscal 2015).

Japan

Net sales in Japan increased by ¥5,464 million, or 42.1%, compared to fiscal 2015 to ¥18,443 million in fiscal 2016.

Asia (excluding Japan)

Net sales in Asia (excluding Japan) increased by ¥723 million, or 0.6%, compared to fiscal 2015 to ¥114,123 million in fiscal 2016. This increase was mainly due to a strong demand for memory test systems in Korea and Taiwan. It is estimated that fluctuations in exchange rates during fiscal 2016 contributed to a decrease of Advantest's net sales in Asia by approximately ¥10,250 million.

Americas

Net sales in the Americas decreased by ¥14,711 million, or 49.8%, compared to fiscal 2015 to ¥14,840 million in fiscal 2016. It is estimated that fluctuations in exchange rates during fiscal 2016 contributed to a decrease of Advantest's net sales in the Americas by approximately ¥1,690 million, primarily due to the appreciation of the Japanese yen against the U.S. dollar.

Europe

Net sales in Europe increased by ¥2,329 million, or 37.7%, compared to fiscal 2015 to ¥8,510 million in fiscal 2016 mainly due to a weak demand for non-memory test systems. It is estimated that fluctuations in exchange rates during fiscal 2016 contributed to a decrease of Advantest's net sales in Europe by approximately ¥970 million, primarily due to the appreciation of the Japanese yen against the Euro.

(3) Summary of Financial Condition

1) Liquidity and Capital Resources

In accordance with Advantest's funding and treasury policy, which is overseen and controlled by its Accounting Department, Advantest funds its cash needs through cash from operating activities and cash and cash equivalents on hand, and is able to procure funds as necessary through issuance of debt and equity securities in domestic and foreign capital markets and through obtainment of bank loans.

If conditions in the semiconductor industry, and thus the semiconductor and component test system industry, experience a downturn in the medium term, Advantest may need to fund future capital expenditures and other working capital needs through the incurrence of additional issuance of debt or dilutive issuances of equity securities.

Advantest issued ¥25.0 billion in corporate bonds in Japan on May 25, 2012, of which ¥10.0 billion was repaid in May 2015 and ¥15.0 billion was repaid in May 2017. Advantest issued Zero Coupon Convertible Bonds (Euroyen bonds with stock acquisition rights) in the aggregate principal amount of ¥30.0 billion on March 14, 2014, with a maturity date of March 14, 2019.

2) Cash Flows

Advantest's cash and cash equivalents balance increased by ¥9,894 million in fiscal 2016 to ¥95,324 million as of March 31, 2017.

Cash flows from operating activities

Net cash provided by operating activities was ¥15,833 million, as a result of ¥15,022 million in income before income taxes, increase of ¥6,403 million in trade and other payables and increase of ¥5,268 million in inventories, and an adjustment of noncash items such as depreciation. Net cash provided by operating activities increased by ¥8,105 million in fiscal 2016 compared to ¥7,728 million in fiscal 2015. The main reason for the increase in fiscal 2016 was increase income before income taxes and in trade and other payables, which was partially offset by the increase in inventories and in trade and other receivables.

Cash flows from investing activities

Net cash used in investing activities was ¥3,521 million in fiscal 2016, of which purchases of property, plant and equipment accounted for ¥4,018 million. The increase by ¥1,126 million compared to ¥2,395 million in fiscal 2015 was primarily due to the fact that while the purchases of property, plant and equipment was comparable to fiscal 2015.

Cash flows from financing activities

Net cash used in financing activities was ¥1,002 million in fiscal 2016, of which dividends paid was accounted for ¥4,016 million and proceeds from disposal of treasury shares was accounted for ¥3,063 million. The decrease by ¥12,529 million in fiscal 2016, compared to net cash used by financing activities in the amount of ¥13,531 million in fiscal 2015, was primarily due to redemption of ¥10,000 million in bonds in fiscal 2015.

3) Assets, Liabilities and Equity

Total assets as of March 31, 2017 amounted to ¥231,603 million, an increase of ¥21,152 million compared to March 31, 2016, primarily due to an increase of ¥9,894 million in cash and cash equivalents, ¥5,181 million in inventories and ¥4,446 million in trade and other receivables. The amount of total liabilities as of March 31, 2017 was ¥122,086 million, an increase of ¥5,254 million compared to March 31, 2016, primarily due to increase of ¥6,388 million in trade and other payables because of increase of purchases. The amount of total equity or equity attributable to owners of the parent as of March 31, 2017 was ¥109,517 million. Equity attributable to owners of the parent to assets ratio was 47.3% as of March 31, 2017, an increase of 2.8 percentage points from March 31, 2016.

4. Research and Development

In order to support technology on the leading-edge, Advantest undertakes research and development initiatives to develop products which play a central role in the area of measuring technologies to support electronics, information and communications, and semiconductor manufacturing. Advantest's research and development focuses on the development of new products and the improvement of existing products. In particular, in the Semiconductor and Component Test System Segment, a large and ongoing investment in research and development is necessary in order to maintain market competitiveness and to provide many types of products that meet the various needs of the customers. Advantest also conducts research of basic technologies. Advantest's expenditures for research and development were approximately ¥31.3 billion in fiscal 2015 and approximately ¥31.2 billion in fiscal 2016. Advantest employs over 1,000 engineers and other personnel in its research and development division.

The contents and achievements for fiscal 2016 of Advantest's research and development activities include:

Basic Technology

• development of constituent technologies in the field of terahertz waves;

• development of constituent technologies, including high speed, energy-saving micro switches and high speed samplers used in semiconductor and component test systems and millimeter wave measuring instruments;

• development of methods to detect timing jitters in high bit-rate signals; and

• development of compound semiconductor, including less-distortion or high-voltage large-current devices used for semiconductor and component test systems.

Semiconductor and Component Test System Segment

• development of semiconductor and component test systems that enable testing of super high speed memory semiconductors at actual motion speed;

• development of semiconductor and component test systems that enhance the functionality of testing of DRAM semiconductors and flash memory semiconductors and require less floor space;

• development of high speed memory burn in system to enable reliability and functionality testing on high parallel memory devices;

• development of semiconductor and component test systems that have the capacity to simultaneously test multiple complex SoC semiconductors with large pin counts and require less floor space;

• development of semiconductor and component test systems with specialized applications;

• development of semiconductor and component test systems for devices that operate at extremely high frequencies and for networks that carry extremely high density transmissions;

• development of semiconductor and component test systems for testing optical communication devices;

• development of high speed transmission technologies for high speed large pin counts and high speed transmission signal contact technologies;

• development of application software for interface between the semiconductor designing environment and semiconductor and component test systems, as well as development of software to analyze defective semiconductors; and

• development of systems that impress the physical stimulus on each sensor.

Mechatronics System Segment

• development of test handlers for memory semiconductors enabling measuring of multiple semiconductors for high throughput testing;

• development of test handlers for SoC semiconductors that respond to diversified device types and packages;

• development of real Active Thermal Control technology with high speed response and high reliability for high power devices;

• development of the device interface (substrate/circuit technology) to measure high speed device;

• development of conveyance technology and the device interface which supports miniaturization and fine pitches of semiconductors;

• development of probe card for testing memory devices on wafer;

• development of MVM-SEM® (3D-CDSEM) for high throughput / high precision measurement intended for 3D measurement & observation; and

• development of high resolution E-Beam lithography tool which supports various type of wafers.

Advantest has research and development facilities in Japan, the U.S., Europe and China.

Advantest promotes joint development efforts between its various research facilities to capitalize on the capabilities of its researchers worldwide. Advantest's research and development team for semiconductor and component test systems in Japan works closely with Advantest research and development teams in the U.S. and Europe for the development of hardware and software.

Advantest is currently engaged in the research and development of electron-beam, or e-beam, lithography technology used to draw circuit patterns directly on semiconductor wafers, as well as the research and development of electron-beam length measuring systems used to measure the microscopic size of the circuit pattern of a photomask. Due to their throughput limitations, e-beam lithography systems are currently used in the development of high value-added semiconductors with limited production volumes and semiconductor prototypes. Advantest believes that in order to meet demand for next generation equipment, further research and development will be necessary for technologies for improvement in throughput as well as for attaining high precision technologies necessary for the leading semiconductor design and manufacturing process.

5. Risk Factors

Risks Related to Advantest's Business

The risks related to Advantest's business are as follows.

Advantest's business and results of operations are subject to significant demand volatility in the semiconductor industry

Advantest's business depends largely upon the capital expenditures of semiconductor industrial, design and manufacturing companies, fabless semiconductor companies, foundries and test houses. These companies, in turn, determine their capital expenditure and investment levels largely based on current and anticipated market demand for semiconductors and products incorporating semiconductors. Such demand is influenced significantly by the overall condition of the global economy. Historically, the percentage reduction in capital expenditures by semiconductor manufacturers during downturns in the semiconductor industry, including investment in semiconductor test systems, has typically been much greater than the percentage reduction in worldwide sales of semiconductors. The semiconductor industry has been highly cyclical with recurring periods of excess inventory, which often have had a severe effect on the semiconductor industry's demand for semiconductor test systems, including those of Advantest.

The worldwide semiconductor market in 2014, the semiconductor market continued to increase by 9.9% compared to 2013, the highest growth rate since 2011, despite some variations among products. In 2015, the semiconductor market decreased by 0.2% compared to 2014, due to the slowdown in demand for electronic equipment such as smartphones. In 2016, the semiconductor market increased by 1.1% compared to 2015, due to the improving functionality and increasing sales volumes of smartphones and others. Worldwide sales of non-memory semiconductors in 2014 increased by 7.6% compared to 2013 due to a further global adoption of smartphones and improvements in handset performance. In 2015, worldwide sales of non-memory semiconductors decreased by 0.4% compared to 2014 due to the slowdown in demand for electronic equipment such as smartphones. In 2016, worldwide sales of non-memory semiconductors increased by 1.3% compared to 2015 due to the increasing of capital investment in smartphone-related production and others. In 2014, worldwide sales of memory semiconductors increased by 18.2% compared to 2013 due to a strong demand of semiconductor for PCs, among other factors. In 2015, sales decreased by 2.6% compared to 2014 due to, as in the case for non-memory semiconductors, the slowdown in demand for electronic equipment such as smartphones. In 2016, worldwide sales of memory semiconductors decreased by 0.6% compared to 2015, although demand for smartphones and high-speed servers increased since the summer.

The significant volatility in demand for semiconductors is affected by various factors such as:

- the overall state of the global economy;

- levels of investment in communications infrastructure and trends of demand in communication devices such as smartphones and wearable devices;

- demand in personal computer and data server industries;

- consumer demand for digital consumer products such as flat-panel TVs, DVD/Blu-ray disc recorders, portable audio players and electronic books;

- demand in the automobile industry; and

- trends in the semiconductor industry.

In fiscal 2014, Advantest strove to maximize profitability by engaging in sales promotions for non-memory test systems for which demand growth has been particularly strong and by expanding its customer base across all operating segments. As a result, Advantest's net sales in fiscal 2014 largely increased ¥163,803 million. Advantest returned to profitability, with net income attributable to owners of the parent of ¥16,753 million, mainly due to higher year-over-year net sales, an improved mix of high-profitability products and successful cost-cutting measures undertaken across the entire Advantest Group. Advantest's Semiconductor and Component Test System Segment focused on stimulating customer's motivation to invest despite worsening market conditions by launching new products for memory and non-memory semiconductors. Our Mechatronics System and Services, Support and Others Segments also sought to increase net sales with strategies such as obtaining new customers in growth sectors. As a result, Advantest's net sales in fiscal 2015 decreased by 1.0%, as compared to fiscal 2014, to ¥162,111 million. Net income attributable to owners of the parent was ¥6,694 million, mainly due to an increase in costs denominated in foreign currency due to the continuing depreciation of the yen. Advantest sought to improve performance, with a focus on capturing new demand from the memory sector, where customers are now highly motivated to invest. As a result, Advantest's net sales in fiscal 2016 decreased by 3.8%, as compared to fiscal 2015, to ¥155,916 million in spite of appreciation of the yen. Net income attributable to owners of the parent was ¥14,201 million, mainly due to a more profitable sales mix and an increase of deferred tax assets in comparison to the previous fiscal year.

Advantest believes that its results are significantly affected by the significant volatility in demand in the semiconductor industry. While Advantest is unable to predict future trends in the semiconductor industry, if there is a significant downturn in the semiconductor industry, Advantest's financial condition and results of operations will be adversely affected. With respect to semiconductor prices in recent years, even though prices for products such as DRAM have bottomed out and are rising, if the prices decline as a result of over-supply of semiconductors, semiconductor manufacturers' earnings could deteriorate, resulting in their restraint towards capital expenditures, and Advantest's results of operations could be adversely affected.

If Advantest does not introduce new products meeting its customers' technical requirements in a timely manner and at competitive prices, its products may become obsolete and its financial condition and results of operations may suffer

Advantest sells its products to several industries that are characterized by rapid technological changes, frequent introduction of new products and services, varying and unpredictable product lifecycles and evolving industry standards. Advantest anticipates that future demand for its products will be driven, in large part, by technological innovation in semiconductor technology, which creates new testing requirements that are not adequately addressed by currently-installed semiconductor test systems. Customer needs in response to these technological innovations, and their need for greater cost-effectiveness and efficiency to respond to the market environment, include:

• test solutions of non-memory semiconductors that incorporate more advanced memory semiconductors, logic and analog circuits;

• test solutions of power semiconductors that control small and large motor drives;

• solutions for complexed IC incorporating RF, logic and memory chips in a single package in order to achieve IC with advanced 3D integration as well as downsizing and technical advantages, through TSV technology;

• mechatronics-related products which transport devices faster, more accurately and more stably;

• test solutions of testing technologies that employ self-test circuit designs incorporated into semiconductor chips;

• test solutions of testing technologies that employ test circuit designs for Device Under Test (DUT);

• test solutions of system level testing that guarantees performance of the final products;

• introduction of mechatronics products that respond to reduced testing time resulting from advances in customers' back-end testing;

• prompt response and quick repair in the event of failure;

• total solutions that allow customers to reduce their testing costs; and

• solutions for measurement and observation of state-of-the-art photomasks and wafer.

Advantest also believes demand for its products, including semiconductor and component test systems, is affected by the level of demand for personal computers, high-speed wireless and wireline data services, digital consumer products and communication devices, such as smartphones and wearable devices, and data servers. It is likely that advances in technologies used in those products and services will require new testing systems. Without the timely introduction of semiconductor test systems capable of effectively testing and measuring equipment that use these new technologies, Advantest's products and services may become technologically obsolete over time.

A failure by Advantest to meet its customers' technical requirements at competitive prices or to deliver conforming equipment in a timely manner may result in its products being replaced by those of a competitor or an alternative technology solution. Furthermore, Advantest's inability to secure sufficient personnel appropriate for the business during a period of recovery or its inability to provide a product that meets requested performance criteria at an acceptable price when required by its customers would severely damage its reputation with such customers and may adversely affect future sales efforts with respect to such customers.

Advantest's dependence on a sole source or a limited number of suppliers for its components and parts may prevent it from delivering its products on a timely basis or its failure to meet the demand for its products upon a sudden expansion of the markets may adversely affect its future market share and financial results

Advantest relies on suppliers to perform some of the assembly requirements for its products. In addition, many of the components used in Advantest's semiconductor and component test systems and mechatronics systems are produced by suppliers based on Advantest's specifications. Advantest's reliance on these suppliers gives it less control over the manufacturing process and exposes it to significant risks, especially inadequate manufacturing capacity, late delivery, substandard quality, lack of labor availability and high costs. In addition, Advantest depends on a sole source or a limited number of suppliers for a portion of its components and parts. Advantest does not maintain long-term supply agreements with most of its suppliers, and it purchases most of its components and parts through individual purchase orders. If a supplier becomes unable to provide components or parts in the volumes needed and at acceptable prices, or if a supplier withdraws from business thereby stopping production or sales of custom or general components and parts that Advantest uses or will use in the future, or a large scale natural disaster or electricity shortage occurs, Advantest would have to identify and procure acceptable replacements. Advantest may lose its capacity to supply test systems if it becomes unable to procure acceptable replacements. Suppliers have typically adjusted their production capacity through the reduction of production lines and personnel. Therefore, if the market for semiconductor and component test systems and mechatronics systems were to suddenly expand, Advantest would require significant increases in production capabilities including personnel, as well as materials, components and supplies from suppliers, in order to fully capitalize on such expansion. Furthermore, the markets for semiconductors and other specialized components have, in the past, experienced periods of inadequate supply to meet demand. Moreover, there may be a shortage of components if a large scale natural disaster or electricity shortage occurs. The process of selecting suppliers and of identifying suitable replacement components and parts is lengthy and may result in Advantest being unable to deliver products meeting customer requirements in a timely manner. Advantest has, in the past, been unable to deliver its products according to production schedules primarily due to the inability of suppliers to supply components and parts based on Advantest's specifications and by other shortages in components and parts. Moreover, a deterioration in the financial position of Advantest's suppliers reflecting the decline in the economic environment or the failure of Advantest to adjust to large increases in demand for its products during the period of recovery in demand could result in Advantest losing one or more of its existing large-volume customers or losing the opportunity to establish a strong relationship with potential large-volume customers with which it currently does little or no business. Such failure may adversely affect Advantest's future market share and its financial results.

Advantest faces substantial competition in its businesses and, if Advantest does not maintain or expand its market share, its business may be harmed

Advantest faces substantial competition throughout the world. Advantest's primary competitors in the semiconductor and component test system market include, among others, Teradyne, Inc., Xcerra Corporation, UniTest Inc. and EXICON Ltd. In the mechatronics system related market, Advantest also competes with Delta Design, Inc., TechWing, Inc. and Seiko Epson Corporation in test handler devices, and with TSE Co., Ltd., Semes Co., Ltd., SL-link Co., Ltd. and TechWing, Inc. in device interfaces. Some of Advantest's competitors have greater financial and other resources than Advantest.

Advantest faces many challenges in its businesses, including increased pressure from customers to produce semiconductor and component test systems and mechatronics systems that reduce testing costs or from customers who have developed internal test solutions. For device interfaces, acquisition of vendors that supply core technical components by Advantest's competitors, or leakage of the manufacturing technology of printed circuit boards, may result in reduced testing costs by customers or difficulty by Advantest to realize its products' full performance.

To compete effectively and maintain and expand its market share, Advantest must continue to enhance its business processes to lower the cost of its products, or introduce enhancements that lower overall testing costs. Advantest also expects its competitors to continue to introduce new products with improvements in price and performance, as well as increasing their customer service and support offerings, and Advantest expects new market participants to launch low-price testers. Significant increases in competition may erode Advantest's profit margin and weaken its earnings.

Advantest may not be able to meet the targets set in its strategies and medium-term business plan

The attainment of goals such as those in medium-term business plans is subject to various internal and external factors, including the general economic and market conditions in which Advantest and its customers operate, the level of competition, the level of corporate capital expenditure, the level of demand for Advantest's products and fluctuations in exchange rates. As a result, any strategies and medium-term business goals and targets (as amended from time to time) should not be treated as forecasts of future results. There can be no assurance that Advantest's strategies to accomplish medium-term business plans and implementation of such strategies will be successful, that the implementation of its strategies will have the intended effects, that the medium-term business plan or other targets (whether quantitative or qualitative, and as amended from time to time) will be met, or that such goals, targets and aims will not be changed in the future by Advantest's management.

Advantest's largest customers currently account for a significant part of its net sales and, in addition to the risk of Advantest's business being harmed by the loss of one or more of these customers or changes in their capital expenditures, Advantest may not be able to recover its accounts receivables if its largest customers experience a deterioration in their financial position

Advantest's success depends on its continued ability to develop and manage relationships with its major customers. A small number of such major customers currently account for a significant portion of its net sales. Sales to Advantest's five largest customers accounted for approximately 38% in fiscal 2015 and approximately 32% in fiscal 2016. The loss of one or more of these major customers, changes in their capital expenditures or failure of their main products could materially harm Advantest's business. Furthermore, if Advantest's major customers experience deterioration in their financial position and are unable to fulfill their payment obligations to Advantest in accordance with the applicable terms, Advantest's business, results of operations and financial position may be adversely affected.

Advantest's product lines are facing significant price pressure

Price pressure on Advantest's businesses is adversely affecting Advantest's operating margins. Irrespective of the trend in the demand for semiconductors, there is ongoing price pressure on semiconductors, which puts continuous pressure on the market price for products in the Semiconductor and Component Test System Segment and Mechatronics System Segment. During periods when there is rapid decrease in semiconductor prices, semiconductor manufacturers, foundries and test houses, which are Advantest's customers, seek to increase their production capacities while minimizing their capital expenditures. In addition, increased competition in the market for digital consumer products, personal computers, mobile devices such as smartphones and wearable devices, and data servers have driven down prices of these goods, subsequently creating significant price pressure on Advantest's product lines. If prices of semiconductors continue to decline, customers may postpone capital expenditures on new equipment by remodeling or adapting the usage of existing equipment. If price pressure further increases in the future, Advantest's financial condition and results of operations may be adversely affected.

Fluctuations in exchange rates could reduce Advantest's profitability

The majority of Advantest's net sales are derived from products sold to customers located outside of Japan. Of Advantest's fiscal 2016 net sales, 88.2% were from products sold to overseas customers. Approximately 72% of Advantest's net sales in fiscal 2016 were derived from currencies other than the Japanese yen, predominantly the U.S. dollar. If the Japanese yen becomes strong relative to foreign currencies (mostly the U.S. dollar and, to a much lesser extent, other currencies), it would increase the prices of Advantest products as stated in U.S. dollars and in those other currencies, which could hurt sales in those countries.

With respect to the Euro, if the Japanese yen weakens, there may be a negative impact on Advantest's profitability since there are currently more costs incurred in Euro than net sales derived in Euro.

In addition, significant fluctuations in the exchange rate between the Japanese yen and foreign currencies, especially the U.S. dollar, could require Advantest to lower its prices with respect to foreign sales of its products that are priced in Japanese yen, and reduce the Japanese yen equivalent amounts of its foreign sales for products that are based in U.S. dollars or other foreign currencies, thereby reducing its profitability overall. These fluctuations could also cause prospective customers to push out or delay orders because of the increased relative cost of Advantest's products. In the past, there have been significant fluctuations in the exchange rate between the Japanese yen and the foreign currencies in which Advantest's sales are denominated.

Furthermore, Advantest's consolidated financial statements for a particular period or for a particular date will be affected by changes in the prevailing exchange rates of the currencies in which subsidiaries of Advantest prepare their financial statements against the Japanese yen. Foreign exchange rate fluctuations may have an effect on those amounts not denominated in yen which are translated into yen for Advantest's consolidated financial statements, and depending on the direction of the foreign exchange fluctuation, it may have an adverse effect on Advantest's reported financial position, results of operations and net assets.

Advantest may not recoup costs incurred in the development of new products

Enhancements to existing products and the development of new generations of products are, in most cases, costly processes. Furthermore, because the decision to purchase semiconductor and component test systems products and mechatronics systems generally involves a significant commitment of capital, the sale of this equipment typically involves a lengthy sales period and requires Advantest to expend substantial funds and sales efforts to secure the sale. Advantest's enhancements or new generations of products may not generate net sales in excess of development and sales costs if, for example, these new enhancements or products are quickly rendered obsolete by changing customer preferences, the introduction by Advantest's competitors of products embodying new technologies or features, the introduction by Advantest's customers of new products that require different testing functions or the failure of the market for Advantest's customer's products to grow at the rate, or to the levels, anticipated by Advantest. In some cases, Advantest must anticipate industry trends and develop products in advance of the commercialization of its customers' products. This requires Advantest to make significant investments in product development well before it determines the commercial viability of these innovations. If Advantest's customers fail to introduce their devices in a timely manner or the market rejects their devices, Advantest may not recover its investments in product development through sales in significant volume.

The market for Advantest's major products is highly concentrated, and Advantest may not be able to increase sales of its products because of limited opportunities

The market for test systems for memory semiconductors in the Semiconductor and Component Test System Segment is highly concentrated, with a small number of large semiconductor manufacturers, foundries and test houses accounting for a large portion of total sales in the semiconductor and component test system industry. Advantest believes that this market concentration could become even more severe in the future as larger semiconductor device manufacturers, foundries and test houses acquire smaller semiconductor market participants, and as corporate restructuring, such as elimination and consolidation of businesses, progresses. Advantest's ability to increase sales will depend in large part upon its ability to obtain or increase orders from large-volume customers. Furthermore, in the event there is an over-supply of semiconductor and component test system products on the second-hand market reflecting, among others, restructuring within the industry, or delay to meet the specific needs of Advantest's customers, Advantest faces an additional risk of losing its sales opportunities.

Advantest may be required to record a significant impairment charge which could have a material adverse effect on Advantest's financial condition and results of operations

If there is any indication of impairment for property, plant and equipment, the asset is tested for impairment. Goodwill is tested for impairment both annually and when there is any indication of impairment. An impairment loss is recognized if the recoverable amount of an asset, cash-generating unit (CGU) or CGU group is less than its carrying amount. Therefore, depending on the expected future cash flow of property, plant and equipment or business operations to which goodwill relates, Advantest may be required to record a significant impairment charge, which could have a material adverse effect on Advantest's financial condition and results of operations.

If Advantest's main facilities for research and development, production or information technology systems for its businesses, or the facilities of its subcontractors and suppliers, were to experience catastrophic loss, its results of operations would be seriously harmed

Advantest's main facilities for research and development for its Semiconductor and Component Test Systems and Mechatronics System Segments production, as well as Advantest's service bases, are located in Gunma Prefecture, Saitama Prefecture and Miyagi Prefecture in Japan. In addition, the main system server and the network hub are maintained in system centers approved by the Information System Management System, or ISMS, and local network servers are located in certain operations offices in Japan.

Japan is a region that is susceptible to frequent earthquakes. If Advantest's facilities, particularly its semiconductor and component test system manufacturing factories, were to experience a catastrophic loss from, but not limited to, earthquakes, it would materially disrupt Advantest's operations, delay production, shipments and revenue, and result in large expenses to repair or replace the facilities. Advantest has insurance to cover most potential losses at its manufacturing facilities, other than those that result from earthquakes. However, this insurance may not be adequate to cover all possible losses. Similar disruptions to Advantest's business may occur if the facilities of Advantest's subcontractors and suppliers or if the facilities of Advantest's information system network were to experience a catastrophic loss.

Advantest has prepared itself for crises such as large-scale natural disasters, and each department of Advantest has documented its own disaster-response procedures and manuals. Furthermore, in order to prevent any disruption of its core businesses, or in case of suspension, to re-start the suspended businesses, including the recovery of important facilities, in the shortest possible time, Advantest formulated and implemented a "Business Continuity Plan." However, if such Business Continuity Plan is not effective, Advantest's core businesses could be disrupted at a time of crisis, such as large-scale natural disasters, and could take a substantial amount of time to recover.

Advantest's business is subject to economic, political and other risks associated with international operations and sales

Advantest's business is subject to risks associated with conducting business internationally because it manufactures and sells its products, and purchases parts and components from, around the world. In fiscal 2016, 73.2% of Advantest's total net sales came from Asia (excluding Japan), a majority of which consisted of sales in Taiwan, the People's Republic of China ("China") and Korea, 9.5% from the Americas and 5.5% from Europe. Advantest anticipates that net sales from international operations will continue to represent a substantial portion of its total net sales. In addition, some of the Company's distribution and support subsidiaries are located in the Americas, Europe, and Asian countries, including Taiwan, Singapore, Korea and China, and some of Advantest's suppliers and factories are also located overseas, such as Korea and Malaysia. Accordingly, Advantest's future results could be harmed by a variety of factors, including:

- political and economic instability, including economic and political disruptions, disputes, natural calamities, epidemics or other risks related to countries where Advantest procures its components and parts or manufactures and sells its products;

- trade protection measures and import or export licensing requirements;

- potentially negative consequences from changes in tax laws;

- risks with respect to international taxation, including transfer pricing regulations;

- difficulty in staffing and managing widespread operations;

- differing protection of intellectual property;

- difficulties in collecting accounts receivable because of distance and different legal rules;

- risks with respect to social and political crises and issues resulting from, among others, terrorism, war and deterioration in the political and/or economic relationships between Japan and other countries;

- risks with respect to decline in the quality of procurement and manufacturing where Advantest's suppliers or manufacturing facilities are located in countries that do not have developed infrastructures in mechanical processing and assembly; and

- risks with respect to increases in cost, delays in delivery or expenses in repairing products where low quality and counterfeit products are mixed into the supply chain.

Advantest may not be able to recover its capital expenditures

Advantest continues to make capital expenditures. From fiscal 2012 through fiscal 2013, Advantest built a new factory in South Korea in order to increase its share of sales to major Korean customers. The factory began operating in May 2013. Advantest may not be able to recover the capital expenditures for such projects within the assumed timeframe, or at all, if it cannot achieve the assumed volume of sales due to customers cutting back on capital expenditures or if intense competition with competitors results in a reduction in unit prices. In such event, the asset would be subject to impairment, which may have an adverse impact on Advantest's profitability.

Advantest's business may be negatively affected by factors relating to its marketing and sales capabilities and its branding

Advantest's business may be negatively affected by factors relating to its marketing and sales capabilities and its branding, including:

- the long selling process involved in the sale of semiconductor and component test systems and mechatronics system;

- the relatively small number of total units sold in the semiconductor and component test system and mechatronics system market;

- order cancellations or postponement of capital expenditures by customers;

- delays in collection of accounts receivable, increases in losses resulting from bad debt or increases in provisions for doubtful receivables, reflecting the financial condition of customers;

- increases in required provisions for product warranty costs and write-downs of inventory; and

- any real or perceived decrease in performance and reliability of Advantest products, which could lead to a decline in Advantest's reputation.

Chemicals used by Advantest may become subject to more stringent regulations, and Advantest may be required to incur significant costs in adapting to new requirements

Advantest uses chemicals in the manufacturing of its products, the manufacture, processing and distribution of which are subject to environmental related laws, regulations and rules of Japanese governmental agencies, as well as by various industry organizations and other regulatory bodies in other countries. These regulatory bodies may strengthen existing regulations governing chemicals used by Advantest and may also begin to regulate other chemicals used by Advantest. While Advantest is taking measures to eliminate toxic substances included in parts used to manufacture its products, Advantest uses solder, which contains lead for mounting electronic parts and components for its products except for some of them, in order to ensure the reliability of its products as a matter of priority. Further, as a method to cool some of its semiconductor and component test systems and mechatronics systems, Advantest uses fluorinated liquid which use is not currently regulated by laws. Advantest believes that it is in compliance with regulations with respect to the use of chemicals by promoting environmental policies for its products with the focus on ensuring the safety and the reliability of its products; however, Advantest must be prepared to adapt to regulatory requirements in all relevant countries as requirements change. Advantest may be required to incur significant cost in adapting to new requirements. Any failure by Advantest to comply with applicable government or industry regulations could result in restrictions on its ability to carry on with or expand sales of its products.

Advantest could suffer significant liabilities, litigation costs or licensing expenses or be prevented from

selling its products if it is infringing on the intellectual property of third parties

Advantest may be unknowingly infringing on the intellectual property rights of third parties and may be held responsible for that infringement. To date, Advantest has not been the subject of a material intellectual property claim. However, any future litigation regarding patents or other intellectual property infringement could be costly and time consuming and divert management and key personnel from Advantest's business operations. If Advantest loses a claim, it may be forced to pay significant damages, pay license fees, modify its products or processes, stop making products or stop using processes. A license could be very expensive to obtain or may not be available at all. Changing Advantest's products or processes to avoid infringing on the rights of third parties may be costly or impractical.

Advantest may be unable to protect its proprietary rights due to the difficulty of Advantest gaining access to, and investigating, the products believed to infringe on Advantest's intellectual property rights

Advantest relies on patents, utility model rights, design rights, trademarks and copyrights obtained in various countries to actively protect its proprietary rights. For instance, with respect to the device interface market, Advantest has taken legal action based on its patent and utility model rights against manufacturers that sell replicas of Advantest's products and, in some instances, has obtained injunctions against sales of such replicas. However, in general, it is difficult for Advantest to gain access to, and investigate, the products believed to infringe on its intellectual property rights. Therefore, Advantest cannot ensure that its intellectual property rights will provide meaningful protection of its proprietary rights. Nevertheless, Advantest is focused on protecting its intellectual property rights from third party infringement and will continue to monitor and enforce its rights.

The technology labor market is very competitive, and Advantest's business may suffer if Advantest is unable to hire and retain engineers and other key personnel

Advantest's future success depends partly on its ability to attract and retain highly qualified engineers for its research and development and customer service and support divisions. If Advantest fails to hire and retain a sufficient number of these personnel, it may not be able to maintain and expand its business. Advantest may need to revise its compensation and other personnel related policies to retain its existing officers and employees and attract and retain the additional personnel that it expects to require.

Damage, interference or interruption to Advantest's information technology networks and systems could hinder business continuity and lead to substantial costs or harm Advantest's reputation

Advantest relies on various information technology networks and systems, some of which are managed by third parties, to process, transmit and store electronic information, including confidential data, and to carry out and support a variety of business activities, including manufacturing, research and development, supply chain management, sales and accounting. Advantest has the Information Security Committee and Legal Department to create policies on information security measures. The IT section builds and operates the information and technology network and system based on the above-mentioned policies. However, attacks by hackers or computer viruses, wrongful use of the information security system, careless use, accidents or disasters could undermine the defenses established by Advantest and disrupt business continuity, which could not only risk leakage or tampering of information but could also result in a legal claim, litigation, damages liability or an obligation to pay fines. If this were to occur, Advantest's reputation could be harmed, Advantest could incur substantial costs, and it may have a material adverse effect upon Advantest's financial condition and results of operation.

Product defects and any damages stemming from Advantest's product liability could harm Advantest's reputation among existing and potential customers and could have a material adverse effect upon Advantest's business results and financial condition

Advantest manufactures its products in accordance with internationally accepted quality control standards such as ISO 9000. However, Advantest cannot guarantee that there are no defects in its products. Advantest maintains product liability insurance, but cannot guarantee that such insurance will sufficiently cover the ultimate amount of damages with respect to Advantest's liabilities. Therefore, shipping stoppage and delivery delay due to quality defects of parts or manufacturing defects of products, large scale accidents due to product defects or any discovery of defects in its products could harm Advantest's reputation for not adequately addressing defects, could cause Advantest to incur higher costs, could result in claims for damages and could have a material adverse effect upon Advantest's business results and financial condition.