Takara Holdings Inc. and Consolidated Subsidiaries

Consolidated Financial Statements for the Year Ended March 31, 2018 and Independent Auditor's Report

Deloitte.

Deloitte Touche Tohmatsu LLC
Shijokarasuma FT Square
20 Naginataboko-cho
Karasuma-higashiiru, Shijo-dori
Shimogyo-ku, Kyoto 600-8008
Japan

Tel: +81 (75) 222 0181
Fax: +81 (75) 231 2703
www.deloitte.com/jp/en

INDEPENDENT AUDITOR'S REPORT

To the Board of Directors of Takara Holdings Inc.:

We have audited the accompanying consolidated balance sheet of Takara Holdings Inc. and its consolidated subsidiaries as of March 31, 2018, and the related consolidated statements of income, comprehensive income, changes in equity, and cash flows for the year then ended, and a summary of significant accounting policies and other explanatory information, all expressed in Japanese yen.

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 accounting principles generally accepted in Japan, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

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. In making those risk assessments, the auditor considers internal control 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, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. 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 consolidated financial position of Takara Holdings Inc. and its consolidated subsidiaries as of March 31, 2018, and the consolidated results of their operations and their cash flows for the year then ended in accordance with accounting principles generally accepted in Japan.

Convenience Translation

Our audit also comprehended the translation of Japanese yen amounts into U.S. dollar amounts and, in our opinion, such translation has been made in accordance with the basis stated in Note 1 to the consolidated financial statements. Such U.S. dollar amounts are presented solely for the convenience of readers outside Japan.

Deloitte Touche Tohmatsu LLC

June 7, 2018

Takara Holdings Inc. and Consolidated Subsidiaries

Consolidated Balance Sheet
March 31, 2018

ASSETS	Millions of Yen 2018	Millions of Yen 2017	Thousands of U.S. Dollars (Note 1) 2018
CURRENT ASSETS:			
Cash and cash equivalents (Note 16)	¥ 49,341	¥ 58,765	$ 465,481
Time deposits (Note 16)	9,445	7,524	89,103
Marketable securities (Notes 4 and 16)	8,690	5,021	81,981
Notes and accounts receivable (Notes 7 and 16):			
Trade	57,889	57,951	546,122
Other	574	778	5,415
Allowance for doubtful accounts	(329)	(236)	(3,103)
Inventories (Notes 5, 7, and 8)	42,909	39,851	404,801
Deferred tax assets (Note 13)	2,284	2,112	21,547
Prepaid expenses and other current assets	2,547	2,144	24,028
Total current assets	173,352	173,912	1,635,396
PROPERTY, PLANT, AND EQUIPMENT (Notes 6, 7, and 21):			
Land	18,821	20,089	177,556
Buildings and structures	53,842	53,980	507,943
Machinery, equipment, and vehicles	83,143	82,563	784,367
Tools, furniture and fixtures	15,462	14,609	145,867
Lease assets	1,050	2,056	9,905
Construction in progress	1,064	262	10,037
Total	173,384	173,561	1,635,698
Accumulated depreciation	(115,898)	(114,387)	(1,093,377)
Net property, plant, and equipment	57,485	59,174	542,311
INVESTMENTS AND OTHER ASSETS:			
Investment securities (Notes 4 and 16)	27,091	24,135	255,575
Investments in and advances to unconsolidated subsidiaries and associated companies	1,516	1,447	14,301
Goodwill (Notes 3 and 21)	13,765	6,626	129,858
Deferred tax assets (Note 13)	1,783	1,496	16,820
Other assets (Note 9)	12,064	7,575	113,811
Total investments and other assets	56,221	41,282	530,386
TOTAL	¥ 287,059	¥ 274,368	$ 2,708,103

LIABILITIES AND EQUITY	Millions of Yen 2018	Millions of Yen 2017	Thousands of U.S. Dollars (Note 1) 2018
CURRENT LIABILITIES:			
Short-term bank loans (Notes 7 and 16)	¥ 4,919	¥ 8,389	$ 46,405
Current portion of long-term debt (Notes 7 and 16)	466	11,106	4,396
Notes and accounts payable (Note 16):			
Trade	16,512	16,759	155,773
Associated companies		6	
Construction and other	4,084	4,822	38,528
Liquor taxes payable (Notes 8 and 16)	9,278	7,593	87,528
Income taxes payable (Note 16)	3,126	2,468	29,490
Accrued expenses	7,992	8,025	75,396
Accrued sales promotion expenses	1,853	1,899	17,481
Other current liabilities	4,477	4,435	42,235
Total current liabilities	52,712	65,506	497,283
LONG-TERM LIABILITIES:			
Long-term debt (Notes 7 and 16)	36,064	21,776	340,226
Liability for retirement benefits (Note 9)	8,759	8,961	82,632
Deposits	5,312	5,342	50,113
Deferred tax liabilities (Note 13)	6,293	5,564	59,367
Other	1,700	1,296	16,037
Total long-term liabilities	58,130	42,941	548,396
COMMITMENTS AND CONTINGENT LIABILITIES (Notes 7, 14, and 17)			
EQUITY (Notes 10 and 18):			
Common stock, authorized, 870,000,000 shares; issued, 201,699,743 shares in 2018 and 217,699,743 shares in 2017	13,226	13,226	124,773
Capital surplus	2,219	1,650	20,933
Retained earnings	117,571	119,729	1,109,160
Treasury stock, at cost, 2,069,224 shares in 2018 and 16,475,731 shares in 2017	(1,367)	(9,939)	(12,896)
Accumulated other comprehensive income (loss):			
Unrealized gain on available-for-sale securities	11,520	9,583	108,679
Deferred gain (loss) on derivatives under hedge accounting (Note 17)	(120)	0	(1,132)
Foreign currency translation adjustments	2,645	1,426	24,952
Defined retirement benefit plans	(583)	(634)	(5,500)
Total	145,111	135,043	1,368,971
Noncontrolling interests	31,106	30,877	293,452
Total equity	176,217	165,920	1,662,424
TOTAL	¥ 287,059	¥ 274,368	$ 2,708,103

See notes to consolidated financial statements.

Takara Holdings Inc. and Consolidated Subsidiaries

Consolidated Statement of Income
Year Ended March 31, 2018

	Millions of Yen 2018	Millions of Yen 2017	Thousands of U.S. Dollars (Note 1) 2018
NET SALES (Notes 11 and 21)	¥ 268,142	¥ 234,193	$ 2,529,641
COST OF SALES (Notes 8, 9, 11, and 21)	163,529	140,182	1,542,726
Gross profit	104,612	94,010	986,905
SELLING, GENERAL AND ADMINISTRATIVE EXPENSES (Notes 9, 12, and 20)	88,999	80,458	839,613
Operating income	15,612	13,551	147,283
OTHER INCOME (EXPENSES):			
Interest and dividend income	700	659	6,603
Gain on sales of shares of subsidiaries and associates	3,312		31,245
Subsidy income	239	288	2,254
Gain on step acquisitions		878	
Interest expense	(568)	(481)	(5,358)
Bond issuance cost	(112)		(1,056)
Impairment loss (Notes 6 and 21)	(446)	(667)	(4,207)
Loss on disposals of property, plant, and equipment	(222)	(264)	(2,094)
Other, net	388	554	3,660
Other income, net	3,291	968	31,047
INCOME BEFORE INCOME TAXES	18,903	14,520	178,330
INCOME TAXES (Note 13):			
Current	6,859	5,208	64,707
Deferred	(484)	74	(4,566)
Total income taxes	6,374	5,283	60,132
NET INCOME	12,528	9,236	118,188
NET INCOME ATTRIBUTABLE TO NONCONTROLLING INTERESTS	1,499	755	14,141
NET INCOME ATTRIBUTABLE TO OWNERS OF THE PARENT	¥ 11,029	¥ 8,480	$ 104,047

	Yen		U.S. Dollars
PER SHARE OF COMMON STOCK (Notes 2.*s* and 18):			
Basic net income	¥54.97	¥42.15	$0.51
Cash dividends applicable to the year	16.00	13.00	0.15

See notes to consolidated financial statements.

Takara Holdings Inc. and Consolidated Subsidiaries

Consolidated Statement of Comprehensive Income
Year Ended March 31, 2018

	Millions of Yen		Thousands of U.S. Dollars (Note 1)
	2018	2017	2018
NET INCOME	¥ 12,528	¥ 9,236	$ 118,188
OTHER COMPREHENSIVE INCOME (LOSS) (Note 18):			
Unrealized gain on available-for-sale securities	1,936	2,760	18,264
Deferred (loss) gain on derivatives under hedge accounting	(115)	446	(1,084)
Foreign currency translation adjustments	1,262	(4,310)	11,905
Defined retirement benefit plans	93	(348)	877
Total other comprehensive gain (loss)	3,177	(1,451)	29,971
COMPREHENSIVE INCOME	¥ 15,706	¥ 7,784	$ 148,169
TOTAL COMPREHENSIVE INCOME ATTRIBUTABLE TO:			
Owners of the parent	¥14,114	¥7,300	$133,150
Noncontrolling interests	1,591	483	15,009

See notes to consolidated financial statements.

Takara Holdings Inc. and Consolidated Subsidiaries

Consolidated Statement of Changes in Equity
Year Ended March 31, 2018

	Thousands	Millions of Yen										
						Accumulated Other Comprehensive Income						
	Number of Shares of Common Stock Outstanding	Common Stock	Capital Surplus	Retained Earnings	Treasury Stock	Unrealized Gain on Available-for-Sale Securities	Deferred (Loss) Gain on Derivatives under Hedge Accounting	Foreign Currency Translation Adjustments	Defined Retirement Benefit Plans	Total	Noncontrolling Interests	Total Equity
BALANCE, APRIL 1, 2016	201,224	¥ 13,226	¥ 1,879	¥ 113,663	¥ (9,938)	¥ 6,822	¥ (445)	¥ 5,548	¥ (370)	¥ 130,386	¥ 25,762	¥ 156,148
Net income attributable to owners of the parent				8,480						8,480		8,480
Cash dividends, ¥12.0 per share				(2,414)						(2,414)		(2,414)
Net increase in treasury stock	0		0		(0)					(0)		(0)
Purchase of shares of consolidated subsidiary			(229)							(229)		(229)
Net change in the year						2,760	445	(4,122)	(264)	(1,179)	5,115	3,935
BALANCE, MARCH 31, 2017	201,224	13,226	1,650	119,729	(9,939)	9,583	0	1,426	(634)	135,043	30,877	165,920
Net income attributable to owners of the parent				11,029						11,029		11,029
Cash dividends, ¥13.0 per share				(2,615)						(2,615)		(2,615)
Purchase of treasury shares	(1,594)				(2,001)					(2,001)		(2,001)
Disposal of treasury shares	0		0		0					0		0
Retirement of treasury shares			(10,572)		10,572							
Purchase of shares of consolidated subsidiary			570							570		570
Transfer to capital surplus from retained earnings			10,572	(10,572)								
Net change in the year						1,936	(121)	1,218	51	3,085	228	3,314
BALANCE, MARCH 31, 2018	199,631	¥ 13,226	¥ 2,219	¥ 117,571	¥ (1,367)	¥ 11,520	¥ (120)	¥ 2,645	¥ (583)	¥ 145,111	¥ 31,106	¥ 176,217

	Thousands of U.S. Dollars (Note 1)										
					Accumulated Other Comprehensive Income						
	Common Stock	Capital Surplus	Retained Earnings	Treasury Stock	Unrealized Gain on Available-for-Sale Securities	Deferred (Loss) Gain on Derivatives under Hedge Accounting	Foreign Currency Translation Adjustments	Defined Retirement Benefit Plans	Total	Noncontrolling Interests	Total Equity
BALANCE, MARCH 31, 2017	$ 124,773	$ 15,566	$ 1,129,518	$ (93,764)	$ 90,405	$ 0	$ 13,452	$ (5,981)	$ 1,273,990	$ 291,292	$ 1,565,283
Net income attributable to owners of the parent			104,047						104,047		104,047
Cash dividends, $0.12 per share			(24,669)						(24,669)		(24,669)
Purchase of treasury shares				(18,877)					(18,877)		(18,877)
Disposal of treasury shares		0		0					0		0
Retirement of treasury shares		(99,735)		99,735							
Purchase of shares of consolidated subsidiary		5,377							5,377		5,377
Transfer to capital surplus from retained earnings		99,735	(99,735)								
Net change in the year					18,264	(1,141)	11,490	481	29,103	2,150	31,264
BALANCE, MARCH 31, 2018	$ 124,773	$ 20,993	$ 1,109,160	$ (12,896)	$ 108,679	$ (1,132)	$ 24,952	$ (5,500)	$ 1,368,971	$ 293,452	$ 1,662,424

See notes to consolidated financial statements.

Takara Holdings Inc. and Consolidated Subsidiaries

Consolidated Statement of Cash Flows
Year Ended March 31, 2018

	Millions of Yen		Thousands of U.S. Dollars (Note 1)
	2018	2017	2018
OPERATING ACTIVITIES:			
Income before income taxes	¥ 18,903	¥ 14,520	$ 178,330
Adjustments for:			
Income taxes paid	(6,017)	(5,218)	(56,764)
Depreciation and amortization	7,702	6,213	72,660
Impairment loss	446	667	4,207
Gain on step acquisitions		(878)	
Bond issuance cost	112		1,056
Gain on sales of shares of subsidiaries and associates	(3,312)		(31,245)
Changes in assets and liabilities:			
Increase in trade receivables	(240)	(1,334)	(2,264)
Increase in inventories	(2,520)	(1,377)	(23,773)
Decrease in interest and dividends receivable	19	37	179
(Decrease) increase in trade payables	(10)	208	(94)
Increase (decrease) in liquor taxes payable	1,685	(261)	15,896
Increase in consumption taxes payable	176	478	1,660
Increase in interest payable	8	6	75
Increase in liability for retirement benefits	51	419	481
Other, net	(739)	(653)	(6,971)
Total adjustments	(2,638)	(1,694)	(24,886)
Net cash provided by operating activities	16,265	12,826	153,443
INVESTING ACTIVITIES:			
Net (increase) decrease in time deposits	(1,833)	8,449	(17,292)
Purchases of marketable securities and investment securities	(12,783)	(10,070)	(120,594)
Proceeds from sales and redemption of marketable securities	8,736	22,028	82,415
Purchases of property, plant, and equipment	(6,601)	(5,376)	(62,273)
Purchases of shares of subsidiaries resulting in change in scope of consolidation (Note 14)	(12,396)	(1,327)	(116,943)
Proceeds from purchase of shares of subsidiaries resulting in change in scope of consolidation (Note 14)		2,070	
Proceeds from sales of shares of subsidiary resulting in change in scope of consolidation (Note 14)	4,150		39,150
Other, net	811	426	7,650
Net cash (used in) provided by investing activities	(19,916)	16,200	(187,886)

(Continued)

Takara Holdings Inc. and Consolidated Subsidiaries

Consolidated Statement of Cash Flows
Year Ended March 31, 2018

	Millions of Yen		Thousands of U.S. Dollars (Note 1)
	2018	2017	2018
FINANCING ACTIVITIES:			
Net (decrease) increase in short-term loans payable	¥ (3,356)	¥ 72	$ (31,660)
Repayment of long-term loans payable	(858)	(108)	(8,094)
Proceeds from issuance of bonds	14,887		140,443
Redemption of bonds	(10,547)		(99,500)
Purchases of treasury shares	(2,001)	(0)	(18,877)
Cash dividends paid	(2,614)	(2,413)	(24,660)
Proceeds from changes in ownership interests in subsidiaries that do not result in change in scope of consolidation	(585)		(5,518)
Other, net	(493)	(379)	(4,650)
Net cash used in financing activities	(5,570)	(2,828)	(52,547)
FOREIGN CURRENCY TRANSLATION ADJUSTMENTS ON CASH AND CASH EQUIVALENTS	(202)	31	(1,905)
NET (DECREASE) INCREASE IN CASH AND CASH EQUIVALENTS	(9,423)	26,228	(88,896)
CASH AND CASH EQUIVALENTS, BEGINNING OF YEAR	58,765	32,536	554,386
CASH AND CASH EQUIVALENTS, END OF YEAR	¥ 49,341	¥ 58,765	$ 465,481

See notes to consolidated financial statements.

(Concluded)

1. BASIS OF PRESENTATION OF CONSOLIDATED FINANCIAL STATEMENTS

The accompanying consolidated financial statements have been prepared in accordance with the provisions set forth in the Japanese Financial Instruments and Exchange Act and its related accounting regulations, and in conformity with accounting principles generally accepted in Japan ("Japanese GAAP"), which are different in certain respects as to the application and disclosure requirements of International Financial Reporting Standards.

In preparing these consolidated financial statements, certain reclassifications and rearrangements have been made to the consolidated financial statements issued domestically in order to present them in a form which is more familiar to readers outside Japan. In addition, certain reclassifications have been made in the 2017 consolidated financial statements to conform to the classifications used in 2018.

The consolidated financial statements are stated in Japanese yen, the currency of the country in which Takara Holdings Inc. (the "Company") is incorporated and operates. Japanese yen figures of less than a million yen are rounded down to the nearest million yen, except for per share data and the amounts in Notes 2.*s* and 19. The translations of Japanese yen amounts into U.S. dollar amounts are included solely for the convenience of readers outside Japan and have been made at the rate of ¥106 to $1, the approximate rate of exchange at March 31, 2018. U.S. dollar figures of less than a thousand dollars are rounded down to the nearest thousand dollars, except for per share data and the amounts in Notes 2.*s* and 18. Such translations should not be construed as representations that the Japanese yen amounts could be converted into U.S. dollars at that or any other rate.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

a. Consolidation - The consolidated financial statements for the years ended March 31, 2018 and 2017 include the accounts of the Company and its 61 consolidated subsidiaries (together, the "Group"). Under the control and influence concepts, those companies in which the Company, directly or indirectly, is able to exercise control over operations are fully consolidated, and those companies over which the Group has the ability to exercise significant influence are accounted for by the equity method.

An investment in an associated company in 2018 and 2017 is accounted for by the equity method.

Investments in remaining unconsolidated subsidiaries and associated companies are stated at cost. If the equity method of accounting had been applied to the investments in these companies, the effect on the accompanying consolidated financial statements would not be material.

Foreign subsidiaries of the Company have a fiscal year ending December 31. The accounts of those subsidiaries are included in the Company's consolidated financial statements based on the subsidiaries' fiscal year. Necessary adjustments have been made for significant events that occurred during the period between their fiscal year ends and March 31.

All significant intercompany balances and transactions have been eliminated in consolidation. All material unrealized profit included in assets resulting from transactions within the Group is also eliminated.

b. ***Unification of Accounting Policies Applied to Foreign Subsidiaries for the Consolidated Financial Statements*** - Under Accounting Standards Board of Japan ("ASBJ") Practical Issues Task Force ("PITF") No. 18, "Practical Solution on Unification of Accounting Policies Applied to Foreign Subsidiaries for the Consolidated Financial Statements," the accounting policies and procedures applied to a parent company and its subsidiaries for similar transactions and events under similar circumstances should in principle be unified for the preparation of the consolidated financial statements. However, financial statements prepared by foreign subsidiaries in accordance with either International Financial Reporting Standards or generally accepted accounting principles in the United States of America (Financial Accounting Standards Board Accounting Standards Codification) tentatively may be used for the consolidation process, except for the following items that should be adjusted in the consolidation process so that net income is accounted for in accordance with Japanese GAAP, unless they are not material: (a) amortization of goodwill; (b) scheduled amortization of actuarial gain or loss of pensions that has been recorded in equity through other comprehensive income; (c) expensing capitalized development costs of R&D; and (d) cancellation of the fair value model of accounting for property, plant, and equipment and investment properties and incorporation of the cost model of accounting.

c. ***Unification of Accounting Policies Applied to Foreign Associated Companies for the Equity Method*** - ASBJ Statement No. 16, "Accounting Standard for Equity Method of Accounting for Investments," requires adjustments to be made to conform the associate's accounting policies for similar transactions and events under similar circumstances to those of the parent company when the associate's financial statements are used in applying the equity method, unless it is impracticable to determine such adjustments. In addition, financial statements prepared by foreign associated companies in accordance with either International Financial Reporting Standards or generally accepted accounting principles in the United States of America tentatively may be used in applying the equity method if the following items are adjusted so that net income is accounted for in accordance with Japanese GAAP, unless they are not material: (a) amortization of goodwill; (b) scheduled amortization of actuarial gain or loss of pensions that has been recorded in equity through other comprehensive income; (c) expensing capitalized development costs of R&D; and (d) cancellation of the fair value model of accounting for property, plant, and equipment and investment properties and incorporation of the cost model of accounting.

d. ***Business Combinations*** - Business combinations are accounted for using the purchase method. Acquisition-related costs, such as advisory fees or professional fees, are accounted for as expenses in the periods in which the costs are incurred. If the initial accounting for a business combination is incomplete by the end of the reporting period in which the business combination occurs, an acquirer shall report in its financial statements provisional amounts for the items for which the accounting is incomplete. During the measurement period, which shall not exceed one year from the acquisition, the acquirer shall retrospectively adjust the provisional amounts recognized at the acquisition date to reflect new information obtained about facts and circumstances that existed as of the acquisition date and that would have affected the measurement of the amounts recognized as of that date. Such adjustments shall be recognized as if the accounting for the business combination had been completed at the acquisition date. A parent's ownership interest in a subsidiary might change if the parent purchases or sells ownership interests in its subsidiary. The carrying amount of noncontrolling interest is adjusted to reflect the change in the parent's ownership interest in its subsidiary while the parent retains its controlling interest in its subsidiary. Any difference between the fair value of the consideration received or paid and the amount by which the noncontrolling interest is adjusted is accounted for as capital surplus as long as the parent retains control over its subsidiary.

In the current year, Takara Bio USA Holdings Inc. ("TBUSH"), a wholly owned subsidiary of Takara Bio Inc. ("Bio"), purchased the shares of Rubicon Genomics, Inc. ("Rubicon"), and Rubicon was included in the scope of consolidation. However, as Rubicon was merged with Takara Bio USA, Inc. due to an absorption-type merger in which consolidated subsidiary Takara Bio USA, Inc. was the surviving company, Rubicon has been excluded from the scope of consolidation.

As TBUSH acquired the shares of WaferGen Bio-systems, Inc. ("WaferGen"), WaferGen and its subsidiaries WaferGen Biosystems Europe S.a.r.l. and WaferGen, Inc. were included in the scope of consolidation. However, WaferGen and WaferGen, Inc. were merged with Takara Bio USA, Inc. due to an absorption-type merger in which consolidated subsidiary Takara Bio USA, Inc. was the surviving company. Also, WaferGen Biosystems Europe S.a.r.l. being insignificant as a defunct company. Thus, these entities have been excluded from the scope of consolidation.

These acquisitions were accounted for by the purchase method of accounting (see Note 3).

In the current year, the Company established Takara Shuzo International Co., Ltd. ("Takara Shuzo International"), and included Takara Shuzo International in the scope of consolidation.

TAKARA CHOU UN Co., Ltd. ("TAKARA CHOU UN") was excluded from the scope of consolidation due to the transfer of all shares owned in Takara Shuzo Co., Ltd. ("Takara Shuzo"). (See Note 3)

e. ***Cash Equivalents*** - Cash equivalents are short-term investments that are readily convertible into cash and exposed to insignificant risk of changes in value. Cash equivalents include time deposits, certificates of deposit, trust fund investments, commercial paper, and trust beneficiary rights, all of which mature or become due within three months of the date of acquisition.

f. ***Marketable and Investment Securities*** - Marketable and investment securities are classified and accounted for, depending on management's intent, as follows: (1) held-to-maturity debt securities, for which there is the positive intent and ability to hold to maturity, are reported at amortized cost and (2) available-for-sale securities, which are not classified as either of the aforementioned securities, are reported at fair value, with unrealized gains and losses, net of applicable taxes, reported in a separate component of equity.

Nonmarketable available-for-sale securities are stated at cost determined by the moving-average method.

For other-than-temporary declines in fair value, investment securities are reduced to net realizable value by a charge to income.

g. ***Inventories*** - Inventories are mainly stated at the lower of cost, determined by the average method, or net selling value.

h. ***Property, Plant, and Equipment*** - Property, plant, and equipment are stated at cost. Depreciation is computed principally by the declining-balance method at rates based on the estimated useful lives of the assets. The range of useful lives is principally from 3 to 50 years for buildings and structures and from 4 to 15 years for machinery, equipment, and vehicles.

i. ***Long-Lived Assets -*** The Group reviews its long-lived assets for impairment whenever events or changes in circumstances indicate the carrying amount of an asset or asset group may not be recoverable. An impairment loss would be recognized if the carrying amount of an asset or asset group exceeds the sum of the undiscounted future cash flows expected to result from the continued use and eventual disposition of the asset or asset group. The impairment loss would be measured as the amount by which the carrying amount of the asset exceeds its recoverable amount, which is the higher of the discounted cash flows from the continued use and eventual disposition of the asset, or the net selling price at disposition.

j. ***Goodwill -*** The Company and its domestic and overseas consolidated subsidiaries amortize goodwill on a pro rata basis over a certain period not exceeding 20 years. Accounting for impairment of long-lived assets also applies to goodwill.

k. ***Retirement and Pension Plans*** - Each of the employee retirement benefit programs of the Company and certain consolidated subsidiaries consists of an unfunded lump-sum severance payment plan, a defined benefit corporate pension plan, and a defined contribution pension plan as described in Note 9.

The Company accounts for liability for retirement benefits based on the projected benefit obligations and plan assets at the balance sheet date. The projected benefit obligations are attributed to periods on a benefit formula basis. Actuarial gains and losses and past service costs that are yet to be recognized in profit or loss are recognized within accumulated other comprehensive income, after adjusting for tax effects, and are recognized in profit or loss over 10 years, no longer than the expected average remaining service period of the employees.

l. ***Allowance for Doubtful Accounts -*** The allowance for doubtful accounts is stated in amounts considered to be appropriate based on the Group's past credit loss experience and an evaluation of potential losses in the receivables outstanding.

m. ***Accrued Sales Promotion Expenses -*** Accrued sales promotion expenses are stated at amounts considered to be appropriate based on the purchased quantities of finished products by retail stores, identified by Takara Shuzo, multiplied by the past year actual unit cost of the relevant products.

n. ***Leases -*** Finance lease transactions are capitalized by recognizing lease assets and lease obligations in the balance sheet.

Lease assets related to finance lease transactions without title transfer are depreciated on a straight-line basis over the leased periods, which are their useful lives, and with no residual value.

o. ***Income Taxes -*** The provision for income taxes is computed based on the pretax income included in the consolidated statement of income. The asset and liability approach is used to recognize deferred tax assets and liabilities for the expected future tax consequences of temporary differences between the carrying amounts and the tax bases of assets and liabilities. Deferred taxes are measured by applying currently enacted tax rates to the temporary differences.

On December 22, 2017, the Tax Reform Act was enacted in the United States. In compliance to the Act, federal corporate income tax rate in the United States applicable to the Company's U.S. consolidated subsidiaries was reduced from 35% to 21% effective from the fiscal year starting after January 1, 2018. The effect of this tax rate change on the consolidated financial statements is not material.

p. ***Foreign Currency Transactions -*** All short-term and long-term monetary receivables and payables denominated in foreign currencies are translated into Japanese yen at the exchange rates at the balance sheet date. The foreign exchange gains and losses from translation are recognized in the consolidated statement of income to the extent that they are not hedged by forward exchange contracts.

q. ***Foreign Currency Financial Statements -*** The balance sheet accounts of the consolidated foreign subsidiaries are translated into Japanese yen at the current exchange rate as of the balance sheet date except for equity, which is translated at the historical rate. The resulting translation differences, less those attributable to noncontrolling interests, are shown as "Foreign currency translation adjustments" under accumulated other comprehensive income in a separate component of equity. Revenue and expense accounts of consolidated foreign subsidiaries are translated into Japanese yen at the average exchange rate.

r. ***Derivative Financial Instruments -*** The Group uses derivative financial instruments, such as foreign currency forward contracts and foreign currency options, as a means of hedging exposure to foreign currency exchange rate risks. The Group does not enter into derivatives for trading or speculative purposes.

Derivative financial instruments and foreign currency transactions are classified and accounted for as follows: (1) all derivatives are recognized as either assets or liabilities and measured at fair value, and gains or losses on derivative transactions are recognized in the consolidated statement of income, and (2) for derivatives used for hedging purposes, if such derivatives qualify for hedge accounting because of high correlation and effectiveness between the hedging instruments and the hedged items, gains or losses on derivatives are deferred until maturity of the hedged transactions.

The foreign currency forward contracts are utilized to hedge payments of royalties and foreign currency import transactions. Payables denominated in foreign currencies are translated at the contracted rates if the forward contracts qualify for hedge accounting.

Foreign currency options are utilized to hedge foreign currency exposures in the procurement of raw materials from overseas suppliers. These options, which qualify for hedge accounting, are measured at fair value at the balance sheet date and the unrealized gains or losses are deferred until maturity as another liability or asset.

s. ***Per Share Information*** - Basic net income per share is computed by dividing net income available to common shareholders by the weighted-average number of common shares outstanding for the period.

Cash dividends per share presented in the accompanying consolidated statements of income are dividends applicable to the respective years, including dividends to be paid after the end of the year.

t. ***Accounting Standard Issued but Not Yet Applied***

- ASBJ Statement No. 29, "Accounting Standard for Revenue Recognition (March 30, 2018)"

- ASBJ Guidance No. 30, "Implementation Guidance on Accounting Standard for Revenue Recognition"

The International Accounting Standards Board (IASB) and US Financial Accounting Standards Board (FASB) issued their joint revenue recognition standard, "Revenue from Contracts with Customers" (International Financial Reporting Standards (IFRS) 15 and Topic 606). IFRS 15 applies to an entity's first annual IFRS financial statements for a period beginning on or after January 1, 2018 and Topic 606 applies to an entity's first annual US GAAP financial statements for a period beginning on or after December 25, 2017.

Based on such circumstances, ASBJ started to consider development of a comprehensive accounting standard for revenue recognition and issued ASBJ Statement No. 29 together with ASBJ Guidance No. 30.

The fundamental reason ASBJ developed the accounting standard for revenue recognition was to build on the core principle of IFRS 15, considering financial statement comparability, which is one of the benefits from having an identical standards to IFRS 15, but if there are any items that warrant consideration based on domestic practical procedure, alternative treatments will be added as far they do not impair this comparability.

1) Scheduled date of application

The Company expects to apply the accounting standard and guidance for annual periods beginning on or after April 1, 2021.

2) The effect of applying the standard and guidance

The Company is in the process of measuring the effect at this moment.

3. BUSINESS COMBINATIONS

Business Combinations by Acquisition

a. Acquisition of Shares of Rubicon Genomics, Inc.

On December 15, 2016, the Board of Directors of Bio, a 60.91% owned subsidiary of the Company, resolved for TBUSH, a wholly owned subsidiary of Bio, to acquire all shares of Rubicon. TBUSH completed the acquisition procedure on January 17, 2017 (US Pacific Standard Time). The fiscal year-end of TBUSH is December 31.

a. Outline of the business combination

(1) Name of acquired company and its business outline

Name of the acquired company:	Rubicon Genomics, Inc.
Business outline:	Manufacturing and sales of research reagents

(2) Major reason for the business combination

Bio Group is concentrating on developing next-generation sequencing reagent kits that are used in a wide range of fields from basic research to industrial applications. As Rubicon joins Bio Group, Bio Group complements its sample preparation technology for ultra-trace DNA sequence analysis and sample preparation technology for ultra-trace RNA sequence analysis; therefore Bio Group will be able to provide a wide range of products and services in the field of ultra-trace nucleic acid analysis.

Additionally, Bio Group will be able to provide products and services to a wide range of fields from basic research to industrial application by adding WaferGen Bio-systems, Inc.'s pre-processing system for next-generation sequence analysis.

(3) Date of business combination

January 17, 2017 (US Pacific Standard Time)

(4) Legal form of business combination

Acquisition of shares

(5) Name of the company after the combination

Rubicon Genomics, Inc.

Rubicon merged with Takara Bio USA, Inc., a wholly owned subsidiary of TBUSH, on March 31, 2017 (US Pacific Standard Time).

(6) Ratio of voting rights acquired

100%

(7) Basis for determining the acquirer

It is based on the fact that TBUSH acquired 100% of voting rights by means of share acquisition in consideration for cash.

b. The period for which the operations of the acquired company are included in the consolidated financial statements

The operations of the acquired company from January 17, 2017 to December 31, 2017, were included in the consolidated statement of income for the year ended March 31, 2018.

c. Acquisition cost of the acquired company and related details of each class of consideration

	Thousands of U.S. Dollars
	2018
Consideration for acquisition – Cash	$ 74,426
Acquisition cost	$ 74,426

d. Major acquisition-related costs

	Thousands of U.S. Dollars
	2018
Advisory fees and commissions to the lawyers and financial institutions	$2,934

e. Amount of goodwill incurred, reasons for the goodwill incurred, and the method and period of amortization

(1) Amount of goodwill incurred

¥5,060 million ($44,328 thousand)

(2) Reasons for the goodwill incurred

Goodwill is incurred from expected excess earnings power in the future arising from further business development.

(3) Method and period of amortization

The goodwill is amortized on a straight-line basis over 20 years.

f. The assets acquired and the liabilities assumed at the acquisition date are as follows:

	Millions of Yen 2018	Thousands of U.S. Dollars 2018
Current assets	¥ 552	$ 4,837
Non-current assets	8,890	77,880
Total assets acquired	¥ 9,443	$ 82,717
Current liabilities	¥ 391	$ 3,429
Long-term liabilities	554	4,861
Total liabilities assumed	¥ 946	$ 8,290

g. Amount of major identifiable intangible assets other than goodwill, its details and weighted-average useful life:

	Millions of Yen 2018	Thousands of U.S. Dollars 2018	Weighted-Average Useful Life
Technology assets	¥3,664	$32,100	7 years
Customer-related assets	68	600	9 years

h. Pro forma information (unaudited)

If this business combination had been completed as of January 1, 2017, the beginning of the current fiscal year, the effects on the consolidated statement of income for the year ended March 31, 2018, would be as follows:

	Millions of Yen 2018	Thousands of U.S. Dollars 2018
Sales	¥ 62	$ 555
Operating income	(146)	(1,310)

Outline of the method of calculation for the effects above:

We estimated the approximate impact by the difference between the sales and profit loss information of the acquiree, calculated assuming that the business combination was completed as of the beginning of the fiscal year, and sales and profit loss information of the acquiree included in the consolidated statement of income of the acquirer.

The above pro forma financial information has not been audited.

b. Acquisition of Shares of WaferGen Bio-systems, Inc.

On May 13, 2016, the Board of Directors of Bio resolved for TBUSH to acquire all shares of WaferGen, and TBUSH entered into a merger agreement with WaferGen on the same day. Based on the agreement, TBUSH completed the acquisition on February 28, 2017 (US Pacific Standard Time).

a. Outline of the business combination

(1) Name of acquired company and its business outline

Name of the acquired company:	WaferGen Bio-systems, Inc.
Business outline:	Manufacturing and sales of research reagents and equipment

(2) Major reason for the business combination

Bio Group supplies research reagents, scientific instruments, and contracted services to biotechnology researchers. Specifically, Bio Group focuses on development of reagent kits for next-generation sequencers and reagent kits using SMART technology which efficiently amplifies genes from micro amounts of RNA samples under the brand name of Clontech®. Currently, Bio Group is developing reaction reagents optimized for automatic analysis devices targeted for use in the clinical field.

WaferGen provides devices and reagent kits for single-cell analysis, and their unique massively-parallel qPCR device for small amount samples, to biotechnology companies, pharmaceutical companies and clinical laboratories.

Bio Group expects synergies and increased sales of equipment and single-cell reagent kits from the combination of WaferGen technology, including the single-cell analysis and molecular biotechnology of Bio Group.

(3) Date of business combination

February 28, 2017 (US Pacific Standard Time)

(4) Legal form of business combination

Acquisition of shares

(5) Name of the company after the combination

WaferGen Bio-systems, Inc.

WaferGen merged with Takara Bio USA, Inc., a wholly owned subsidiary of TBUSH, on May 31, 2017 (US Pacific Standard Time).

(6) Ratio of voting rights acquired

100%

(7) Basis for determining the acquirer

It is based on the fact that TBUSH acquired 100% of voting rights by means of share acquisition in consideration for cash.

b. The period for which the operations of the acquired company are included in the consolidated financial statements

The operations of the acquired company from March 1, 2017 to December 31, 2017, were included in the consolidated statement of income for the year ended March 31, 2018.

c. Acquisition cost of the acquired company and related details of each class of consideration

	Thousands of U.S. Dollars
	2018
Consideration for acquisition – Cash	$ 37,545
Acquisition cost	$ 37,545

d. Major acquisition-related costs

	Thousands of U.S. Dollars
	2018
Advisory fees and commissions to the lawyers and financial institutions	$3,855

e. Amount of goodwill incurred, reasons for the goodwill incurred, and the method and period of amortization

(1) Amount of goodwill incurred

¥2,550 million ($22,682 thousand)

(2) Reasons for the goodwill incurred

Goodwill is incurred from expected excess earnings power in the future arising from further business development.

(3) Method and period of amortization

The goodwill is amortized on a straight-line basis over 20 years.

f. The assets acquired and the liabilities assumed at the acquisition date are as follows:

	Millions of Yen	Thousands of U.S. Dollars
	2018	2018
Current assets	¥ 525	$ 4,669
Non-current assets	5,181	46,080
Total assets acquired	¥ 5,706	$ 50,749
Current liabilities	¥ 928	$ 8,257
Long-term liabilities	556	4,946
Total liabilities assumed	¥ 1,484	$ 13,204

g. Amount of major identifiable intangible assets other than goodwill, its details, and weighted-average useful life:

	Millions of Yen 2018	Thousands of U.S. Dollars 2018	Weighted-Average Useful Life
Technology assets	¥1,709	$15,200	8 years
Customer related assets	33	300	9 years

h. Pro forma information (unaudited)

If this business combination had been completed as of January1, 2017, the beginning of the current fiscal year, the effects on the consolidated statement of income for the year ended March 31, 2018, would be as follows:

	Millions of Yen 2018	Thousands of U.S. Dollars 2018
Sales	¥ 60	$ 537
Operating income	(838)	(7,476)

Outline of the method of calculation for the effects above:

We estimated the approximate impact by the difference between the sales and profit loss information of the acquiree, calculated assuming that the business combination was completed as of the beginning of the fiscal year, and sales and profit loss information of the acquiree included in the consolidated statement of income of the acquirer.

The above pro forma financial information has not been audited.

Business Divestitures

Business divestures of TAKARA CHOU UN Co., Ltd.

On November 7, 2017, the board of directors of Takara Shuzo resolved to divest TAKARA CHOU UN, and sold all of its shares to Aspirant Group Inc. SPC IV, owned by AG investment Limited Partnership which is run and administered by Aspirant Group Inc. Details are as described below.

a. Outline of the business divestitures

(1) Name of the purchaser company:

Aspirant Group Inc. SPC IV

(2) Outline of the divested business:

TAKARA CHOU UN
(Type of business: Transportation, warehousing, construction, and customs broker)

(3) Major reason for the business divestitures

The Group is working on the three-year Takara Group Medium-Term Management Plan FY2020 from the current fiscal year and under the plan, the Group plans to concentrate management resource on its three business segments, which are Takara Shuzo (the domestic business), Takara Shuzo International Group (the overseas business), and Takara Bio Group (the biomedical business).

In these circumstances, it has been judged that rather than continuing the business of TAKARA CHOU UN as it stands within the Group, investing the funds obtained from the transfer of the company into the three aforementioned business segments to achieve further concentration of management resources will be more useful in enhancing the corporate value of the Group.

(4) Date of business divestitures:

November 7, 2017

(5) Outline of the legal form and others:

Stock transfer paid in properties such as cash

b. Outline of the implemented accounting treatment

(1) The amount of gain on transfer

	Millions of Yen 2018	Thousands of U.S. Dollars 2018
Gain on sales of shares of subsidiaries and associates	¥3,312	$31,245

(2) Appropriate book values of assets and liabilities of the transferred business

	Millions of Yen 2018	Thousands of U.S. Dollars 2018
Current assets	¥ 1,885	$ 17,783
Non-current assets	1,815	17,122
Total amount of assets	¥ 3,700	$ 34,905
Current liabilities	¥ 1,713	$ 16,160
Non-current liabilities	521	4,915
Total amount of liabilities	¥ 2,234	$ 21,075

(3) Accounting treatment

We allocated the difference between consolidated book value and sale value to "Other income (expenses)" as "Gain on sales of shares of subsidiaries and associates" after deducting the expense for the transfer of the shares.

c. Reported segment in which the divested business was included

Other

d. Approximate amount of a gain or loss of the divested business, included in the consolidated statement of income, for the year ended March 31, 2018

	Millions of Yen 2018	Thousands of U.S. Dollars 2018
Sales	¥2,753	$25,971

4. MARKETABLE AND INVESTMENT SECURITIES

Marketable and investment securities as of March 31, 2018 and 2017, consist of the following:

	Millions of Yen		Thousands of U.S. Dollars
	2018	2017	2018
Current:			
Debt securities	¥ 6,418	¥ 2,691	$ 60,547
Other	2,271	2,330	21,424
Total	¥ 8,690	¥ 5,021	$ 81,981
Non-current:			
Investment equity securities	¥ 27,042	¥ 24,086	$ 255,113
Debt securities	48	48	452
Total	¥ 27,091	¥ 24,135	$ 255,575

The costs and aggregate fair values of marketable and investment securities at March 31, 2018 and 2017, are as follows:

	Millions of Yen			
	Cost	Unrealized Gains	Unrealized Losses	Fair Value
March 31, 2018				
Securities classified as:				
Available-for-sale:				
Equity securities	¥8,811	¥16,556	¥18	¥25,349
Debt securities	426	0	7	418
Others	2,271			2,271
Held-to-maturity	6,000		0	5,999

	Millions of Yen			
	Cost	Unrealized Gains	Unrealized Losses	Fair Value
March 31, 2017				
Securities classified as:				
Available-for-sale:				
Equity securities	¥8,898	¥13,694	¥0	¥22,592
Debt securities	698	0	7	691
Others	2,330			2,330
Held-to-maturity	2,000			2,000

	Thousands of U.S. Dollars			
	Cost	Unrealized Gains	Unrealized Losses	Fair Value
March 31, 2018				
Securities classified as:				
Available-for-sale:				
Equity securities	$83,122	$156,188	$169	$239,141
Debt securities	4,018	0	66	3,943
Others	21,424			21,424
Held-to-maturity	56,603		0	56,594

The information for available-for-sale securities which were sold during the years ended March 31, 2018 and 2017, is as follows:

March 31, 2018	Millions of Yen Proceeds	Realized Gains	Realized Losses
Available-for-sale:			
Equity securities	¥ 300	¥ 160	¥ 0
Debt securities	171	0	
Total	¥ 471	¥ 160	¥ 0

March 31, 2017	Millions of Yen Proceeds	Realized Gains	Realized Losses
Available-for-sale:			
Equity securities	¥ 289	¥ 40	¥ 0
Debt securities	1,604	0	0
Total	¥ 1,893	¥ 40	¥ 0

March 31, 2018	Thousands of U.S. Dollars Proceeds	Realized Gains	Realized Losses
Available-for-sale:			
Equity securities	$ 2,830	$ 1,509	$ 0
Debt securities	1,613	0	
Total	$ 4,443	$ 1,509	$ 0

Investments in equity instruments that do not have a quoted market price in an active market and securities without contractual maturities (for which the totals included in the consolidated balance sheets at March 31, 2018 and 2017, are ¥1,741 million ($16,424 thousand) and ¥1,542 million, respectively) do not have fair values because their fair value cannot be reliably determined.

The impairment losses on marketable and investment securities recognized for the years ended March 31, 2018 and 2017, were as follows:

	Millions of Yen 2018	Millions of Yen 2017	Thousands of U.S. Dollars 2018
Non-marketable equity securities	¥0	¥16	$0

5. INVENTORIES

Inventories at March 31, 2018 and 2017, are as follows:

	Millions of Yen 2018	Millions of Yen 2017	Thousands of U.S. Dollars 2018
Finished products and merchandise	¥ 29,799	¥ 27,496	$ 281,122
Semifinished products	8,180	7,804	77,169
Work in process	997	1,244	9,405
Raw materials and supplies	3,932	3,306	37,094
Total	¥ 42,909	¥ 39,851	$ 404,801

6. LONG-LIVED ASSETS

The Group reviewed its long-lived assets for impairment and, as a result, recognized impairment losses for the following long-lived assets for the years ended March 31, 2018 and 2017.

Year Ended March 31, 2018

		Impairment Loss Millions of Yen				
Location	Description	Building and Structures	Machinery, Equipment, and Vehicles	Others	Land	Total
Takara Bio Inc.						
Otsu-shi, Shiga	Idle property	¥151	¥24	¥1	¥269	¥446

		Impairment Loss Thousands of U.S. Dollars				
Location	Description	Building and Structures	Machinery, Equipment, and Vehicles	Others	Land	Total
Takara Bio Inc.						
Otsu-shi, Shiga	Idle property	$1,424	$226	$9	$2,537	$4,207

Year Ended March 31, 2017

		Impairment Loss Millions of Yen					
Location	Description	Building and Structures	Machinery, Equipment, and Vehicles	Others	Land	Goodwill	Total
Takara Bio Inc.							
Otsu-shi, Shiga	Property to be sold (Production facilities)	¥ 131	¥ 5	¥ 9	¥ 1		¥ 148
Otsu-shi, Shiga	Property to be sold (Employee dormitory)	16		0	34		51
Yokkaichi-shi, Mie	Idle property				286		286
-	Goodwill					¥ 181	181
Total		¥ 148	¥ 5	¥ 9	¥ 322	¥ 181	¥ 667

(1) Reason for recognizing impairment loss

The Company does not have a future utilization plan as of March 31, 2018.

In the fiscal year ended March 31, 2017, Bio recognized an impairment loss on property to be sold with net recoverable value that was less than its carrying value as of March 31, 2017, due to the resolution of the Board of Directors of Bio on December 15, 2016. Also, Bio recognized an impairment loss on idle assets that were not likely to be used in the future as of March 31, 2017. As for the goodwill, the performance of Takara Bio Europe AB ("TBEAB"), a subsidiary of Bio, has recently been below the plan formulated at the time of acquisition. Based on the decline in profitability of TBEAB, Bio recognized an impairment loss as of March 31, 2017.

(2) Method of calculating recoverable amount

In the fiscal year ended March 31, 2018, the recoverable values of the idle properties were measured at the net selling price, which was based on the appraisal value of real estate or reasonable estimation of the value of the assets.

In the fiscal year ended March 31, 2017, the recoverable values of the properties to be sold were measured at the net selling price, which was based on the expected selling price. As for the idle property, the recoverable values were measured at the net selling price, which was based on the appraisal value of real estate or reasonable estimation of the value of the assets. As for goodwill, the recoverable amount was measured based on the value in use, and the discount rate used was 10.0%.

7. SHORT-TERM BANK LOANS AND LONG-TERM DEBT

Short-term bank loans consisted principally of term loans with interest at annual rates ranging from 0.426% to 3.250% and from 0.406% to 9.500% at March 31, 2018 and 2017, respectively.

The Company ended into the commitment line contract with a financial institution for flexibility of financing. Unused balances of the credit based on the contract were ¥10,000 million at both March 31, 2018 and March 31, 2017.

Long-term debt at March 31, 2018 and 2017, were as follows:

	Millions of Yen		Thousands of U.S. Dollars
	2018	2017	2018
Loans principally from banks, due serially to September 2027, with interest rates ranging from 0.17% to 4.50% (0% to 5.15% in 2017):			
Collateralized	¥ 479	¥ 1,412	$ 4,518
Unsecured	10,442	10,401	98,509
1.960% unsecured bonds, due September 2017		5,000	
1.561% unsecured bonds, due May 2020	5,000	5,000	47,169
0.468% unsecured bonds, due April 2017		5,000	
1.162% unsecured bonds, due April 2022	5,000	5,000	47,169
0.100% unsecured bonds, due April 2022	5,000		47,169
0.220% unsecured bonds, due April 2024	5,000		47,169
0.315% unsecured bonds, due April 2027	5,000		47,169
Obligation under finance leases	609	1,068	5,745
Total	36,531	32,882	344,632
Less current portion	466	11,106	4,396
Long-term debt, less current portion	¥ 36,064	¥ 21,776	$ 340,226

Annual maturities of long-term debt as of March 31, 2018, for the next five years and thereafter are as follows:

Year Ending March 31	Millions of Yen	Thousands of U.S. Dollars
2019	¥ 466	$ 4,396
2020	5,304	50,037
2021	5,176	48,830
2022	124	1,169
2023	15,318	144,509
2024 and thereafter	10,140	95,660
Total	¥ 36,531	$ 344,632

At March 31, 2018, notes and accounts receivable of ¥1,441 million ($13,594 thousand), inventories of ¥2,648 million ($24,981 thousand), and property, plant, and equipment of ¥1,353 million ($12,764 thousand) were pledged as collateral for short-term bank loans of ¥113 million ($1,066 thousand), and long-term debt (including current portion of long-term debt) of ¥479 million ($4,518 thousand).

8. LIQUOR TAXES PAYABLE

Liquor taxes are calculated at various rates according to the quantities of categorized beverages containing more than 1% of alcohol when delivered from manufacturing lots or taken outside of the bonded area. Liquor taxes are included in the cost of sales and inventories. Liquor taxes payable are to be paid by the end of the second month following the delivery or after being taken outside the bonded area.

9. RETIREMENT AND PENSION PLANS

The Company and certain consolidated subsidiaries provide lump-sum payment plans, a defined benefit corporate pension plan, and a defined contribution pension plan.

Certain consolidated subsidiaries have enrolled in the Smaller Enterprise Retirement Allowance Mutual Aid System.

Certain consolidated subsidiaries account for part of the defined benefit obligations and benefit costs for retirement lump-sum payment using the simplified method.

(1) The changes in defined benefit obligation for the years ended March 31, 2018 and 2017, are as follows:

	Millions of Yen		Thousands of U.S. Dollars
	2018	2017	2018
Balance at beginning of year	¥ 14,805	¥ 14,243	$ 139,669
Current service cost	818	793	7,716
Interest cost	114	122	1,075
Actuarial loss	29	392	273
Benefit paid	(722)	(520)	(6,811)
Decrease by exclusion of subsidiaries from consolidation	(261)		(2,462)
Others	74	(225)	698
Balance at end of year	¥ 14,858	¥ 14,805	$ 140,169

(2) The changes in plan assets for the years ended March 31, 2018 and 2017, are as follows:

	Millions of Yen		Thousands of U.S. Dollars
	2018	2017	2018
Balance at beginning of year	¥ 6,740	¥ 6,573	$ 63,584
Expected return on plan assets	139	134	1,311
Actuarial gain (loss)	68	(5)	641
Contribution from the employer	290	447	2,735
Benefits paid	(277)	(188)	(2,613)
Others	67	(220)	632
Balance at end of year	¥ 7,027	¥ 6,740	$ 66,292

(3) Reconciliation between the liability recorded in the consolidated balance sheet and the balances of defined benefit obligation and plan assets as of March 31, 2018 and 2017, is as follows:

	Millions of Yen		Thousands of U.S. Dollars
	2018	2017	2018
Defined benefit obligation	¥ 6,255	¥ 6,050	$ 59,009
Plan assets	(7,027)	(6,740)	(66,292)
Total	(772)	(689)	(7,283)
Unfunded defined benefit obligation	8,603	8,755	81,160
Net liability arising from defined benefit obligation	¥ 7,830	¥ 8,065	$ 73,867

	Millions of Yen		Thousands of U.S. Dollars
	2018	2017	2018
Liability for retirement benefits	¥ 8,759	¥ 8,961	$ 82,632
Prepaid benefit cost	(928)	(896)	(8,754)
Net liability arising from defined benefit obligation	¥ 7,830	¥ 8,065	$ 73,867

Prepaid benefit cost is included in other assets.

(4) The components of net periodic benefit costs for the years ended March 31, 2018 and 2017, are as follows:

	Millions of Yen		Thousands of U.S. Dollars
	2018	2017	2018
Service cost	¥ 817	¥ 792	$ 7,707
Interest cost	114	122	1,075
Expected return on plan assets	(139)	(134)	(1,311)
Amortization of prior service cost	336	(285)	3,169
Recognized actuarial (gains) losses	(284)	280	(2,679)
Net periodic benefit costs	¥ 844	¥ 776	$ 7,962

(5) Amounts recognized in other comprehensive income (before income tax effect) in respect of defined retirement benefit plans for the years ended March 31, 2018 and 2017, are as follows:

	Millions of Yen		Thousands of U.S. Dollars
	2018	2017	2018
Prior service cost	¥ (264)	¥ (295)	$ (2,490)
Actuarial loss (gain)	351	(105)	3,311
Total	¥ 86	¥ (400)	$ 811

(6) Amounts recognized in accumulated other comprehensive income (before income tax effect) in respect of defined retirement benefit plans as of March 31, 2018 and 2017, are as follows:

	Millions of Yen		Thousands of U.S. Dollars
	2018	2017	2018
Unrecognized prior service cost	¥ 874	¥ 1,139	$ 8,245
Unrecognized actuarial gain	(1,761)	(2,112)	(16,613)
Total	¥ (886)	¥ (973)	$ (8,358)

(7) Plan assets as of March 31, 2018 and 2017

a. *Components of plan assets*

Plan assets as of March 31, 2018 and 2017, consisted of the following:

	2018	2017
Debt investments	53%	52%
General account of insurance company	25	26
Equity investments	12	12
Cash and cash in bank	0	0
Others	10	10
Total	100%	100%

b. *Method of determining the expected rate of return on plan assets*

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

(8) Assumptions used for the years ended March 31, 2018 and 2017, are set forth as follows:

	2018	2017
Discount rate	mainly 0.7%	mainly 0.7%
Expected rate of return on plan assets	mainly 2.0%	mainly 2.0%
Expected rate of future salary increase	mainly 3.8%	mainly 3.8%

The Company uses the compensation increase index determined in accordance with the Company's human resources and wage policy as the expected rate of future salary increase.

(9) Defined contribution plan

The amounts of contribution required for the defined contribution plan paid by the Company and its subsidiaries were ¥276 million ($2,603 thousand) and ¥164 million for the years ended March 31, 2018 and 2017, respectively.

10. EQUITY

Japanese companies are subject to the Companies Act of Japan (the "Companies Act"). The significant provisions in the Companies Act that affect financial and accounting matters are summarized below:

a. Dividends

Under the Companies Act, companies can pay dividends at any time during the fiscal year in addition to the year-end dividend upon resolution at the shareholders' meeting. Additionally, for companies that meet certain criteria including (1) having a Board of Directors, (2) having independent auditors, (3) having an Audit & Supervisory Board, and (4) the term of service of the directors being prescribed as one year rather than the normal two-year term by its articles of incorporation, the Board of Directors may declare dividends (except for dividends-in-kind) at any time during the fiscal year if the company has prescribed so in its articles of incorporation. However, the Company does not meet all the above criteria.

The Companies Act permits companies to distribute dividends-in-kind (noncash assets) to shareholders subject to a certain limitation and additional requirements.

Semiannual interim dividends may also be paid once a year upon resolution by the Board of Directors, if the articles of incorporation of the company so stipulate. The Companies Act provides certain limitations on the amounts available for dividends or the purchase of treasury stock. The limitation is defined as the amount available for distribution to the shareholders, but the amount of net assets after dividends must be maintained at no less than ¥3 million.

b. Increases/Decreases and Transfer of Common Stock, Reserve, and Surplus

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

c. Treasury Stock and Treasury Stock Acquisition Rights

The Companies Act also provides for companies to purchase treasury stock and dispose of such treasury stock by resolution of the Board of Directors. The amount of treasury stock purchased cannot exceed the amount available for distribution to the shareholders, which is determined by a specific formula. Under the Companies Act, stock acquisition rights are presented as a separate component equity.

The Companies Act also provides that companies can purchase both treasury stock acquisition rights and treasury stock. Such treasury stock acquisition rights are presented as a separate component of equity or deducted directly from stock acquisition rights.

11. RELATED-PARTY TRANSACTIONS

Net sales and purchases representing transactions of the Group with associated companies for the years ended March 31, 2018 and 2017, are as follows:

	Millions of Yen		Thousands of U.S. Dollars
	2018	2017	2018
Net sales		¥758	
Purchases	¥27	71	$254

12. RESEARCH AND DEVELOPMENT EXPENSES

Research and development expenses charged to income were ¥5,063 million ($47,764 thousand) and ¥4,550 million for the years ended March 31, 2018 and 2017, respectively.

13. INCOME TAXES

The Company and its domestic subsidiaries are subject to Japanese national and local income taxes, which, in the aggregate, resulted in a normal effective statutory tax rate of approximately 31% for the years ended March 31, 2018 and 2017. Overseas consolidated subsidiaries are subject to income taxes of the countries in which they operate.

The tax effects of the significant temporary differences and tax loss carryforwards, which resulted in deferred tax assets and liabilities at March 31, 2018 and 2017, are as follows:

	Millions of Yen		Thousands of U.S. Dollars
	2018	2017	2018
Deferred tax assets:			
Inventories	¥ 221	¥ 323	$ 2,084
Accrued bonuses	627	758	5,915
Accrued sales promotion expenses	574	588	5,415
Enterprise tax payable	210	204	1,981
Tax loss carryforwards	1,793	688	16,915
Unrealized profit on sale of inventories	362	304	3,415
Retirement benefits	2,146	2,192	20,245
Marketable and investment securities	437	438	4,122
Depreciation	345	329	3,254
Impairment losses	410	424	3,867
Defined retirement benefit plans	261	283	2,462
Other	1,423	1,086	13,424
Subtotal	8,815	7,623	83,160
Less valuation allowance	(2,210)	(2,477)	(20,849)
Total	¥ 6,604	¥ 5,146	$ 62,301
Deferred tax liabilities:			
Unrealized gain on available-for-sale securities	¥ (5,009)	¥ (4,103)	$ (47,254)
Deferred gain on fixed assets	(533)	(402)	(5,028)
Deferred gain on fixed assets inherited by a corporate division	(214)	(381)	(2,018)
Basis difference of acquired intangible assets	(1,582)	(486)	(14,924)
Basis difference of acquired land	(383)	(508)	(3,613)
Retained earnings of foreign subsidiaries	(420)	(392)	(3,962)
Other	(686)	(827)	(6,471)
Total	¥ (8,830)	¥ (7,101)	$ (83,301)
Net deferred tax liabilities	¥ (2,225)	¥ (1,954)	$ (20,990)

	Millions of Yen		Thousands of U.S. Dollars
	2018	2017	2018
Current deferred assets	¥ 2,284	¥ 2,112	$ 21,547
Noncurrent deferred assets	1,783	1,496	16,820
Noncurrent deferred liabilities	(6,293)	(5,564)	(59,367)

A reconciliation between the normal effective statutory tax rate and the actual effective tax rate reflected in the accompanying consolidated statements of income for the years ended March 31, 2018 and 2017, is as follows:

	2018	2017
Normal effective statutory tax rate in Japan	31.0%	31.0%
Expenses not deductible for income tax purposes	1.7	1.2
Change in valuation allowance	(0.5)	2.3
Effect of tax rate change	(1.6)	
Withholding taxes in foreign countries	0.8	0.9
Amortization of goodwill	1.2	1.0
Undistributed earnings of foreign consolidated subsidiaries	0.1	1.2
Adjustment for consolidation of gain on sales of subsidiaries and affiliates' stocks	1.2	
Recognition of gain on step acquisitions		(1.9)
Other, net	(0.2)	0.7
Actual effective tax rate	33.7%	36.4%

At March 31, 2018, the Company and certain consolidated subsidiaries have tax loss carryforwards aggregating approximately ¥6,389 million ($60,273 thousand), which are available to be offset against taxable income of such consolidated subsidiaries. These tax loss carryforwards, if not utilized, will expire as follows:

Year Ending March 31	Millions of Yen	Thousands of U.S. Dollars
2019	¥ 427	$ 4,028
2020	336	3,169
2021	124	1,169
2022	106	1,000
2023 and thereafter	4,881	46,047
Total	¥ 5,876	$ 55,433

14. SUPPLEMENTAL CASH FLOW INFORMATION

The breakdown of assets and liabilities of newly consolidated subsidiaries as the result of the acquisition of shares for the year ended March 31, 2017

(1) Nippon Food Supplies Company Pty Ltd. ("Nippon Food")

The Company subscribed to third-party allotment of shares of Nippon Food. As a result, Nippon Food became a consolidated subsidiary during the year ended March 31, 2017.

The breakdown of assets and liabilities at the beginning of consolidation of Nippon Food and its subsidiaries as a result of the acquisition of shares and reconciliation between cash paid for the shares of Nippon Food and payment for the acquisition, net of cash and cash equivalents acquired, is as follows:

	Millions of Yen
	2017
Current assets	¥ 2,000
Fixed assets	264
Goodwill	902
Current liabilities	(469)
Long-term liabilities	(293)
Noncontrolling interests	(706)
Foreign currency translation adjustments	18
Cash paid for the shares	1,715
Cash and cash equivalents	(388)
Purchases of shares of subsidiaries resulting in change in scope of consolidation	¥ 1,327

(2) Mutual Trading Co., Inc. ("Mutual Trading")

The Company subscribed to third-party allotment of shares of Mutual Trading. As a result, Mutual Trading became a consolidated subsidiary during the year ended March 31, 2017.

The breakdown of assets and liabilities at the beginning of consolidation of Mutual Trading and its 14 subsidiaries as a result of the acquisition of shares and reconciliation between cash paid for the shares of Mutual Trading and payment for the acquisition, net of cash and cash equivalents acquired, is as follows:

	Millions of Yen
	2017
Current assets	¥ 10,303
Fixed assets	5,610
Goodwill	120
Current liabilities	(5,449)
Long-term liabilities	(2,350)
Noncontrolling interests	(4,133)
Foreign currency translation adjustments	172
Cash paid for the shares	4,274
Accumulated gain as of September 30, 2016	(2,535)
Gain on step acquisitions	(878)
Cash and cash equivalents	(2,931)
Proceeds from purchase of shares of subsidiaries resulting in change in scope of consolidation	¥ (2,070)

The breakdown of assets and liabilities of newly consolidated subsidiaries as the result of the acquisition of shares for the year ended March 31, 2018

(1) Rubicon Genomics, Inc.

TBUSH, which is a wholly owned subsidiary of Bio, acquired all shares of Rubicon. As a result, Rubicon became a consolidated subsidiary during the year ended March 31, 2018. (See Note 3. BUSINESS COMBINATIONS)

The breakdown of assets and liabilities at the beginning of consolidation of Rubicon as a result of the acquisition of shares and reconciliation between cash paid for the shares of Rubicon and payment for the acquisition, net of cash and cash equivalents acquired, is as follows:

	Millions of Yen	Thousands of U.S. Dollars
	2018	2018
Current assets	¥ 552	$ 5,207
Fixed assets	3,830	36,132
Goodwill	5,060	47,735
Current liabilities	(391)	(3,688)
Long-term liabilities	(554)	(5,226)
Cash paid for shares	8,496	80,150
Cash and cash equivalents	(308)	(2,905)
Purchases of shares of subsidiaries resulting in change in scope of consolidation	¥ 8,187	$ 77,235

(2) WaferGen Bio-systems, Inc.

TBUSH, which is a wholly owned subsidiary of Bio, acquired all shares of WaferGen. As a result, WaferGen became a consolidated subsidiary during the year ended March 31, 2018. (See Note 3. BUSINESS COMBINATIONS)

The breakdown of assets and liabilities at the beginning of consolidation of WaferGen as a result of the acquisition of shares and reconciliation between cash paid for the shares of WaferGen and payment for the acquisition, net of cash and cash equivalents acquired, is as follows:

	Millions of Yen	Thousands of U.S. Dollars
	2018	2018
Current assets	¥ 525	$ 4,952
Non-current assets	2,630	24,811
Goodwill	2,550	24,056
Current liabilities	(928)	(8,754)
Non-current liabilities	(556)	(5,245)
Cash paid for shares	4,221	39,820
Cash and cash equivalents	(12)	(113)
Purchases of shares of subsidiaries resulting in change in scope of consolidation	¥ 4,208	$ 39,698

The breakdown of assets and liabilities of the unconsolidated subsidiary as a result of the transfer of shares for the year ended March 31, 2018

(1) TAKARA CHOU UN Co., Ltd.

Takara Shuzo, a consolidated subsidiary of the Company, approved the transfer of all of its shares in TAKARA CHOU UN, a wholly owned subsidiary of Takara Shuzo. As a result, TAKARA CHOU UN was excluded from consolidation during the year ended March 31, 2018. (See Note 3. BUSINESS COMBINATIONS)

The breakdown of assets and liabilities as a result of the transfer of the shares and reconciliation between cash paid for the transfer of shares of the unconsolidated subsidiary and payment for the transfer of shares, net of cash and cash equivalents acquired, is as follows:

	Millions of Yen	Thousands of U.S. Dollars
	2018	2018
Current assets	¥ 1,885	$ 17,783
Fixed assets	1,815	17,122
Current liabilities	(1,713)	(16,160)
Long-term liabilities	(521)	(4,915)
Valuation difference on available-for-sale securities	(2)	(18)
Expense for sales of shares	274	2,584
Gain on sales of shares	3,312	31,245
Selling price of shares	5,050	47,641
Expense for sales of shares	(274)	(2,584)
Cash and cash equivalents	(625)	(5,896)
Proceeds from sales of shares of subsidiary resulting in change in scope of consolidation	¥ 4,150	$ 39,150

15. OPERATING LEASES

The Group leases certain buildings, machinery, computer equipment, and other assets.

Total rental expenses for the years ended March 31, 2018 and 2017, were ¥3,475 million ($32,783 thousand) and ¥2,465 million, respectively.

Obligations under operating leases as of March 31, 2018 and 2017, are as follows:

	Millions of Yen		Thousands of U.S. Dollars
	2018	2017	2018
Due within one year	¥ 1,236	¥ 1,106	$ 11,660
Due after one year	9,374	5,551	88,433
Total	¥ 10,610	¥ 6,657	$ 100,094

16. FINANCIAL INSTRUMENTS AND RELATED DISCLOSURES

Group Policy for Financial Instruments

The Group invests in low-risk financial assets if it holds cash surpluses. The Group uses financial instruments, mainly bank loans and bonds, based on its capital financing plan. Derivatives are not used for speculative or trading purposes, but to avoid the risks described below.

Nature and Extent of Risks Arising from Financial Instruments and Risk Management for Financial Instruments

Credit risk and market risk

Although receivables, such as notes and trade accounts, are exposed to customer credit risk, the Group manages due dates and account balances for every customer to identify doubtful receivables in the early stages and to mitigate default risk.

Although marketable securities, mainly certificates of deposit and held-to-maturity securities, are exposed to the credit risks of the bond issuers, the credit risk is kept extremely low by limiting funding to short maturities and high credit rating bonds. Although investment securities, mainly stocks, are exposed to the risk of market price fluctuations, the Group reviews the fair values quarterly if investment securities have market prices, and monitors the financial condition of issuers regularly if they do not have market prices.

Payment terms of payables, such as notes and trade accounts, are less than three months. Although payables in foreign currencies, such as raw materials and merchandise, are exposed to the market risk of fluctuation in foreign currency exchange rates, those risks are hedged by using currency options and forward foreign currency contracts.

Bank loans and bonds are utilized for financing of business transactions and capital investments. Payment terms of bank loans and bonds are a maximum of nine years after the balance sheet date.

Derivative transactions entered into by the Group have been made in accordance with the internal policies of the Finance Department, which regulates authorization, purpose, credit limit amount, evaluation of counterparties, and reporting procedures. Derivative transactions mainly include forward foreign currency contracts and currency options for the purpose of hedging against the market risk of fluctuation in foreign currency exchange rates of transactions in foreign currencies. Although derivative transactions are exposed to the market risk of fluctuation in foreign currency exchange rates, these transactions are made only for the purpose of mitigating the risks of assets, liabilities, and transactions that become hedged items. As the Group established a limit on contract amounts, the Group also believes that the effect of market risks on its business administration is not significant. As the Group manages its exposure to credit risk by limiting its funding to high credit rating bonds, the Group recognizes that the exposure to credit risk is extremely low.

Information regarding the valuation method of hedged items and hedging instruments related to hedge accounting, hedge policies, and hedge effectiveness is included in Note 2.*r*.

Liquidity risk management

In the Group, the Finance Department develops and updates a cash management plan pursuant to reporting by each department, and manages its liquidity risk by maintaining adequate volumes of liquid assets. In addition, consolidated subsidiaries also manage their liquidity risks in the same manner.

Supplementary explanation on matters related to fair values of financial instruments

Fair values of financial instruments are based on market prices in active markets or other rational valuation techniques if market prices do not exist. Fair values of financial instruments fluctuate as a result of adopting different preconditions because the calculation of fair values includes fluctuation factors. With respect to the contract amounts related to derivative transactions in Note 17, the amounts do not reflect market risks related to derivative transactions.

Concentration of Credit Risk

As of March 31, 2018, 18% of total receivables are from one major customer.

Fair Value of Financial Instruments

	Millions of Yen		
March 31, 2018	Carrying Value	Fair Value	Unrealized Gain/Loss
Cash and cash equivalents	¥ 49,341	¥ 49,341	
Time deposits	9,445	9,445	
Notes and accounts receivable			
(Trade and associated companies)	57,563	57,563	
Marketable securities and investment securities	34,040	34,040	
Total	¥ 150,389	¥ 150,389	
Notes and accounts payable	¥ 20,596	¥ 20,596	
Short-term bank loans	4,919	4,919	
Current portion of long-term debt	466	474	¥ 7
Liquor taxes payable	9,278	9,278	
Income taxes payable	3,126	3,126	
Long-term debt	36,064	36,540	476
Total	¥ 74,452	¥ 74,936	¥ 484
Derivatives	¥ (187)	¥ (187)	

	Millions of Yen		
March 31, 2017	Carrying Value	Fair Value	Unrealized Gain/Loss
Cash and cash equivalents	¥ 58,765	¥ 58,765	
Time deposits	7,524	7,524	
Notes and accounts receivable			
(Trade and associated companies)	57,717	57,717	
Marketable securities and investment securities	27,614	27,614	
Total	¥ 151,621	¥ 151,621	
Notes and accounts payable	¥ 21,588	¥ 21,588	
Short-term bank loans	8,389	8,389	
Current portion of long-term debt	11,106	11,189	¥ 82
Liquor taxes payable	7,593	7,593	
Income taxes payable	2,468	2,468	
Long-term debt	21,776	22,463	686
Total	¥ 72,910	¥ 73,680	¥ 769
Derivatives	¥ (24)	¥ (24)	

March 31, 2018	Thousands of U.S. Dollars Carrying Value	Fair Value	Unrealized Gain/Loss
Cash and cash equivalents	$ 465,481	$ 465,481	
Time deposits	89,103	89,103	
Notes and accounts receivable			
(Trade and associated companies)	543,047	543,047	
Marketable securities and investment securities	321,132	321,132	
Total	$ 1,418,764	$ 1,418,764	
Notes and accounts payable	$ 194,301	$ 194,301	
Short-term bank loans	46,405	46,405	
Current portion of long-term debt	4,396	4,471	$ 66
Liquor taxes payable	87,528	87,528	
Income taxes payable	29,490	29,490	
Long-term debt	340,226	344,716	4,490
Total	$ 702,377	$ 706,943	$ 4,566
Derivatives	$ (1,764)	$ (1,764)	

Cash and cash equivalents

The carrying value of cash and cash equivalents approximates fair value because of their short maturities.

Notes and accounts receivable (Trade and associated companies)

The carrying value of notes and accounts receivable approximates fair value because of their short maturities. Allowance for doubtful accounts is deducted from the total amount of notes and accounts receivable by ¥326 million ($3,075 thousand) and ¥236 million in 2018 and 2017, respectively.

Marketable securities and investment securities

Marketable securities are bonds, trust beneficiary rights, and certificates of deposit. The fair value of bonds is measured at the quoted price obtained from the financial institution. The carrying value of trust beneficiary rights and certificates of deposit approximates fair value due to their short maturities. Investment securities are mainly stocks and are measured at the market price. Information regarding the classification of securities is included in Note 4.

Notes and accounts payable

The carrying value of notes and accounts payable approximates fair value because of their short maturities.

Liquor taxes payable

The carrying value of liquor taxes payable approximates fair value because of their short maturities.

Income taxes payable

The carrying value of income taxes payable approximates fair value because of their short maturities.

Short-term bank loans

The carrying value of short-term bank loans approximates fair value because of their short maturities. Moreover, the fair value of the current portion of long-term bank loans is determined by discounting the cash flows related to the total of principal and interest at a reasonably estimated rate according to the remaining period.

Long-term debt

Bonds payable is included in long-term debt. The fair value of the current portion of long-term bonds and bonds is determined by discounting the cash flows related to the total of principal and interest at the rate in which the remaining period to maturity and credit risk is reflected.

The fair value of other long-term debt is determined by discounting the cash flows related to the total of principal and interest at a reasonably estimated rate according to the remaining period.

Derivatives

Fair value information for derivatives is included in Note 17.

Investments in equity instruments that do not have a quoted market price in an active market and securities without contractual maturities (the totals included in the consolidated balance sheets at March 31, 2018 and 2017 are ¥3,258 million ($30,735 thousand) and ¥2,990 million, respectively) do not have fair values because their fair value cannot be reliably determined. Moreover, deposits from customers do not have fair values because their fair value cannot be reliably determined.

Maturity Analysis for Financial Assets and Securities with Contractual Maturities

	Millions of Yen		Thousands of U.S. Dollars	
March 31, 2018	Due in One Year or Less	Due after One Year through Five Years	Due in One Year or Less	Due after One Year through Five Years
Cash and cash equivalents	¥ 49,341	¥	$ 465,481	$
Notes and accounts receivable				
(Trade and associated companies)	57,563		543,047	
Held-to-maturity securities:				
(1) Corporate Bonds	4,000		37,735	
(2) Others	2,000		18,867	
Available-for-sale securities with contractual maturities:				
(1) Government bonds and municipal bonds	426		4,018	
(2) Others	2,271		21,424	
Total	¥ 115,602	¥	$ 1,090,584	$

March 31, 2017	Millions of Yen Due in One Year or Less	 Due after One Year through Five Years
Cash and cash equivalents	¥ 58,765	¥
Notes and accounts receivable		
(Trade and associated companies)	57,717	
Held-to-maturity securities:		
(1) Others	2,000	
Available-for-sale securities with contractual maturities:		
(1) Government bonds and municipal bonds	684	
(2) Others	2,330	
Total	¥ 121,498	¥

17. DERIVATIVES

The Group enters into foreign currency forward contracts and foreign currency option agreements to hedge foreign currency exchange rate risk associated with certain liabilities denominated in foreign currencies.

All derivative transactions are entered into to hedge foreign currency exposures incorporated within the Group's business. Accordingly, market risk in these derivatives is basically offset by opposite movements in the value of hedged liabilities.

Because the counterparties to these derivatives are limited to major international financial institutions, the Group does not anticipate any losses arising from credit risk.

Derivative transactions entered into by the Group have been made in accordance with the Group's policies, which regulate the authorization, purposes, credit limit amounts, evaluation of the counterparties, and reporting procedures.

Derivative Transactions to Which Hedge Accounting Is Not Applied

	Millions of Yen			
March 31, 2018	Contract Amount	Contract Amount Due after One Year	Fair Value	Unrealized Gain/Loss
Foreign currency forward contracts:				
Buying U.S. dollar	¥ 205	¥	¥ (0)	¥ (0)
Buying Euro	7		0	0
Buying GB pound	45		(0)	(0)
Buying Australian dollar	0		(0)	(0)
Buying Japanese yen	176		(2)	(2)
Selling Euro	131		0	0
Selling GB pound	0		0	0
Non-deliverable forward contracts:				
Selling Korean won	15		(0)	(0)
Total	¥ 584	¥	¥ (2)	¥ (0)

March 31, 2017	Millions of Yen Contract Amount	 Contract Amount Due after One Year	 Fair Value	 Unrealized Gain/Loss
Foreign currency forward contracts:				
Buying U.S. dollar	¥ 450	¥	¥ (3)	¥ (3)
Buying Euro	22		0	0
Buying GB pound	22		0	0
Buying Australian dollar	0		(0)	(0)
Buying Japanese yen	93		(4)	(4)
Selling Euro	48		0	0
Non-deliverable forward contracts:				
Selling Korean won	2		(0)	(0)
Foreign currency options:				
Buying put option Korean won	28		(1)	(1)
Selling call option Korean won	28		0	0
Total	¥ 699	¥	¥ (7)	¥ (7)

March 31, 2018	Thousands of U.S. Dollars Contract Amount	 Contract Amount Due after One Year	 Fair Value	 Unrealized Gain/Loss
Foreign currency forward contracts:				
Buying U.S. dollar	$ 1,933	$	$ (0)	$ (0)
Buying Euro	66		0	0
Buying GB pound	424		(0)	(0)
Buying Australian dollar	0		(0)	(0)
Buying Japanese yen	1,660		(18)	(18)
Selling Euro	1,235		0	0
Selling GB pound	0		0	0
Non-deliverable forward contracts:				
Selling Korean won	141		(0)	(0)
Total	$ 5,509	$	$ (18)	$ (0)

Derivative Transactions to Which Hedge Accounting Is Applied

a. Foreign exchange derivatives

March 31, 2018	Millions of Yen Hedged Item	 Contract Amount	 Contract Amount Due after One Year	 Fair Value
Foreign currency options:				
Buying call option U.S. dollar	Accounts payable	¥ 7,597	¥ 3,562	¥ (189)
Selling put option U.S. dollar	Accounts payable	7,597	3,562	22
Foreign currency forward contracts:				
Buying U.S. dollar	Accounts payable	1,746	0	(48)
Total		¥ 16,941	¥ 7,124	¥ (215)

		Millions of Yen		
March 31, 2017	Hedged Item	Contract Amount	Contract Amount Due after One Year	Fair Value
Foreign currency options:				
Buying call option U.S. dollar	Accounts payable	¥ 9,145	¥ 4,837	¥ (82)
Selling put option U.S. dollar	Accounts payable	9,145	4,837	42
Foreign currency forward contracts:				
Buying U.S. dollar	Accounts payable	1,995		10
Buying Euro	Accounts payable	3		(0)
Total		¥ 20,289	¥ 9,675	¥ (28)

		Thousands of U.S. Dollars		
March 31, 2018	Hedged Item	Contract Amount	Contract Amount Due after One Year	Fair Value
Foreign currency options:				
Buying call option U.S. dollar	Accounts payable	$ 71,669	$ 33,603	$ (1,783)
Selling put option U.S. dollar	Accounts payable	71,669	33,603	207
Foreign currency forward contracts:				
Buying U.S. dollar	Accounts payable	16,471	0	(452)
Total		$ 159,820	$ 67,207	$ (2,028)

b. Interest rate derivatives

		Millions of Yen		
March 31, 2017	Hedged Item	Contract Amount	Contract Amount Due after One Year	Fair Value
Fixed rate payment, floating rate receipt	Current portion of long-term debt	¥ 598	¥	¥ (16)
Total		¥ 598	¥	¥ (16)

18. COMPREHENSIVE INCOME

The components of other comprehensive income for the years ended March 31, 2018 and 2017, are as follows:

	Millions of Yen		Thousands of U.S. Dollars
	2018	2017	2018
Unrealized gain or loss on available-for-sale securities:			
Gain arising during the year	¥ 3,004	¥ 4,042	$ 28,339
Reclassification adjustments to profit	(161)	(38)	(1,518)
Amount before income tax effect	2,843	4,003	26,820
Income tax effect	(907)	(1,242)	(8,556)
Total	¥ 1,936	¥ 2,760	$ 18,264
Deferred gain or loss on derivatives under hedge accounting:			
(Loss) gain arising during the year	¥ (173)	¥ 642	$ (1,632)
Reclassification adjustments to profit		5	
Amount before income tax effect	(173)	647	(1,632)
Income tax effect	58	(200)	547
Total	¥ (115)	¥ 446	$ (1,084)
Foreign currency translation adjustments:			
Adjustments arising during the year	¥ 1,262	¥ (4,503)	$ 11,905
Reclassification adjustments to profit		192	
Total	¥ 1,262	¥ (4,310)	$ 11,905
Defined retirement benefit plans:			
Adjustments arising during the year	¥ 34	¥ (396)	$ 320
Reclassification adjustments to profit	51	(4)	481
Amount before income tax effect	86	(400)	811
Income tax effect	6	51	56
Total	¥ 93	¥ (348)	$ 877
Share of other comprehensive income in associates:			
Gain arising during the year	¥	¥	$
Total other comprehensive income (loss)	¥ 3,177	¥ (1,451)	$ 29,971

19. NET INCOME PER SHARE

A reconciliation of the differences between basic and diluted net income per share ("EPS") for the years ended March 31, 2018 and 2017, is as follows:

	Millions of Yen	Thousands of Shares	Yen	Dollars
	Net Income	Weighted-Average Shares	EPS	
For the year ended March 31, 2018:				
Basic EPS				
Net income available to common shareholders	¥ 11,029	200,632	¥ 54.97	$ 0.51
For the year ended March 31, 2017:				
Basic EPS				
Net income available to common shareholders	¥ 8,480	201,224	¥ 42.15	

Diluted net income per share for both the years ended March 31, 2018 and 2017 is not disclosed because there were no dilutive shares during these two fiscal years.

20. SUBSEQUENT EVENTS

a. Appropriations of Retained Earnings

On May 11, 2018, the Board of Directors of the Company resolved to propose cash dividends of ¥16 ($0.15) per share to shareholders of record as of March 31, 2018, or a total of ¥3,194 million ($30,132 thousand), for approval at the general shareholders' meeting to be held on June 28, 2018.

b. Conclusion of Important Agreement

Bio entered into an agreement with Otsuka Pharmaceutical Co., Ltd. ("Otsuka") for co-development and exclusive sales in Japan of NY-ESO-1 siTCRTM gene therapy product (TBI-1301 and TBI-1301-A) and CD19 CAR gene therapy product (TBI 1501) as of April 9, 2018.

Under the agreement, both companies will aim cooperatively for early manufacture and sales approval of the two therapeutic products in Japan. Specifically, Bio is responsible for examining manufacturing methods for the two therapeutic products and manufacturing and quality control of the investigational products, while Otsuka is responsible for clinical trials, other clinical studies, regulatory submissions for manufacturing and sales approval, and safety data collection for both the products. After acquisition of manufacturing and sales approval, Bio and Otsuka are exclusively responsible for manufacturing and selling in Japan, respectively. There are no limitations on the target indications in the agreement. Otsuka also holds a right of first refusal for nine Asian countries outside Japan.

Bio will receive certain upfront and milestone payments from Otsuka depending on the achievement of certain stages of development based on the execution of the agreement. Bio will supply Otsuka with the products for a financial consideration after the market launch of the products. As for NY-ESO-1 siTCRTM gene therapy products, Bio will receive milestone payments upon the achievement of target sales in addition to the running royalties on net sales.

21. SEGMENT INFORMATION

Under ASBJ Statement No. 17, "Accounting Standard for Disclosures about Segment of an Enterprise and Related Information" and ASBJ Guidance No. 20, "Guidance on Accounting Standard for Disclosures about Segment of an Enterprise and Related Information," an entity is required to report financial and descriptive information about its reportable segments. Reportable segments are operating segments or aggregations of operating segments that meet specified criteria. Operating segments are components of an entity about which separate financial information is available and for which such information is evaluated regularly by the chief operating decision-maker in deciding how to allocate resources and in assessing performance. Generally, segment information is required to be reported on the same basis as is used internally for evaluating operating segment performance and deciding how to allocate resources to operating segments.

(1) Description of Reportable Segments

Reporting segments are the segments of the Takara Group for which financial information can be obtained. The Board of Directors, the top organization for decision making on Group-management, examines such information to determine the allocation of management resources and evaluate business performance on a regular basis.

In prior years, the Group consisted of Takara Shuzo Group, Takara Bio Inc., Healthcare and other businesses, and the Company, which manages the whole group as the holding company. All operating companies develop comprehensive business strategies, covering both domestic and overseas operations, for the goods, products, and services that they offer, and work to expand their business operations. In 2017, the management reconsidered the operating segments and identified international as a new operating segment.

Accordingly, the Group has defined three reporting segments based on the types of goods, products, and services, while taking into consideration the scope of managerial responsibility and the capacity to evaluate business performance. These three reporting segments are Takara Shuzo, the Takara Shuzo International Group, and the Takara Bio Group.

Takara Shuzo primarily engages in the manufacture and sale of seasonings and alcoholic beverages in Japan. The Takara Shuzo International Group engages in the export of alcoholic beverages from Japan, the manufacture and sale of alcoholic beverages at overseas locations, and the Japanese food wholesale business in overseas markets. The Takara Bio Group engages in the manufacture and sale of products such as research reagents, scientific instruments, and mushrooms, as well as contract research services and research and development of gene and cell therapies.

On February 16, 2017, the Company's Board of Directors resolved to spin off (incorporation type company split) the overseas business of Takara Shuzo, a consolidated subsidiary of the Company, and transfer it to the newly established Takara Shuzo International on July 3, 2017. As a result of revising its reporting segments in accordance with this decision, the Company changed its reporting segments to "Takara Shuzo," "Takara Shuzo International Group," and "Takara Bio Group" starting from the fiscal year ended March 31, 2018.

Segment information for the previous fiscal year, ended March 31, 2017, discloses information prepared based on the post-change segments.

(2) Methods of Measurement for the Amounts of Sales, Profit (Loss), Assets, and Other Items for Each Reportable Segment

The accounting policies of each reportable segment are consistent with those disclosed in Note 2, "SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES."

The figures for the income of reporting segments are based on operating income. Intersegment income is based on prevailing market prices.

(3) Information about sales, profit, assets, and other items is as follows.

* Information for the fiscal year ended March 31, 2017 stated based on post-change classifications.

	Millions of Yen						
	2018						
	Reportable Segment						
	Takara Shuzo	Takara Shuzo International Group	Takara Bio Group	Total	Other	Reconciliation	Consolidated
Sales:							
Sales to external customers	¥ 149,426	¥ 70,456	¥ 31,617	¥ 251,500	¥ 16,633	¥ 8	¥ 268,142
Intersegment sales or transfers	413	261	694	1,369	19,778	(21,148)	
Total	149,839	70,717	32,312	252,870	36,412	(21,140)	268,142
Segment profit	5,569	4,393	3,555	13,518	2,318	(224)	15,612
Segment assets	95,131	68,239	68,854	232,225	19,587	35,246	287,059
Other:							
Depreciation	2,225	938	2,568	5,733	309	387	6,430
Amortization of goodwill		353	489	843			843
Investment in equity method affiliate						1,490	1,490
Increase in property, plant, and equipment and intangible assets	2,696	1,677	1,539	5,913	252	249	6,414

	Millions of Yen						
	2017						
	Reportable Segment						
	Takara Shuzo	Takara Shuzo International Group	Takara Bio Group	Total	Other	Reconciliation	Consolidated
Sales:							
Sales to external customers	¥ 149,408	¥ 37,278	¥ 28,529	¥ 215,216	¥ 18,976	¥ 0	¥ 234,193
Intersegment sales or transfers	44	262	845	1,152	20,041	(21,193)	
Total	149,452	37,540	29,375	216,369	39,017	(21,193)	234,193
Segment profit	5,071	3,182	3,202	11,456	2,167	(72)	13,551
Segment assets	90,931	64,759	67,143	222,834	23,061	28,472	274,368
Other:							
Depreciation	2,196	623	1,722	4,542	437	191	5,171
Amortization of goodwill		424	162	586			586
Investment in equity method affiliate						1,407	1,407
Increase in property, plant, and equipment and intangible assets	2,188	763	1,648	4,600	666	1,391	6,658

	Thousands of U.S. Dollars						
	2018						
	Reportable Segment						
	Takara Shuzo	Takara Shuzo International Group	Takara Bio Group	Total	Other	Reconciliation	Consolidated
Sales:							
Sales to external customers	$ 1,409,679	$ 664,679	$ 298,273	$ 2,372,641	$ 156,915	$ 75	$ 2,529,641
Intersegment sales or transfers	3,896	2,462	6,547	12,915	186,584	(199,509)	
Total	1,413,575	667,141	304,830	2,385,566	343,509	(199,433)	2,529,641
Segment profit	52,537	41,443	33,537	127,528	21,867	(2,113)	147,283
Segment assets	897,462	643,764		2,190,801	184,783	332,509	2,708,103
Other:							
Depreciation	20,990	8,849	24,226	54,084	2,915	3,650	60,660
Amortization of goodwill		3,330	4,613	7,952			7,952
Investment in equity method affiliate						14,056	14,056
Increase in property, plant, and equipment and intangible assets	25,433	15,820	14,518	55,783	2,377	2,349	60,509

Notes:

1. "Other" represents operating segments that are not included in the reportable segments, and mainly consists of real-estate lease and logistics businesses of domestic subsidiaries.

2. Details of "Reconciliation" are as follows.

   (1) Sales to external customers consist of revenue from the system consulting and maintenance business, etc., recognized by the Company.

   (2) Segment profit includes eliminations of intersegment transactions of ¥(79) million ($(745) thousand) and ¥61 million, and income of the Company not allocated to operating segments of ¥(303) million ($(2,858) thousand) and ¥(11) million as of March 31, 2018 and 2017, respectively.

   (3) Segment assets include assets of the Company not allocated to operating segments of ¥55,784 million ($526,264 thousand) and ¥47,963 million, and other adjustment (principally eliminations of intersegment transactions) of ¥(20,537) million ($(193,745) thousand) and ¥(19,490) million as of March 31, 2018 and 2017, respectively. Assets attributed to the Company include surplus funds and long-term investment assets.

   (4) Depreciation is the amount of depreciation recognized by the Company.

   (5) Investment in equity-method affiliate is the cost of investment in an affiliate company not allocated to operating segments.

   (6) Increase in property, plant, and equipment and intangible assets comprises investments of the Company.

3. Segment profit has been reconciled with the operating income in the consolidated statement of income.

(4) Information about products and services

	Millions of Yen				
	2018				
	Domestic and Overseas Alcoholic Beverages	Japanese Food Wholesale Business in Overseas Markets	Bio	Other	Total
Sales to external customers	¥157,968	¥61,912	¥31,617	¥16,643	¥268,142

	Millions of Yen				
	2017				
	Domestic and Overseas Alcoholic Beverages	Japanese Food Wholesale Business in Overseas Markets	Bio	Other	Total
Sales to external customers	¥157,753	¥28,933	¥28,529	¥18,976	¥234,193

	Thousands of U.S. Dollars				
	2018				
	Domestic and Overseas Alcoholic Beverages	Japanese Food Wholesale Business in Overseas Markets	Bio	Other	Total
Sales to external customers	$1,490,264	$584,075	$298,273	$157,009	$2,529,641

(5) Information about geographical areas

(a) Sales

Millions of Yen			
2018			
Japan	USA	Other	Total
¥179,675	¥44,770	¥43,695	¥268,142

Millions of Yen			
2017			
Japan	USA	Other	Total
¥182,107	¥18,770	¥33,315	¥234,193

Thousands of U.S. Dollars			
2018			
Japan	USA	Other	Total
$1,695,047	$422,358	$412,216	$2,529,641

Note: Sales are classified by country or region based on the location of customers.

(b) Property, plant, and equipment

Millions of Yen			
2018			
Japan	USA	Other	Total
¥44,735	¥8,114	¥4,635	¥57,485

Millions of Yen			
2017			
Japan	USA	Other	Total
¥47,409	¥7,596	¥4,168	¥59,174

Thousands of U.S. Dollars			
2018			
Japan	USA	Other	Total
$422,028	$76,547	$43,726	$542,311

(6) Information about major customers

	2018	
Name of Customers	Millions of Yen Sales	Related Segment Name
KOKUBU GROUP CORP.	¥34,540	Takara Shuzo

	2017	
Name of Customers	Millions of Yen Sales	Related Segment Name
KOKUBU GROUP CORP.	¥35,610	Takara Shuzo

	2018	
Name of Customers	Thousands of U.S. Dollars Sales	Related Segment Name
KOKUBU GROUP CORP.	$325,849	Takara Shuzo

(7) Information about impairment losses

	Millions of Yen					
	2018					
	Takara Shuzo	Takara Shuzo International Group	Takara Bio Group	Other	Elimination/ Corporate	Total
Impairment losses of assets	¥	¥	¥446	¥	¥	¥446

	Millions of Yen					
	2017					
	Takara Shuzo	Takara Shuzo International Group	Takara Bio Group	Other	Elimination/ Corporate	Total
Impairment losses of assets	¥	¥	¥667	¥	¥	¥667

	Thousands of U.S. Dollars					
	2018					
	Takara Shuzo	Takara Shuzo International Group	Takara Bio Group	Other	Elimination/ Corporate	Total
Impairment losses of assets	$	$	$4,207	$	$	$4,207

(8) Information about amortization of goodwill

	Millions of Yen					
	2018					
	Takara Shuzo	Takara Shuzo International Group	Takara Bio Group	Other	Elimination/ Corporate	Total
Amortization of goodwill	¥	¥ 353	¥ 489	¥	¥	¥ 843
Goodwill at March 31, 2018		5,506	8,259			13,765

	Millions of Yen					
	2017					
	Takara Shuzo	Takara Shuzo International Group	Takara Bio Group	Other	Elimination/ Corporate	Total
Amortization of goodwill	¥	¥ 424	¥ 162	¥	¥	¥ 586
Goodwill at March 31, 2017		5,412	1,213			6,626

	Thousands of U.S. Dollars					
	2018					
	Takara Shuzo	Takara Shuzo International Group	Takara Bio Group	Other	Elimination/ Corporate	Total
Amortization of goodwill	$	$ 3,330	$ 4,613	$	$	$ 7,952
Goodwill at March 31, 2018		51,943	77,915			129,858

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