NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Bridgestone Corporation and Subsidiaries

NOTE 1 NATURE OF OPERATIONS

Bridgestone Corporation and its subsidiaries (hereinafter referred to collectively as the "Companies") engage in developing, manufacturing and marketing tires and diversified products. The Companies market their products worldwide and operate manufacturing plants in every principal market. Development activities take place primarily in Japan, the United States of America (the "U.S.") and Europe.

Tire operations include retread business, automotive maintenance and repairs, retail business and raw material supplies, as well as tire development, manufacturing and marketing. Diversified products include industrial products, chemical products, automotive components, construction materials, electronic equipment, bicycles and sporting goods.

NOTE 2 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 accordance 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 ("IFRS") and the accounting principles generally accepted in the U.S. ("U.S. GAAP").

The consolidated financial statements are stated in Japanese yen, the currency of the country in which Bridgestone Corporation (the "Company") is incorporated and operates. 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 ¥111.00 to $1, the approximate rate of exchange on December 31, 2018. 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.

NOTE 3 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

(1) Consolidation

The consolidated financial statements include the accounts of the Companies in which the Company has effective control. All significant intercompany balances and transactions have been eliminated in consolidation. All material unrealized profits included in assets resulting from transactions within the Companies are also eliminated.

Investments in affiliated companies, primarily those owned 20% to 50%, are accounted for under the equity method with appropriate adjustments for intercompany profits and dividends. Share of profit of entities accounted for using the equity method is included in other income (expenses) in the consolidated statements of income.

The number of consolidated subsidiaries and affiliated companies for 2018 and 2017 is summarized below:

	2018	2017
Consolidated subsidiaries	285	288
Affiliated companies	146	147

(2) Unification of accounting policies applied to foreign subsidiaries for the consolidated financial statements

In May 2006, the Accounting Standards Board of Japan (the "ASBJ") issued ASBJ Practical Issues Task Force ("PITF") No.18, "Practical Solution on Unification of Accounting Policies Applied to Foreign Subsidiaries for the Consolidated Financial Statements" which was subsequently revised in February 2010 and March 2015 to reflect revisions of the relevant Japanese GAAP or accounting standards in other jurisdictions. PITF No.18 prescribes that 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 IFRS or U.S. GAAP 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: (i) amortization of goodwill; (ii) scheduled amortization of actuarial gain or loss of pensions that has been recorded in equity through other comprehensive income; (iii) expensing capitalized development costs of R&D; and (iv) cancellation of the fair value model of accounting for property, plant and equipment and investment properties and incorporation of the cost model of accounting.

(3) Unification of accounting policies applied to foreign affiliated companies for the equity method

In March 2008, the ASBJ issued ASBJ Statement No.16, "Accounting Standard for Equity Method of Accounting for Investments" which was subsequently revised in line with the revisions to PITF No. 18 above. The standard requires adjustments to be made to conform the affiliate's accounting policies for similar transactions and events under similar circumstances to those of the parent company when the affiliate'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 affiliated companies in accordance with either IFRS or U.S. GAAP 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: (i) amortization of goodwill; (ii) scheduled amortization of actuarial gain or loss of pensions that has been recorded in equity through other comprehensive income; (iii) expensing capitalized development costs of R&D; and (iv) cancellation of the fair value model of accounting for property, plant and equipment and investment properties and incorporation of the cost model of accounting.

(4) Cash equivalents

Cash equivalents are short-term investments that are readily convertible into cash and that are exposed to insignificant risk of changes in value. Cash equivalents include highly liquid investments with original maturities of three months or less.

(5) Allowance for doubtful accounts

Allowance for doubtful accounts is established in amounts considered to be appropriate based on the Companies' past credit loss experience and an evaluation of potential losses in the receivables outstanding.

(6) Inventories

Inventories are substantially stated at the lower of cost, determined by the average method, or net selling value.

Meanwhile, inventories held by subsidiaries in the U.S. are substantially stated at the lower of cost, determined principally by the last-in, first-out method, or market value.

(7) Marketable and investment securities

Marketable and investment securities are classified and accounted for, depending on management's intent, as follows:

Available-for-sale securities, which are not classified as neither of trading securities nor held-to-maturity debt, 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.

(8) Property, plant and equipment

Property, plant and equipment are stated at cost. Depreciation of property, plant and equipment of the Company and its domestic subsidiaries is computed substantially by the declining-balance method based on the estimated useful lives of the assets, while the straight-line method is applied to property, plant and equipment of the Company's overseas subsidiaries. Maintenance, repair and minor renewals are charged to income as incurred.

(9) Impairment of assets

Assets are reviewed for impairment whenever events or changes in circumstance indicate the carrying amount of an asset or asset group may not be recoverable. An impairment loss is 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 an asset or asset group exceeds its recoverable amount, which is the higher of the discounted future cash flows expected to result from the continued use and eventual disposition of the asset or asset group, or the net selling price at disposition.

(10) Goodwill

Goodwill recorded by subsidiaries, and the excess of cost of the Company's investments in subsidiaries and affiliated companies over its equity at the respective dates of acquisition, are mainly being amortized on a straight-line basis over a reasonable economical life of up to 20 years.

(11) Provision for sales returns

Provision for sales returns is estimated and recorded principally to provide for future losses on the return of snow tires.

(12) Provision for reorganization of R&D and manufacturing base

In order to reserve for outlays related to reorganization of R&D and manufacturing base, the estimated amount of future obligations is recorded.

(13) Provision for product warranties

Provision for product warranties, included in other liabilities, is estimated and recorded at the time of sale to provide for future potential costs, such as costs related to after-sales services, in amounts considered to be appropriate based on the Companies' past experience.

(14) Provision for environmental remediation

In order to reserve for outlays legally required for removal and disposal of polychlorinated biphenyl ("PCB") and others, the estimated amount of future obligations is recorded.

(15) Retirement and pension plans

The Company and its domestic subsidiaries have contributory funded defined benefit pension plans and unfunded retirement benefit plans for employees. Certain of the Company's overseas subsidiaries have funded defined benefit pension plans and defined contribution pension plans.

The Company accounts for the liability of 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 or a straight-line basis. Actuarial gains and losses and past service costs that are yet to be recognized in profit or loss are recognized within equity (accumulated other comprehensive income), after adjusting for tax effects and are recognized in profit or loss over 3 years to 13 years, respectively, no longer than the expected average remaining service period of the employees.

Retirement allowances for directors are recorded as a liability at the amount that would be required if all directors retired at each balance sheet date.

(16) Asset retirement obligations

An asset retirement obligation is recorded for a legal obligation imposed either by law or contract that results from the acquisition, construction, development and normal operation of a tangible fixed asset and is associated with the retirement of such tangible fixed asset. The asset retirement obligation is recognized as the sum of the discounted cash flows required for the future asset retirement and is recorded in the period in which the obligation is incurred if a reasonable estimate can be made. If a reasonable estimate of the asset retirement obligation cannot be made in the period the asset retirement obligation is incurred, the liability should be recognized when a reasonable estimate of the asset retirement obligation can be made.

Upon initial recognition of a liability for an asset retirement obligation, an asset retirement cost is capitalized by increasing the carrying amount of the related fixed asset by the amount of the liability. The asset retirement cost is subsequently allocated to expense through depreciation over the remaining useful life of the asset. Over time, the liability is accreted to its present value each period. Any subsequent revisions to the timing or the amount of the original estimate of undiscounted cash flows are reflected as an adjustment to the carrying amount of the liability and the capitalized amount of the related asset retirement cost.

(17) Leases

Finance (Capital) lease transactions are capitalized by recognizing lease assets and lease obligations in the balance sheet.

(18) Income taxes

The provision for income taxes is computed based on income before income taxes 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 income taxes are measured by applying currently enacted income tax rates to the temporary differences. A valuation allowance is provided for any portion of the deferred tax assets where it is considered more likely than not that they will not be realized.

(19) 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 currency exchange gains and losses from translation are recognized in the consolidated statement of income.

(20) Foreign currency financial statements

The balance sheet accounts of the Company's overseas subsidiaries are translated into Japanese yen at the current exchange rate at the balance sheet date except for equity, which is translated at the historical rate. Differences arising from such translation are shown as foreign currency translation adjustments under accumulated other comprehensive income in a separate component of equity. Revenue and expense accounts of the Company's overseas subsidiaries are translated into Japanese yen at the average annual exchange rate.

(21) Derivatives and hedging activities

The Companies use derivative financial instruments to manage their exposures to fluctuations in foreign currency exchange rates, interest rates and commodity prices. Foreign currency forward contracts, currency swap contracts and currency option contracts are utilized by the Companies to reduce foreign currency exchange risks. Interest rate swaps are utilized by the Companies to reduce interest rate risks. Also, commodity swap contracts are utilized by the Companies to reduce commodity price risks. The Companies do not enter into derivatives for trading or speculative purposes.

Derivative financial instruments are classified and accounted for as follows: (i) 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 (ii) 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.

Foreign currency forward contracts which are designated as hedging exposure to variable cash flows of forecasted transactions are measured at fair value, and the unrealized gains or losses are deferred until the underlying transactions are completed. Other foreign currency forward contracts, currency swap contracts and currency option contracts employed to hedge foreign currency exchange exposures to changes in fair value and in cash flow are also measured at fair value but the unrealized gains or losses are recognized in income. Short-term and long-term debt denominated in foreign currencies for which foreign currency forward contracts and currency swap contracts are used to hedge the foreign currency fluctuations are translated at the contracted rate if the foreign currency forward contracts and currency swap contracts qualify for hedge accounting. Interest rate swaps which qualify for hedge accounting and meet specific matching criteria are not remeasured at market value, but the differential paid or received under the swap agreements is recognized and included in interest expenses. The gains or losses on commodity swap contracts used to hedge fluctuations of commodity prices are recognized currently in income.

(22) Per share of common stock

Basic net income per share is computed by dividing net income available to common shareholders by the weighted-average number of common stock outstanding for the period, retroactively adjusted for stock splits.

Diluted net income per share reflects the potential dilution that could occur if securities were exercised or converted into common stock. Diluted net income per share of common stock assumes full conversion of the outstanding convertible notes and bonds at the beginning of the year (or at the time of issuance) with an applicable adjustment for related interest expense, net of tax, and full exercise of outstanding warrants and stock options.

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

(23) Reclassification

In preparing the 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.

(24) Changes in presentation

Consolidated Statement of Cash Flows

Prior to January 1, 2018, “Payments related to reorganization of R&D and manufacturing base” was disclosed separately in the cash flows from operating activities section of the consolidated statement of cash flows. Since during this fiscal year ended December 31, 2018, the materiality of the amount decreased, such amount was included in “Other” in the cash flows from operating activities section of the consolidated statement of cash flows for the year ended December 31, 2018. The amount included in “Other” for the year ended December 31, 2017 was (¥3,321) million.

Prior to January 1, 2018, “Repayments of obligations under finance leases” was included in “Other” in the cash flows from financing activities section of the consolidated statement of cash flows. Since during this fiscal year ended December 31, 2018, the materiality of the amount increased, such amount was disclosed separately in the cash flows from financing activities section of the consolidated statement of cash flows. The amount included in “Other” for the year ended December 31, 2017 was (¥1,292) million.

Prior to January 1, 2018, “Purchase of treasury stock” was disclosed separately in the cash flows from financing activities section of the consolidated statement of cash flows. Since during this fiscal year ended December 31, 2018, the materiality of the amount decreased, such amount was included in “Other” in the cash flows from financing activities section of the consolidated statement of cash flows for the year ended December 31, 2018. The amount included in “Other” for the year ended December 31, 2017 was (¥150,013) million.

(25) Accounting Changes

Adoption of Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income

Certain overseas subsidiaries have early adopted ASU No. 2018-02, “Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income (revised on February 14, 2018)” from the beginning of fiscal 2018.

The effect of changes in deferred tax assets and deferred tax liabilities resulting from a change in tax rate following the enactment of the “Tax Cuts and Jobs Act” by the U.S. federal government on December 22, 2017 was included in the accumulated consolidated net profit of the previous fiscal year. The effect of changes in tax effects described above that were recognized through accumulated other comprehensive income was stranded in accumulated other comprehensive income in the previous fiscal year. In accordance with “Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income”, those subsidiaries that early adopted the standard reclassified stranded tax effects resulting from a change in tax rate above from accumulated other comprehensive income to retained earnings. In accordance with the transitional treatment prescribed in this accounting policy, reclassification was made at the beginning of fiscal 2018.

As a result, retained earnings increased by ¥20,879 million ($188,099 thousand) and remeasurement of defined benefit plans decreased by ¥20,879 million ($188,099 thousand) at the beginning of fiscal 2018. This change in accounting policy had no effect on the consolidated statement of income for the year ended December 31, 2018.

(26) New accounting pronouncements

1. Tax Effect Accounting

On February 16, 2018, the ASBJ issued ASBJ Statement No. 28, "Partial Amendments to Accounting Standard for Tax Effect Accounting," and ASBJ Guidance No. 26, "Implementation Guidance on Recoverability of Deferred Tax Assets." Accounting treatments are required as follows: (1) changes in handling future taxable amount in individual financial statements and (2) clarification of handling on recoverability of deferred tax assets in companies that are categorized as (type 1).

The Company applied the accounting standard and guidance for annual periods beginning on January 1, 2019, and is in the process of measuring the effects of applying the accounting standard and guidance in future applicable periods.

2. Accounting Standard for Revenue Recognition

On March 30, 2018, the ASBJ issued ASBJ Statement No. 29, "Accounting Standard for Revenue Recognition," and ASBJ Guidance No. 30, "Implementation Guidance on Accounting Standard for Revenue Recognition." The core principle of the standard and guidance is that an entity should recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. An entity should recognize revenue in accordance with that core principle by applying the following steps:

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

The accounting standard and guidance are effective for annual periods beginning on or after January 1, 2022. Earlier application is permitted for annual periods beginning on or after January 1, 2019.

The Company expects to apply the accounting standard and guidance for annual periods beginning on or after January 1, 2022 and is in the process of measuring the effects of applying the accounting standard and guidance in future applicable periods.

3. Accounting Standard for Revenue from Contracts with Customers

On May 28, 2014, the Financial Accounting Standards Board (FASB) issued ASU2014-09 "Revenue from Contracts with Customers." The core principle of the standard is that an entity should recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in the exchange for those goods or services. Certain overseas subsidiaries that apply U.S. GAAP applied this accounting standard beginning January 1, 2019 and are in the process of measuring the effects of applying the accounting standard in future applicable periods.

4. Leases

On January 13, 2016, the International Accounting Standards Board (IASB) issued IFRS16 "Leases," and on February 25, 2016, FASB issued ASU2016-02 "Leases," requiring recognition of substantially all lease assets and lease liabilities on the balance sheet.

Certain overseas subsidiaries that apply IFRS applied this accounting standard from the beginning of the annual period beginning on January 1, 2019, and certain overseas subsidiaries which apply U.S. GAAP expect to apply this accounting standard from the beginning of the annual period beginning on January 1, 2020, and are in the process of measuring the effects of applying the accounting standard in future applicable periods.

NOTE 4 INVENTORIES

Inventories at December 31, 2018 and 2017, consist of the following:

	2018	2017	2018
		Millions of yen	Thousands of U.S. dollars
Finished products	¥407,609	¥397,253	$3,672,153
Work in process	37,904	36,788	341,478
Raw materials and supplies	171,721	156,143	1,547,036
Total	¥617,234	¥590,184	$5,560,667

NOTE 5 MARKETABLE AND INVESTMENT SECURITIES

Information regarding each category of available-for-sale securities at December 31, 2018 and 2017, is as follows:

	Cost	Unrealized gains	Unrealized losses	Fair value	Cost	Unrealized gains	Unrealized losses	Fair value
				2018				2017
								Millions of yen
Securities Classified as:								
Available-for-sale:								
Equity securities	¥25,675	¥142,198	¥(10)	¥167,863	¥29,998	¥228,010	¥(1)	¥258,007
				Thousands of U.S. dollars				
Securities Classified as:								
Available-for-sale:								
Equity securities	$231,306	$1,281,063	$(90)	$1,512,279				

In addition to the above, the Companies have available-for-sale securities classified as marketable securities under U.S. GAAP of ¥143,854 million ($1,295,982 thousand) and ¥211,680 million, respectively, for the years ended December 31, 2018 and 2017.

Available-for-sale securities whose fair values are not readily determinable at December 31, 2018 and 2017, are as follows:

	2018	2017	2018
Carrying amount		Millions of yen	Thousands of U.S. dollars
Available-for-sale:			
Equity securities	¥4,268	¥4,186	$38,451

Proceeds from sales of available-for-sale securities for the years ended December 31, 2018 and 2017 are ¥20,554 million ($185,171 thousand) and ¥31,832 million, respectively. Gross realized gains on these sales, for the years ended December 31, 2018 and 2017, computed on the moving average cost basis, are ¥16,238 million ($146,288 thousand) and ¥28,595 million, respectively.

The information of available-for-sale securities which were sold during the year ended December 31, 2018 is as follows:

	Proceeds	Realized gains	Realized losses	Proceeds	Realized gains	Realized losses
						2018
			Millions of yen			Thousands of U.S. dollars
Securities Classified as:						
Available-for-sale:						
Equity securities	¥20,554	¥16,238	¥2	$185,171	$146,288	$18

NOTE 6 SHORT-TERM AND LONG-TERM DEBT

Short-term debt at December 31, 2018 and 2017, consists of the following:

	2018	2017	2018
		Millions of yen	Thousands of U.S. dollars
Short-term bank loans, weighted average interest rate of 3.8% at December 31, 2018, and 5.0% at December 31, 2017	¥76,384	¥82,318	$688,144
Commercial paper, weighted average interest rate of (0.3%) at December 31, 2018	20,955	—	188,784
Total	¥97,339	¥82,318	$876,928

Long-term debt at December 31, 2018 and 2017, consists of the following:

	2018	2017	2018
		Millions of yen	Thousands of U.S. dollars
Borrowings from banks, insurance companies and others, weighted average interest rate of 3.0% at December 31, 2018, and 3.0% at December 31, 2017, denominated mainly in Japanese yen, U.S. dollars and Euros:			
Unsecured	¥ 62,285	¥ 94,017	$ 561,126
0.3% yen unsecured straight bonds, due 2018	—	20,000	—
0.2% yen unsecured straight bonds, due 2019	70,000	70,000	630,631
0.1% yen unsecured straight bonds, due 2022	40,000	40,000	360,360
0.2% yen unsecured straight bonds, due 2024	50,000	50,000	450,450
0.3% yen unsecured straight bonds, due 2027	60,000	60,000	540,541
Obligations under finance leases	28,870	42,694	260,090
Total	311,155	376,711	2,803,198
Less current portion	(95,931)	(76,406)	(864,243)
Long-term Debt, Less Current Portion	¥215,224	¥300,305	$1,938,955

Annual maturities of long-term debt at December 31, 2018, are as follows:

Year ending December 31,	Millions of yen	Thousands of U.S. dollars
2019	¥ 95,931	$ 864,243
2020	4,318	38,901
2021	9,877	88,982
2022	63,861	575,324
2023	4,157	37,451
2024 and thereafter	133,011	1,198,297
Total	¥311,155	$2,803,198

Notes and accounts receivable and property, plant and equipment were pledged as collateral for certain bank loans. The aggregate carrying amount of the assets pledged as collateral for short-term bank loans of ¥0 ($0) and long-term bank loans of ¥0 ($0) at December 31, 2018, is ¥496 million ($4,468 thousand).

General agreements with respective banks provide, as is customary in Japan, that additional collateral must be provided under certain circumstances if requested by such banks and that certain banks have the right to offset cash deposited with them against any long-term or short-term debt or obligation that becomes due and, in case of default and certain other specified events, against all other debt payable to the banks. The Company has never been requested to provide any additional collateral.

Effective January 2019, Bridgestone Americas, Inc. ("BSAM") and its major subsidiaries in the U.S. entered into separate seventeenth amended and restated revolving credit agreements with a syndicate of banks providing an aggregate borrowing commitment of $1,100 million. The revolving credit agreement consists of two tranches, each of which has an aggregate borrowing commitment of $550 million, and expire in January 2020 and January 2021, respectively. These agreements contain certain customary affirmative and negative covenants, the most restrictive of which includes (i) the maintenance by BSAM and its major subsidiaries of their consolidated tangible net worth, (ii) restrictions on entering into additional debt arrangements and (iii) restrictions related to the sale of assets. The above agreements replaced the separate sixteenth amended and restated revolving credit agreements, whose expiration dates are January 2019 and January 2020. As of December 31, 2018, BSAM's outstanding balance under the sixteenth amended and restated revolving credit agreement was $0.

NOTE 7 RETIREMENT AND PENSION PLANS

Employees serving with the Company and its domestic subsidiaries are generally entitled to a lump-sum payment at retirement and, in certain cases, annuity payments at retirement, provided by funded defined benefit pension plans based on the rate of pay at the time of termination, years of service and certain other factors. There are defined contribution pension plans available for the employees as well provided by the Company and certain of its domestic subsidiaries.

Employees serving with certain of the Company's overseas subsidiaries are entitled to either (1) funded defined benefit pension plans, corporate pension plans, lump-sum payment plans and others, or (2) defined contribution pension plans. There are escalated payment plans for voluntary retirement at certain specific ages prior to the mandatory retirement age.

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

	2018	2017	2018
		Millions of yen	Thousands of U.S. dollars
Balance at beginning of year	¥797,016	¥783,746	$7,180,324
Service cost	15,568	19,865	140,252
Interest cost	18,475	18,682	166,441
Actuarial (gains) losses	(44,199)	35,763	(398,189)
Benefits paid	(46,309)	(43,922)	(417,198)
Effect of foreign exchange translation	(12,743)	(13,345)	(114,802)
Others	(679)	(3,773)	(6,116)
Balance at end of year	¥727,129	¥797,016	$6,550,712

Service cost includes net periodic benefit costs of certain subsidiaries that have adopted a simplified method.

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

	2018	2017	2018
		Millions of yen	Thousands of U.S. dollars
Balance at beginning of year	¥656,018	¥632,618	$5,910,072
Expected return on plan assets	30,835	30,379	277,793
Actuarial (losses) gains	(58,345)	24,332	(525,631)
Contributions from the employer	9,979	20,859	89,910
Benefits paid	(41,790)	(40,504)	(376,486)
Effect of foreign exchange translation	(10,047)	(11,958)	(90,514)
Others	192	292	1,721
Balance at end of year	¥586,842	¥656,018	$5,286,865

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

	2018	2017	2018
		Millions of yen	Thousands of U.S. dollars
Funded defined benefit obligation	¥ 636,320	¥ 706,400	$ 5,732,613
Plan assets	(586,842)	(656,018)	(5,286,865)
	49,478	50,382	445,748
Unfunded defined benefit obligation	90,809	90,616	818,099
Net liability arising from defined benefit obligation	140,287	140,998	1,263,847
Net defined benefit liability	138,287	137,266	1,245,829
Net defined benefit asset	(371)	(1,346)	(3,342)
Others	2,371	5,078	21,360
Net liability arising from defined benefit obligation	¥ 140,287	¥ 140,998	$ 1,263,847

In addition to liability for retirement benefits noted above, a liability for post-retirement benefits of ¥57,718 million ($519,982 thousand) and ¥65,598 million is included in the consolidated balance sheet at December 31, 2018 and 2017, respectively.

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

	2018	2017	2018
		Millions of yen	Thousands of U.S. dollars
Service cost	¥ 15,568	¥ 19,865	$ 140,252
Interest cost	18,475	18,682	166,441
Expected return on plan assets	(30,835)	(30,379)	(277,793)
Amortization of prior service cost	20,819	23,143	187,560
Recognized actuarial (gains) losses	136	256	1,225
Net periodic benefit costs	¥ 24,163	¥ 31,567	$ 217,685

Service cost includes net periodic benefit costs of certain subsidiaries that have adopted a simplified method.

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

	2018	2017	2018
		Millions of yen	Thousands of U.S. dollars
Prior service cost	¥ 458	¥ 1,142	$ 4,126
Actuarial (gains) losses	10,501	17,643	94,604
Others	—	1	—
Total	¥10,959	¥18,786	$98,730

In addition to accumulated other comprehensive income on defined retirement benefit plans noted above, accumulated other comprehensive income for post-retirement benefits of a credit of ¥4,322 million ($38,937 thousand) and a debit of ¥2,995 million at certain overseas subsidiaries in the Americas is included in the consolidated statement of comprehensive income at December 31, 2018 and 2017, respectively.

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

	2018	2017	2018
		Millions of yen	Thousands of U.S. dollars
Unrecognized prior service cost	¥ (135)	¥ (594)	$ (1,216)
Unrecognized actuarial (gains) losses	(184,393)	(194,635)	(1,661,198)
Total	¥(184,528)	¥(195,229)	$(1,662,414)

In addition to accumulated other comprehensive income on defined retirement benefit plans noted above, accumulated other comprehensive income for post-retirement benefits of a credit of ¥7,038 million ($63,405 thousand) and a credit of ¥2,716 million at certain overseas subsidiaries in the Americas is included in the consolidated balance sheet at December 31, 2018 and 2017, respectively.

(7) Plan assets

a. Components of plan assets

Plan assets consisted of the following:

	2018	2017
		%
Debt investments	64%	61%
Equity investments	13	15
Cash and cash equivalents	4	6
Others	19	18
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 December 31, 2018 and 2017, are set forth as follows:

	2018	2017
		%
The Company and its domestic subsidiaries		
Discount rate	0.6% to 0.8%	0.7% to 0.9%
Expected long-term rate of return on plan assets	2.5%	2.5%
Overseas subsidiaries		
Discount rate	3.7% to 4.4%	3.3% to 3.7%
Expected long-term rate of return on plan assets	4.3% to 6.0%	4.3% to 6.0%

(9) Defined contribution pension plans

The Company and certain of its domestic and overseas subsidiaries paid costs for defined contribution pension plans of ¥10,922 million ($98,396 thousand) and ¥10,252 million, respectively, for the years ended December 31, 2018 and 2017.

NOTE 8 EQUITY

Significant provisions in the Companies Act of Japan (the "Act") that affect financial and accounting matters are summarized below:

(i) Dividends:

The Act allows Japanese companies to pay dividends at any time during the fiscal year in addition to the year-end dividend upon resolution at the shareholders' meeting. Additionally, for Japanese companies that meet certain criteria including having a Board of Directors, having independent auditors, having an Audit & Supervisory Board, and 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) if the company has prescribed so in its articles of incorporation. The Board of Directors of companies with board committees (including appointment committee, compensation committee and audit committee) can also do so because such companies with board committees already, by nature, meet the above criteria under the Act, even though such companies have an audit committee instead of an Audit & Supervisory Board. The Company is organized as a company with board committees. The Act permits Japanese companies to distribute dividends in kind (noncash assets) to shareholders subject to certain limitations 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 Act continues to provide 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 equity after dividends must be maintained at no less than ¥3 million.

(ii) Increases/Decreases and Transfer of Common Stock, Reserve and Surplus:

The Act requires that an amount equal to 10% of dividends must be appropriated as a legal reserve (of retained earnings) or as additional paid-in capital (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 Act, the total amount of additional paid-in capital and legal reserve may be reversed without limitation. The 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.

(iii) Treasury Stock and Treasury Stock Acquisition Rights:

The Act also provides for Japanese companies to repurchase/dispose of 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 Act, stock acquisition rights are presented as a separate component of equity. The 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.

(iv) Cancellation of Treasury Stock:

The Company, as resolved at the Board of Directors meeting held on February 17, 2017, completed the cancellation of Treasury Stock pursuant to Article 178 of the Companies Act on January 19, 2018.

(1) Book value of shares cancelled: ¥173,127 million ($1,560 million)
(2) Kind of shares cancelled: Common shares of the Company
(3) Total number of shares cancelled: 51,565,900 shares of Treasury Stock of the Company

NOTE 9 STOCK-BASED COMPENSATION

The stock options outstanding as of December 31, 2018 are as follows:

Date of approval	Persons granted		Number of options granted (Thousands of shares)	Date of grant	Exercise price	Exercise period
March 26, 2009 at the general shareholders meeting and the board of directors	Directors Corporate officers not doubling as directors	9 20	110	May 1, 2009	¥1 ($0.01)	from May 1, 2009 to April 30, 2029
March 30, 2010 at the general shareholders meeting and the board of directors	Directors Corporate officers not doubling as directors	8 25	118.5	May 6, 2010	¥1 ($0.01)	from May 6, 2010 to April 30, 2030
March 29, 2011 at the general shareholders meeting and the board of directors	Directors Corporate officers not doubling as directors	9 36	154.5	May 2, 2011	¥1 ($0.01)	from May 2, 2011 to April 30, 2031
March 27, 2012 at the general shareholders meeting and the board of directors	Directors Corporate officers not doubling as directors	9 35	202	May 1, 2012	¥1 ($0.01)	from May 1, 2012 to April 30, 2032
March 26, 2013 at the general shareholders meeting and the board of directors	Directors Corporate officers not doubling as directors	4 36	196	May 1, 2013	¥1 ($0.01)	from May 1, 2013 to April 30, 2033
March 25, 2014 at the general shareholders meeting and the board of directors	Directors Corporate officers not doubling as directors	4 46	131.9	May 1, 2014	¥1 ($0.01)	from May 1, 2014 to April 30, 2034
March 24, 2015 at the general shareholders meeting and the board of directors	Directors Corporate officers not doubling as directors	3 48	142.5	May 1, 2015	¥1 ($0.01)	from May 1, 2015 to April 30, 2035
April 21, 2016 at the board of directors	Directors excluding directors not doubling as executive officers Executive officers not doubling as directors Corporate officers	2 8 41	208.8	May 6, 2016	¥1 ($0.01)	from May 7, 2016 to May 6, 2036
Plan A April 27, 2017 at the board of directors	Directors excluding directors not doubling as executive officers Executive officers not doubling as directors Corporate officers	2 5 45	206.5	May 12, 2017	¥1 ($0.01)	from May 13, 2017 to May 12, 2037
Plan B April 27, 2017 at the board of directors	Executive officers not doubling as directors Corporate officers	1 2	14.3	July 5, 2017	¥1 ($0.01)	from July 6, 2017 to July 5, 2037

The stock option activity is as follows:

	March 26, 2009	March 30, 2010	March 29, 2011	March 27, 2012	March 26, 2013	March 25, 2014	March 24, 2015	April 21, 2016	Plan A April 27, 2017	Plan B April 27, 2017
Vested (Thousands of shares)										
Outstanding at December 31, 2017	52.7	99.4	138.5	186.7	186.3	126.4	137.3	195.8	195	12.5
Vested	—	—	—	—	—	—	—	—	—	—
Exercised	7.1	22.5	17	12	6	3.4	3.9	7.7	—	5.4
Expired	—	—	—	—	—	—	—	—	—	—
Outstanding at December 31, 2018	45.6	76.9	121.5	174.7	180.3	123	133.4	188.1	195	7.1
Exercise price	¥1	¥1	¥1	¥1	¥1	¥1	¥1	¥1	¥1	¥1
	($0.01)	($0.01)	($0.01)	($0.01)	($0.01)	($0.01)	($0.01)	($0.01)	($0.01)	($0.01)
Average stock price at exercise	¥4,540	¥4,342	¥4,326	¥4,244	¥4,191	¥4,191	¥4,191	¥4,191	—	¥4,191
	($40.90)	($39.12)	($38.97)	($38.23)	($37.76)	($37.76)	($37.76)	($37.76)		($37.76)
Fair value price at grant date	¥1,264	¥1,400	¥1,656	¥1,648	¥3,313	¥3,153	¥4,099	¥2,884	¥3,577	¥3,671
	($11.39)	($12.61)	($14.92)	($14.85)	($29.85)	($28.41)	($36.93)	($25.98)	($32.23)	($33.07)

NOTE 10 NET INCOME PER SHARE

Reconciliation of the differences between basic and diluted net income per share (“EPS”) for the years ended December 31, 2018 and 2017, is as follows:

	Profit attributable to owners of parent	Weighted-average shares	EPS	
	For the year ended December 31, 2018			
	Millions of yen	Thousands of shares	Yen	U.S. dollars
Basic EPS				
Net income available to common shareholders	¥291,642	751,761	¥387.95	$3.50
Effect of dilutive securities				
Stock options		1,299		
Diluted EPS				
Net income for computation	¥291,642	753,060	¥387.28	$3.49

	Profit attributable to owners of parent	Weighted-average shares	EPS
	For the year ended December 31, 2017		
	Millions of yen	Thousands of shares	Yen
Basic EPS			
Net income available to common shareholders	¥288,276	767,356	¥375.67
Effect of dilutive securities			
Stock options		1,356	
Diluted EPS			
Net income for computation	¥288,276	768,712	¥375.01

NOTE 11 RESEARCH AND DEVELOPMENT COSTS

Research and development costs are charged to income as incurred.

Research and development costs are ¥103,551 million ($932,892 thousand) and ¥99,792 million for the years ended December 31, 2018 and 2017, respectively.

NOTE 12 OTHER INCOME (EXPENSES)

Gain on establishment in jointly controlled entity

BSAM formed TIREHUB, LLC (equity-method affiliate) with THE GOODYEAR TIRE & RUBBER COMPANY by contribution in kind for operating wholesale distribution in the U.S. in July 2018. Based on U.S. GAAP, the Companies accounted for gain as the amount of difference between the amount of investment and fair value amount of share acquisition.

Impairment loss

During the year ended December 31, 2017, the Companies grouped their assets for businesses in accordance with the classifications used for internal management. Assets to be disposed (assets that the Companies plan to dispose of through scrapping or sale) and idle assets were grouped on an individual basis.

In the previous period, for assets for business whose profitability has declined, assets to be disposed through planned scrapping or sale, and idle assets that are not expected to be used in the future, the carrying amounts were reduced to their recoverable amounts. As a result, the Companies recognized an impairment loss of ¥10,123 million as extraordinary loss. The loss consists of ¥4,626 million for other intangible fixed assets, ¥2,416 million for machinery, equipment and vehicles, ¥1,219 million for buildings and structures, ¥973 million for land, and ¥889 million for others.

			2017
Use	Classification	Location	Amount
			Millions of yen
Assets for business	Machinery, equipment and vehicles, Buildings and structures, Land and others	Thailand, Japan, Mexico and others	¥3,771
Assets to be disposed	Other tangible fixed assets, Land and others	Japan and others	6,307
Idle assets	Land	Japan	44

The recoverable amounts of assets for business are principally measured by value in use, which is calculated by discounting future cash flows at a discount rate of 3.5% to 9.0%. The recoverable amounts of assets to be disposed and idle assets are measured at the net selling price. Assets to be scrapped are evaluated at memorandum value, and assets to be sold and idle assets are evaluated at the estimated selling price and other.

Expenses related to relocation of head office of Americas Operations

During the year ended December 31, 2017, relevant expenses were recognized in relation to the relocation of the head office of BSAM, corporate headquarters in the Americas, and the aggregation of its operation sites in the United States.

Loss related to civil litigation in the Americas

During the year ended December 31, 2017, the Company has recorded the loss related to civil litigation in the Americas regarding sales of automobile parts.

NOTE 13 INCOME TAXES

The Company and its domestic subsidiaries are subject to Japanese national and local income taxes which, in the aggregate, resulted in normal effective statutory tax rates of approximately 30.8% for each of the years ended December 31, 2018 and 2017.

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

	2018	2017	2018
		Millions of yen	Thousands of U.S. dollars
Deferred Tax Assets:			
Net defined benefit liability	¥ 52,217	¥ 53,821	$ 470,424
Accrued expenses	28,899	23,785	260,351
Unrealized intercompany profits	21,680	23,643	195,315
Depreciation	17,321	15,332	156,045
Net operating loss carryforwards for tax purposes	43,235	36,286	389,505
Other	37,639	39,510	339,090
Less valuation allowance	(49,602)	(38,065)	(446,865)
Total	151,389	154,312	1,363,865
Deferred Tax Liabilities:			
Reserve for deferred gain related fixed assets for tax purposes	(11,578)	(11,637)	(104,306)
Unrealized gain on available-for-sale securities	(33,322)	(51,354)	(300,198)
Depreciation	(43,045)	(31,367)	(387,793)
Other	(25,469)	(17,682)	(229,451)
Total	(113,414)	(112,040)	(1,021,748)
Net deferred tax assets	¥ 37,975	¥ 42,272	$ 342,117

A reconciliation between the normal effective statutory tax rates and the actual effective tax rates reflected in the accompanying consolidated statement of income is as follows:

	2017
	%
Normal effective statutory tax rate	30.8%
Tax credit for research and development costs of domestic companies	(1.1)
Tax adjustment of overseas companies	1.9
U.S. tax reform	1.4
Transfer pricing adjustment in advance pricing arrangement	(3.0)
Other—net	(0.7)
Actual Effective Tax Rate	29.3%

For the year ended December 31, 2018, a reconciliation is not disclosed, since the difference is less than 5% of the normal effective statutory tax rate.

NOTE 14 FINANCIAL INSTRUMENTS

1. Qualitative information on financial instruments

(1) Policies for using financial instruments

The Companies raise the necessary funds mainly by bank borrowings or issuance of bonds based on funding requirements of their business activities. The Companies invest temporary cash surpluses only in highly secured financial instruments. The Companies follow the policy of using derivative financial instruments not for speculative purposes, but for managing financial risks as described later.

(2) Details of financial instruments used and the exposures to risk

Receivables, such as notes and accounts receivable, are exposed to customer credit risk. Receivables in foreign currencies are exposed to foreign currency exchange fluctuation risk. Marketable securities consist primarily of the reservation of receivables liquidation that are exposed to customer credit risk or certificates of deposit regarded as marketable securities in accordance with U.S. GAAP. Investments in securities consist primarily of equity securities of business partners and are exposed to market price fluctuation risk.

Payment terms of payables, such as notes and accounts payable are approximately less than one year. Payables in foreign currencies are exposed to foreign currency exchange fluctuation risk. Borrowings, bonds and obligations under finance (capital) leases are mainly for the purpose of obtaining working capital and preparing for capital expenditures. Some of the borrowings and bonds with floating interest rates are exposed to interest rate fluctuation risk.

Derivative transactions consist of the use of foreign currency forward contracts and currency option contracts for the purpose of hedging foreign currency exchange fluctuation risk on receivables, payables and forecasted transactions in foreign currencies; currency swap contracts for the purpose of hedging foreign currency exchange fluctuation risk and interest rate fluctuation risk on loans and borrowings in foreign currencies; interest rate swap contracts for the purpose of hedging interest rate fluctuation risk on borrowings; and commodity swap contracts for the purpose of hedging commodity price fluctuation risk. Hedging instruments and hedged items, hedge policy, assessment method for hedge effectiveness and others related to hedge accounting are described in Note 3. (21) "Derivatives and hedging activities" and Note 15 "Derivatives."

(3) Risk management of financial instruments

a. Management of credit risk

The Companies regularly monitor the financial position of significant customers and manage the due dates and the receivables balance of each customer to minimize the risk of default resulting from deterioration of customers' financial position.

The Companies enter into derivative transactions only with highly rated financial institutions in order to minimize counterparty risk.

The maximum credit risk on December 31, 2018 is represented by the book value of the financial instruments exposed to credit risk on the consolidated balance sheet.

b. Management of market risk

The Company and certain of its subsidiaries principally use foreign currency forward contracts to hedge foreign currency exchange fluctuation risk identified by currency and on a monthly basis for receivables and payables in foreign currencies. Also, when receivables and payables in foreign currencies are expected from a forecasted transaction, foreign currency forward contracts and currency option contracts may be used. In addition, currency swap contracts are used to hedge foreign currency exchange fluctuation risk and interest rate fluctuation risk on loans and borrowings in foreign currencies; interest rate swap contracts are used to hedge interest rate fluctuation risk on borrowings; and commodity swap contracts are used to hedge commodity price fluctuation risk.

With respect to marketable and investment securities, the Company regularly monitors fair market values and financial positions of the issuers, with whom it has business relations, and appropriately reviews the status of these securities considering the relationships with the issuers.

Derivative transactions are carried out under internal regulations by the responsible divisions, and details of transactions are reported to the responsible corporate officers.

c. Management of liquidity risk in financing activities

The Companies practice money management effectively by recognizing the fund position beforehand based on cash flow projection. The Companies also strive to diversify sources of financing in order to reduce liquidity risk.

(4) Supplementary explanation on fair value of financial instruments

Fair values of financial instruments include market prices and values calculated reasonably when there is no market price.
As variable factors are incorporated in calculating the relevant fair values, such values may change depending on the different assumptions. The contract amounts described in Note 15 "Derivatives" do not indicate the amounts of market risk related to derivative transactions.

2. Fair values of financial instruments

Carrying amount, fair value and unrealized gain (loss) of financial instruments as of December 31, 2018 and 2017, are as follows.
Financial instruments whose fair values are not readily determinable are excluded from the following table.

	Carrying amount	Fair value	Unrealized gain (loss)	Carrying amount	Fair value	Unrealized gain (loss)
						2018
			Millions of yen			Thousands of U.S. dollars
(1) Cash and cash equivalents	¥ 433,916	¥ 433,916	¥ —	$ 3,909,153	$ 3,909,153	$ —
(2) Notes and accounts receivable	601,418			5,418,180		
Allowance for doubtful accounts*1	(21,730)			(195,766)		
	579,688	579,688	—	5,222,414	5,222,414	—
(3) Marketable and investment securities	311,717	311,717	—	2,808,261	2,808,261	—
Total	¥1,325,321	¥1,325,321	¥ —	$11,939,828	$11,939,828	$ —
(1) Short-term debt	¥ 97,339	¥ 97,339	¥ —	$ 876,928	$ 876,928	$ —
(2) Current portion of long-term debt	95,931	96,036	(105)	864,243	865,189	(946)
(3) Notes and accounts payable	415,139	415,139	—	3,739,991	3,739,991	—
(4) Long-term debt	215,224	215,735	(511)	1,938,955	1,943,559	(4,604)
Total	¥ 823,633	¥ 824,249	¥(616)	$ 7,420,117	$ 7,425,667	$(5,550)
Derivative transactions*2	¥ 4,732	¥ 4,732	¥ —	$ 42,631	$ 42,631	$ —

	Carrying amount	Fair value	Unrealized gain (loss)
			2017
			Millions of yen
(1) Cash and cash equivalents	¥ 501,798	¥ 501,798	¥ —
(2) Notes and accounts receivable	503,413		
Allowance for doubtful accounts*1	(17,063)		
	486,350	486,350	—
(3) Marketable and investment securities	469,687	469,687	—
Total	¥1,457,835	¥1,457,835	¥ —
(1) Short-term debt	¥ 82,318	¥ 82,318	¥ —
(2) Current portion of long-term debt	76,406	76,422	(16)
(3) Notes and accounts payable	400,917	400,917	—
(4) Long-term debt	300,305	300,382	(77)
Total	¥ 859,946	¥ 860,039	¥(93)
Derivative transactions*2	¥ (7,140)	¥ (7,140)	¥ —

*1 This comprises the allowance for doubtful accounts with respect to notes and accounts receivable, short-term loan receivable and others.
*2 Receivables and payables arising from derivative transactions are presented net. If the net amount is a liability, it is written in parentheses ( ).
*3 Prior to January 1, 2018, "Income taxes payable" was presented separately. Since during this fiscal year ended December 31, 2018, the materiality of the amount decreased, such amount was not presented separately. Presentation of fair values of financial instruments for the previous fiscal year have been changed accordingly. The amount of "Income taxes payable" in the previous fiscal year was ¥66,454 million.

Notes

1. Calculation methods of fair values of financial instruments, investments in securities, and derivative transactions are as follows:

Assets

(1) Cash and cash equivalents, and (2) Notes and accounts receivable

The fair values approximate book values because of their short-term maturities.

(3) Marketable and investment securities

The fair values of the reservation of receivables liquidation are based on values calculated reasonably, the fair values of equity securities are based on the market prices at the securities exchanges, and the fair values of bonds are based on the market prices at the securities exchanges or on the prices disclosed by financial institutions. Information on available-for-sale securities is described in Note 5 “Marketable and investment securities.”

Liabilities

(1) Short-term debt, and (2) Current portion of long-term debt

The fair values of bonds with market prices are based on the market prices. The fair values of others approximate book values because of their short-term maturities.

(3) Notes and accounts payable

The fair values approximate book values because of their short-term maturities.

(4) Long-term debt

The fair values of bonds with market prices are based on the market prices. The fair values of bonds without market prices and long-term bank borrowings are determined by discounting the aggregated values of the principal and interest using an assumed interest rate as if identical debt was newly issued.

Derivative transactions

Information on derivative transactions is described in Note 15 “Derivatives.”

2. Financial instruments whose fair values are extremely difficult to calculate

	Carrying amount		
	2018	2017	2018
	Millions of yen		Thousands of U.S. dollars
Available-for-sale securities			
Unlisted equity securities	¥4,268	¥4,186	$38,451

It is extremely difficult to calculate their fair values because there are no market prices. Therefore, these items are not included in “(3) Marketable and investment securities.”

3. Redemption schedule of monetary assets and investments in securities with contractual maturities

	Due 2019	Due 2020 to 2023	Due 2024 to 2028	Due 2029 and thereafter
	2018			
	Millions of yen			
Cash and cash equivalents	¥433,916	¥—	¥—	¥—
Notes and accounts receivable	601,418	—	—	—
Marketable and investment securities				
Available-for-sale securities with contractual maturities				
Public bonds	—	—	—	—
Corporate bonds	—	2	—	—
Other	10,000	—	—	—
	Thousands of U.S. dollars			
Cash and cash equivalents	$3,909,153	$—	$—	$—
Notes and accounts receivable	5,418,180	—	—	—
Marketable and investment securities				
Available-for-sale securities with contractual maturities				
Public bonds	—	—	—	—
Corporate bonds	—	18	—	—
Other	90,090	—	—	—

4. Please see Note 6 “Short-term and long-term debt” for annual maturities of long-term debt.

NOTE 15 DERIVATIVES

The Companies enter into foreign currency forward contracts, currency swap contracts and currency option contracts to hedge foreign currency exchange risk associated with certain assets and liabilities denominated in foreign currencies. The Companies enter into interest rate swap contracts to manage their interest rate exposures on certain liabilities. In addition, the Companies enter into commodity swap contracts to hedge the risk of fluctuation of commodity prices for raw materials.

All derivative transactions are entered into to hedge foreign currency, interest and commodity price exposures that arise in the course of the Companies' business. Accordingly, the market risk in these derivatives is basically offset by opposite movements in the value of hedged assets or liabilities. Because the counterparties to these derivatives are limited to major international financial institutions, the Companies do not anticipate any losses arising from credit risk. Derivative transactions entered into by the Companies have been made in accordance with internal policies which regulate the authorization and credit limit amounts.

The contract or notional amounts of derivatives which are shown in the following table do not represent the amounts exchanged by the parties and do not measure the Companies' exposure to credit or market risk.

The outstanding balances of derivative contracts which do not qualify for hedge accounting at December 31, 2018 and 2017, are as follows:

	Contract amount	Fair value	Unrealized gain (loss)
			2018
			Millions of yen
Foreign Currency Forward Contracts:			
Sell:			
U.S. dollar	¥58,056	¥ 947	¥ 947
Australian dollar	19,616	619	619
Euro	17,694	384	384
Poland zloty	10,076	(1)	(1)
British pound	8,510	(95)	(95)
Russian ruble	5,892	303	303
Other	20,789	106	106
Buy:			
U.S. dollar	24,127	418	418
Colombian peso	3,174	306	306
Australian dollar	2,038	(12)	(12)
Japanese yen	1,806	(110)	(110)
Other	3,465	23	23
Currency Swap Contracts:			
U.S. dollar receipt, Japanese yen payment	¥39,663	¥1,425	¥1,425
Thai baht receipt, U.S. dollar payment	26,876	(484)	(484)
Hungarian forint receipt, Euro payment	25,314	(235)	(235)
Euro receipt, U.S. dollar payment	16,257	345	345
Euro receipt, Japanese yen payment	13,010	220	220
Chinese yuan receipt, Japanese yen payment	9,727	(59)	(59)
South African rand receipt, U.S. dollar payment	9,697	342	342
Other	11,864	(51)	(51)
Commodity Swap Contracts:			
Natural rubber	¥ 4,455	¥ (197)	¥ (197)

	Contract amount	Fair value	Unrealized gain (loss)
			2017
			Millions of yen
Foreign Currency Forward Contracts:			
Sell:			
U.S. dollar	¥48,752	¥ (219)	¥ (219)
Australian dollar	22,280	(317)	(317)
Euro	17,080	(252)	(252)
Poland zloty	386	4	4
British pound	2,432	1	1
Russian ruble	6,748	(438)	(438)
Hungarian forint	29,481	(456)	(456)
Other	20,100	(460)	(460)
Buy:			
U.S. dollar	28,639	(1,219)	(1,219)
Colombian peso	3,129	(40)	(40)
Australian dollar	821	27	27
Japanese yen	11,080	(443)	(443)
Other	3,693	(33)	(33)
Currency Swap Contracts:			
U.S. dollar receipt, Japanese yen payment	¥37,565	¥ 837	¥ 837
Thai baht receipt, U.S. dollar payment	10,209	(220)	(220)
Euro receipt, U.S. dollar payment	16,638	(185)	(185)
Chinese yuan receipt, Japanese yen payment	9,727	(721)	(721)
South African rand receipt, U.S. dollar payment	2,140	(630)	(630)
Indian rupee receipt, Japanese yen payment	5,744	(389)	(389)
Other	25,005	(1,630)	(1,630)
Commodity Swap Contracts:			
Natural rubber	¥ 2,436	¥ (144)	¥ (144)

	Contract amount	Fair value	Unrealized gain (loss)
			2018
			Thousands of U.S. dollars
Foreign Currency Forward Contracts:			
Sell:			
U.S. dollar	$523,027	$ 8,532	$ 8,532
Australian dollar	176,721	5,577	5,577
Euro	159,405	3,459	3,459
Poland zloty	90,775	(9)	(9)
British pound	76,677	(856)	(856)
Russian ruble	53,081	2,730	2,730
Other	187,288	955	955
Buy:			
U.S. dollar	217,360	3,766	3,766
Colombian peso	28,595	2,757	2,757
Australian dollar	18,360	(108)	(108)
Japanese yen	16,270	(991)	(991)
Other	31,216	207	207
Currency Swap Contracts:			
U.S. dollar receipt, Japanese yen payment	$357,324	$12,838	$12,838
Thai baht receipt, U.S. dollar payment	242,126	(4,360)	(4,360)
Hungarian forint receipt, Euro payment	228,054	(2,117)	(2,117)
Euro receipt, U.S. dollar payment	146,459	3,108	3,108
Euro receipt, Japanese yen payment	117,207	1,982	1,982
Chinese yuan receipt, Japanese yen payment	87,631	(532)	(532)
South African rand receipt, U.S. dollar payment	87,360	3,081	3,081
Other	106,883	(459)	(459)
Commodity Swap Contracts:			
Natural rubber	$ 40,135	$ (1,775)	$ (1,775)

The outstanding balances of derivative contracts which qualify for hedge accounting at December 31, 2018 and 2017, are as follows:

	Primary hedged item	Contract amount	Fair value
			2018
			Millions of yen
Foreign Currency Forward Contracts:			
Sell:			
Euro	Accounts receivable	¥16,772	¥198
U.S. dollar		9,192	174
Australian dollar		4,174	180
Buy:			
U.S. dollar	Accounts payable	1,278	(13)
Japanese yen		106	(1)
Other		24	—

	Primary hedged item	Contract amount	Fair value
			2017
			Millions of yen
Foreign Currency Forward Contracts:			
Sell:			
Euro	Accounts receivable	¥5,732	¥(68)
U.S. dollar		8,189	(61)
Australian dollar		3,660	(20)
Russian ruble		1,640	(50)
Other		10	—
Buy:			
U.S. dollar	Accounts payable	729	(12)
Japanese yen		25	(1)
Other		19	—

	Primary hedged item	Contract amount	Fair value
			2018
			Thousands of U.S. dollars
Foreign Currency Forward Contracts:			
Sell:			
Euro	Accounts receivable	$151,099	$1,784
U.S. dollar		82,811	1,568
Australian dollar		37,604	1,622
Buy:			
U.S. dollar	Accounts payable	11,514	(117)
Japanese yen		955	(9)
Other		216	—

NOTE 16 CONTINGENT LIABILITIES AND COMMITMENTS

(a) Contingent liabilities

At December 31, 2018, the Companies have the following contingent liabilities:

	2018	
	Millions of yen	Thousands of U.S. dollars
Trade notes discounted	¥325	$2,928
Total	¥325	$2,928

(b) Operating lease commitments

The Companies lease certain land, machinery, vehicles, computer equipment, office space and other assets. The minimum lease commitments under noncancelable operating leases at December 31, 2018 are as follows:

	2018	
	Millions of yen	Thousands of U.S. dollars
Due within one year	¥ 44,530	$ 401,171
Due after one year	159,848	1,440,072
Total	¥204,378	$1,841,243

NOTE 17 SEGMENT INFORMATION

For the years ended December 31, 2018 and 2017

Under ASBJ Statement No. 17, "Accounting Standard for Segment Information Disclosures" and ASBJ Guidance No. 20, "Guidance on Accounting Standard for Segment Information Disclosures," 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 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

The Companies' reportable segments are components of the Companies whose separate financial information is obtainable, and the Board of Directors and the Management Committee regularly consider these segments in order to decide the allocation of business resources and evaluate business performance.

The Companies' reportable segments consist mainly of the Tire business that comprises the manufacture and sale of tires and tubes, sale of wheels and accessories, the manufacture and sale of retread material and services, auto maintenance, and Diversified products business that comprises Chemical and Industrial Products, BSAM Diversified Products*, sporting goods, bicycles, etc. Thus, the Companies have two reporting segments: Tires and Diversified products.

* BSAM Diversified Products: A business under BSAM supplying commercial roofing materials and others.

2. Methods of measurement for the amounts of sales and income (loss), assets, and other items for each reportable segment

The accounting policies for each reportable segment are consistent with those outlined in Note 3 "Summary of significant accounting policies." Reportable segment income figures are on an operating income basis. Internal sales and transfers between segments are mainly based on prices for third-party transactions.

3. Information about sales and income (loss), assets, and other items by reportable segment

	Tires	Diversified products	Total	Reconciliations*	Consolidated
					Year ended December 31, 2018
					Millions of yen
Net Sales:					
External customers	¥3,041,100	¥609,011	¥3,650,111	¥ —	¥3,650,111
Inter-segment	10,301	9,745	20,046	(20,046)	—
Total	3,051,401	618,756	3,670,157	(20,046)	3,650,111
Segment income (Operating income)	¥ 393,954	¥ 8,920	¥ 402,874	¥ (142)	¥ 402,732
Segment assets	¥3,414,289	¥454,266	¥3,868,555	¥ (4,856)	¥3,863,699
Other					
Depreciation and amortization	¥ 181,346	¥ 19,131	¥ 200,477	¥ —	¥ 200,477
Amortization of goodwill	3,035	1,524	4,559	—	4,559
Investment for equity-method affiliates	47,394	409	47,803	36	47,839
Increase in property, plant and equipment and intangible assets	241,048	31,849	272,897	—	272,897

	Tires	Diversified products	Total	Reconciliations*	Consolidated
					Year ended December 31, 2017
					Millions of yen
Net Sales:					
External customers	¥3,021,000	¥622,428	¥3,643,428	¥ —	¥3,643,428
Inter-segment	10,156	5,421	15,577	(15,577)	—
Total	3,031,156	627,849	3,659,005	(15,577)	3,643,428
Segment income (Operating income)	¥ 387,159	¥ 31,879	¥ 419,038	¥ 9	¥ 419,047
Segment assets	¥3,513,680	¥447,760	¥3,961,440	¥ (2,401)	¥3,959,039
Other					
Depreciation and amortization	¥ 179,790	¥ 20,587	¥ 200,377	¥ —	¥ 200,377
Amortization of goodwill	2,703	1,858	4,561	—	4,561
Investment for equity-method affiliates	16,195	419	16,614	(4)	16,610
Increase in property, plant and equipment and intangible assets	225,976	33,782	259,758	—	259,758

	Tires	Diversified products	Total	Reconciliations*	Consolidated
					Year ended December 31, 2018
					Thousands of U.S. dollars
Net Sales:					
External customers	$27,397,297	$5,486,586	$32,883,883	$ —	$32,883,883
Inter-segment	92,802	87,793	180,595	(180,595)	—
Total	27,490,099	5,574,379	33,064,478	(180,595)	32,883,883
Segment income (Operating income)	$ 3,549,135	$ 80,360	$ 3,629,495	$ (1,279)	$ 3,628,216
Segment assets	$30,759,360	$4,092,487	$34,851,847	$ (43,748)	$34,808,099
Other					
Depreciation and amortization	$ 1,633,748	$ 172,351	$ 1,806,099	$ —	$ 1,806,099
Amortization of goodwill	27,342	13,730	41,072	—	41,072
Investment for equity-method affiliates	426,973	3,685	430,658	324	430,982
Increase in property, plant and equipment and intangible assets	2,171,604	286,928	2,458,532	—	2,458,532

* The reconciliations are as follows:
1 Reconciliations of segment income refer to elimination of inter-segment transactions.
2 Reconciliations of segment assets refer to elimination of inter-segment receivables and payables.

4. Related information

1. Information about product and services

Information has been omitted, as the classification is the same as that for reportable segments.

2. Information about geographical areas

(1) Sales

Japan	The Americas	United States*2	EMEA	China, Asia Pacific	Total
					Year ended December 31, 2018
					Millions of yen
¥681,988	**¥1,737,619**	**¥1,420,367**	**¥643,967**	**¥586,537**	**¥3,650,111**
					Thousands of U.S. dollars
$6,144,036	**$15,654,225**	**$12,796,099**	**$5,801,505**	**$5,284,117**	**$32,883,883**

Japan	The Americas	United States*2	EMEA	China, Asia Pacific	Total
					Year ended December 31, 2017
					Millions of yen
¥684,361	¥1,755,090	¥1,431,232	¥603,815	¥600,162	¥3,643,428

*1 Sales are classified by country or region based on location of customers.
*2 The figure for the United States is included in that of the Americas.

(2) Property, plant and equipment

Japan	The Americas	United States*1	EMEA	China, Asia Pacific	Total
					Year ended December 31, 2018
					Millions of yen
¥352,595	**¥578,631**	**¥448,261**	**¥184,346**	**¥352,799**	**¥1,468,371**
					Thousands of U.S. dollars
$3,176,532	**$5,212,892**	**$4,038,387**	**$1,660,775**	**$3,178,369**	**$13,228,568**

Japan	The Americas	United States*1	EMEA	China, Asia Pacific	Total
					Year ended December 31, 2017
					Millions of yen
¥335,515	¥573,463	¥438,172	¥192,387	¥371,682	¥1,473,047

*1 The figure for the United States is included in that of the Americas.

3. Information about major customers

The Companies are not required to disclose information on external customers since there are no sales to a single external customer amounting to 10% or more of the Companies' net sales.

5. Information about amortization of goodwill and unamortized balance

	Tires	Diversified products	Reconciliations	Consolidated
				Year ended December 31, 2018
				Millions of yen
Amortization	**¥ 3,035**	**¥ 1,524**	**¥—**	**¥ 4,559**
Unamortized balance	**15,884**	**25,498**	**—**	**41,382**
				Thousands of U.S. dollars
Amortization	**$ 27,342**	**$ 13,730**	**$—**	**$ 41,072**
Unamortized balance	**143,099**	**229,712**	**—**	**372,811**

	Tires	Diversified products	Reconciliations	Consolidated
				Year ended December 31, 2017
				Millions of yen
Amortization	¥ 2,703	¥ 1,858	¥—	¥ 4,561
Unamortized balance	16,282	27,499	—	43,781

NOTE 18 SUBSEQUENT EVENTS

1. Cash dividend

On March 22, 2019, the shareholders of the Company approved payment of a cash dividend of ¥80.0 ($0.72) per share, or a total of ¥60,145 million ($541,847 thousand), to shareholders of record as of December 31, 2018.

2. Acquisition of Treasury Stock

The Company resolved to acquire Treasury Stock at the Board of Directors meeting held on February 15, 2019 pursuant to Article 165-3 and Article 156 of the Companies Act.

(1) Reason for acquisition of Treasury Stock	To enhance enterprise value by improving capital efficiency
(2) Kind of shares to acquire	Common shares of the Company
(3) Total number of shares to acquire	57 million shares (up to) (% of issued shares (not included Treasury Stock); 7.6%)
(4) Total acquisition cost	¥200 billion (up to)
(5) Procedure	(a) Purchases through the Off-auction Own Share Repurchase Trading System of the Tokyo Stock Exchange (ToSNeT-3) (b) Market purchases based on the discretionary dealing contract regarding repurchases of shares
(6) Timing	February 18, 2019 to December 23, 2019
(7) Other	10,498 thousand common shares of the Company were acquired at the acquisition cost of ¥44.3 billion from February 21, 2019 to February 28, 2019 based on the resolution of the Board of Directors meeting.

3. Cancellation of Treasury Stock

The Company resolved to cancel Treasury Stock at the Board of Directors meeting held on February 15, 2019 pursuant to Article 178 of the Companies Act.

(1) Kind of shares to cancel	Common shares of the Company
(2) Total number of shares to cancel	All the common shares acquired from February 18, 2019 to December 23, 2019
(3) Effective date of the cancellation	January 21, 2020

4. Issuance of bonds

The Company passed a comprehensive resolution to issue domestic unsecured straight bonds (the "Bonds") on February 15, 2019 as follows.

(1) Total amount of issue	Maximum of ¥200 billion, Multiple offerings are possible by dividing this amount
(2) Issuance period	February 15, 2019 to December 31, 2019
(3) Issue price	¥100 or larger per each principal amount of ¥100
(4) Coupon	Up to the sum of prevailing yields of Japanese Government Bonds which have the corresponding maturities with the Bonds and 1.0%
(5) Maturity	Up to 10 years
(6) Redemption	The Bonds will be redeemed in full upon maturity
(7) Use of proceeds	Investments, capital expenditures, loans and acquisition of treasury stock, etc.

5. Purchase of company by share acquisition

The Company's subsidiary, Bridgestone Europe NV/SA has entered into an agreement with TOMTOM N.V. ("TOMTOM") to acquire TOMTOM TELEMATICS BV, its digital fleet solutions business, for a cash consideration of EUR910 million. The transaction is anticipated to be completed in the 2nd quarter of 2019 at the latest, subject to the satisfaction of customary closing conditions, including applicable regulatory approvals.

TOMTOM is the number one provider of digital fleet solutions in Europe, a marketplace with very diverse in legal, commercial and cultural requirements. Its digital fleet solutions business has successfully demonstrated its ability to operate in complex and demanding market environments and has continued to strengthen its potential to expand globally.

TOMTOM's digital fleet solutions offer an industry-leading data platform for connected vehicles enabling safer driving, improving productivity and optimizing uptime for personal and commercial mobility through recording and transmission of driving data. Combining this digital fleet solution with Bridgestone's tire expertise and global service network not only provides new value to customers and society, but also creates an opportunity that accelerates the Company's effort to become a key partner in the Mobility-as-a-Service landscape.

In addition to reinforcing the Company's broad and leading portfolio, this strategic investment will also strengthen its position as an innovative leader in the field of tire design, and tire predictive maintenance service. The Companies will gain unprecedented insights into vehicle and tire operating conditions and be able to leverage a growing installed user base of 860,000 vehicles communicating 200 million data points per day.

Company profile of TOMTOM

(1) Name of company:	TOMTOM N.V.
(2) Location of headquarters:	Amsterdam, Netherlands
(3) CEO:	Mr. Harold Goddijn
(4) Common stock:	EUR 47,064,000 (as of Dec. 2017)
(5) Sales of TOMTOM TELEMATIC B.V.:	EUR 162 million (in 2017)

NOTE 19 OTHER COMPREHENSIVE INCOME

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

	2018	2017	2018
		Millions of yen	Thousands of U.S. dollars
Net Unrealized Gain (Loss) on Available-for-sale Securities:			
Gains (losses) arising during the year	¥ (69,634)	¥ 41,808	$ (627,333)
Reclassification adjustment to profit or loss	(16,185)	(28,590)	(145,811)
Amount before income tax effect	(85,819)	13,218	(773,144)
Income tax effect	18,031	(10,747)	162,441
Total	¥ (67,788)	¥ 2,471	$ (610,703)
Deferred Gain (Loss) on Derivative Instruments:			
Gains (losses) arising during the year	¥ 541	¥ (353)	$ 4,874
Reclassification adjustment to profit or loss	190	2,620	1,712
Amount before income tax effect	731	2,267	6,586
Income tax effect	(230)	(706)	(2,072)
Total	¥ 501	¥ 1,561	$ 4,514
Foreign Currency Translation Adjustments:			
Adjustments arising during the year	¥ (81,221)	¥ 14,796	$ (731,721)
Reclassification adjustment to profit or loss	80	(73)	721
Total	¥ (81,141)	¥ 14,723	$ (731,000)
Remeasurements of Defined Benefit Plans:			
Gains (losses) arising during the year	¥ (5,674)	¥ (7,608)	$ (51,177)
Reclassification adjustment to profit or loss	20,955	23,399	188,784
Amount before income tax effect	15,281	15,791	137,667
Income tax effect	(3,001)	(5,717)	(27,036)
Total	¥ 12,280	¥ 10,074	$ 110,631
Share of Other Comprehensive Income in Affiliates:			
Gains (losses) arising during the year	¥ (1,442)	¥ (511)	$ (12,991)
Reclassification adjustment to profit or loss	—	(80)	—
Total	¥ (1,442)	¥ (591)	$ (12,991)
Total Other Comprehensive Income	¥(137,590)	¥ 28,238	$(1,239,549)