

(Translation)

This document has been translated from the Japanese original for the convenience of overseas stakeholders. In the event of any discrepancy between this document and the Japanese original, the original shall prevail.

Quarterly Report

From July 1, 2019 to September 30, 2019

(Second Quarter of the 151th Fiscal Year)

KOMATSU LTD.

Quarterly Report

Certain References and Information:

1. This is an English translation of the Quarterly Securities Report (“Shihanki Hokokusho”) filed via the Electronic Disclosure for Investors’ Network (“EDINET”) system as set forth in Article 27-30-2 of the Financial Instruments and Exchange Act of Japan. Komatsu Ltd. filed its Quarterly Securities Report for the three months ended September 30, 2019 with the Director-General of the Kanto Local Finance Bureau on November 13, 2019. The Quarterly Securities Report contains, among other information, Quarterly Consolidated Financial Statements for the three months and six months ended September 30, 2019. Material information in the Quarterly Securities Report, other than the Quarterly Consolidated Financial Statements, has already been reported by Komatsu Ltd. in its press release dated October 30, 2019. Attached is an English translation of Quarterly Consolidated Financial Statements for the three months and six months ended September 30, 2019.
2. In this report, Komatsu Ltd. is hereinafter referred to as the “Company” and together with its consolidated subsidiaries as “Komatsu.”

Cautionary Statement with respect to forward-looking statements:

This report contains forward-looking statements that reflect managements’ views and assumptions in the light of information currently available with respect to certain future events, including expected financial position, operating results and business strategies. These statements can be identified by the use of terms such as “will,” “believes,” “should,” “projects,” “plans,” “expects” and similar terms and expressions that identify future events or expectations. Actual results may differ materially from those projected, and the events and results of such forward-looking assumptions cannot be assured. Any forward-looking statements speak only as of the date of this report, and the Company assumes no duty to update such statements.

Factors that may cause actual results to differ materially from those predicted by such forward-looking statements include, but are not limited to, unanticipated changes in demand for Komatsu’s principal products, owing to changes in the economic conditions in Komatsu’s principal markets; changes in exchange rates or the impact of increased competition; unanticipated costs or delays encountered in achieving Komatsu’s objectives with respect to globalized product sourcing and new information technology tools; uncertainties as to the results of Komatsu’s research and development efforts and its ability to access and protect certain intellectual property rights; the impact of regulatory changes and accounting principles and practices; and the introduction, success and timing of business initiatives and strategies.

Financial Information

1. Basis of preparation of the quarterly consolidated financial statements

The quarterly consolidated financial statements of the Company are prepared in accordance with the accounting principles generally accepted in the United States of America (hereinafter “U.S. GAAP”), pursuant to Article 4, Supplementary Provisions of the “Ordinance on Terminology, Forms and Preparation Methods of Quarterly Consolidated Financial Statements,” the Ordinance of the Cabinet Office No. 64 of 2007.

2. Audit certification

Pursuant to Article 193-2, paragraph 1 of the Financial Instruments and Exchange Act of Japan, the quarterly consolidated financial statements for the three months ended September 30, 2019 (from July 1 to September 30, 2019) and for the six months ended September 30, 2019 (from April 1 to September 30, 2019) were reviewed by KPMG AZSA LLC.

Consolidated Statements of Income and Consolidated Statements of Comprehensive Income (Unaudited)

Komatsu Ltd. and Consolidated Subsidiaries
Six months ended September 30, 2019 and 2018.

Consolidated Statements of Income

	Six months ended September 30, 2019		Six months ended September 30, 2018	
	Millions of yen	Ratio (%)	Millions of yen	Ratio (%)
Net sales (Notes 1, 10, 12 and 15)	¥ 1,213,485	100.0	¥ 1,318,041	100.0
Cost of sales (Notes 1, 7, 8 and 15)	855,318	70.5	900,519	68.3
Selling, general and administrative expenses (Notes 3, 7, 8 and 11)	217,478	17.9	218,389	16.6
Other operating income, net	1,293	0.1	1,174	0.1
Operating income	141,982	11.7	200,307	15.2
Other income (expenses), net				
Interest and dividend income	3,732	0.3	3,683	0.3
Interest expense	(13,108)	(1.1)	(11,410)	(0.9)
Other, net (Notes 6, 8, 9, 15 and 17)	(4,394)	(0.4)	(71)	(0.0)
Total	(13,770)	(1.1)	(7,798)	(0.6)
Income before income taxes and equity in earnings of affiliated companies	128,212	10.6	192,509	14.6
Income taxes (Note 9)				
Current	35,948		55,724	
Deferred	(330)		1,815	
Total	35,618	2.9	57,539	4.4
Income before equity in earnings of affiliated companies	92,594	7.6	134,970	10.2
Equity in earnings of affiliated companies	1,730	0.1	2,262	0.2
Net income	94,324	7.8	137,232	10.4
Less: Net income attributable to noncontrolling interests	4,262	0.4	11,847	0.9
Net income attributable to Komatsu Ltd.	¥ 90,062	7.4	¥ 125,385	9.5
			Yen	
Per share data (Note 13):				
Net income attributable to Komatsu Ltd.:				
Basic	95.40		132.90	
Diluted	95.32		132.74	

The accompanying Notes are an integral part of these Quarterly Consolidated Financial Statements.

Consolidated Statements of Comprehensive Income

	Millions of yen	
	Six months ended September 30, 2019	Six months ended September 30, 2018
Net income	¥ 94,324	¥ 137,232
Other comprehensive income (loss), for the period, net of tax		
Foreign currency translation adjustments (Note 9)	(66,214)	41,705
Pension liability adjustments (Notes 8 and 9)	145	590
Net unrealized holding gains (losses) on derivative instruments (Notes 9 and 15)	(1,231)	(2,690)
Total	(67,300)	39,605
Comprehensive income	27,024	176,837
Less: Comprehensive income (loss) attributable to noncontrolling interests	(361)	13,701
Comprehensive income attributable to Komatsu Ltd.	¥ 27,385	¥ 163,136

The accompanying Notes are an integral part of these Quarterly Consolidated Financial Statements.

Consolidated Statements of Income and Consolidated Statements of Comprehensive Income (Unaudited)

Komatsu Ltd. and Consolidated Subsidiaries

Three months ended September 30, 2019 and 2018.

Consolidated Statements of Income

	Three months ended September 30, 2019		Three months ended September 30, 2018	
	Millions of yen	Ratio (%)	Millions of yen	Ratio (%)
Net sales (Notes 1, 10, 12 and 15)	¥ 603,718	100.0	¥ 671,981	100.0
Cost of sales (Notes 1, 7, 8 and 15)	427,961	70.9	459,270	68.3
Selling, general and administrative expenses (Notes 3, 7, 8 and 11)	107,811	17.9	109,488	16.3
Other operating income (expenses), net	(724)	(0.1)	1,036	0.2
Operating income	67,222	11.1	104,259	15.5
Other income (expenses), net				
Interest and dividend income	1,986	0.3	1,710	0.3
Interest expense	(6,458)	(1.1)	(5,987)	(0.9)
Other, net (Notes 6, 8, 9, 15 and 17)	(1,448)	(0.2)	(413)	(0.1)
Total	(5,920)	(1.0)	(4,690)	(0.7)
Income before income taxes and equity in earnings of affiliated companies	61,302	10.2	99,569	14.8
Income taxes (Note 9)				
Current	22,866		32,975	
Deferred	(5,079)		(3,459)	
Total	17,787	2.9	29,516	4.4
Income before equity in earnings of affiliated companies	43,515	7.2	70,053	10.4
Equity in earnings of affiliated companies	1,062	0.2	1,164	0.2
Net income	44,577	7.4	71,217	10.6
Less: Net income attributable to noncontrolling interests	1,991	0.3	8,802	1.3
Net income attributable to Komatsu Ltd.	¥ 42,586	7.1	¥ 62,415	9.3
			Yen	
Per share data (Note 13):				
Net income attributable to Komatsu Ltd.:				
Basic	45.11		66.15	
Diluted	45.07		66.07	

The accompanying Notes are an integral part of these Quarterly Consolidated Financial Statements.

Consolidated Statements of Comprehensive Income

	Millions of yen	
	Three months ended September 30, 2019	Three months ended September 30, 2018
Net income	¥ 44,577	¥ 71,217
Other comprehensive income (loss), for the period, net of tax		
Foreign currency translation adjustments (Note 9)	(32,903)	23,709
Pension liability adjustments (Notes 8 and 9)	(183)	364
Net unrealized holding gains (losses) on derivative instruments (Notes 9 and 15)	(517)	(997)
Total	(33,603)	23,076
Comprehensive income	10,974	94,293
Less: Comprehensive income attributable to noncontrolling interests	86	10,058
Comprehensive income attributable to Komatsu Ltd.	¥ 10,888	¥ 84,235

The accompanying Notes are an integral part of these Quarterly Consolidated Financial Statements.

Consolidated Statements of Equity (Unaudited)

Komatsu Ltd. and Consolidated Subsidiaries

Six months ended September 30, 2019

	Millions of yen								
	Common stock	Capital surplus	Retained earnings		Accumulated other comprehensive income (loss)	Treasury stock	Total Komatsu Ltd. shareholders' equity	Non-controlling interests	Total equity
			Appropriated for legal reserve	Un-appropriated					
Balance at March 31, 2019	¥ 68,311	¥ 136,798	¥ 46,028	¥ 1,654,105	¥ (39,792)	¥ (49,868)	¥ 1,815,582	¥ 87,286	¥ 1,902,868
Cash dividends (Note 19)				(55,719)			(55,719)	(4,614)	(60,333)
Transfer to retained earnings appropriated for legal reserve			552	(552)			—		—
Other changes		10			(29)		(19)	106	87
Net income				90,062			90,062	4,262	94,324
Other comprehensive income (loss), for the period, net of tax (Note 9)					(62,677)		(62,677)	(4,623)	(67,300)
Issuance and exercise of stock acquisition rights (Note 11)		(325)					(325)		(325)
Purchase of treasury stock						(22)	(22)		(22)
Sales of treasury stock		14				312	326		326
Restricted stock compensation (Note 11)	378	375					753		753
Balance at September 30, 2019	¥ 68,689	¥ 136,872	¥ 46,580	¥ 1,687,896	¥ (102,498)	¥ (49,578)	¥ 1,787,961	¥ 82,417	¥ 1,870,378

Six months ended September 30, 2018

	Millions of yen								
	Common stock	Capital surplus	Retained earnings		Accumulated other comprehensive income (loss)	Treasury stock	Total Komatsu Ltd. shareholders' equity	Non-controlling interests	Total equity
			Appropriated for legal reserve	Un-appropriated					
Balance at March 31, 2018	¥ 67,870	¥ 138,450	¥ 45,828	¥ 1,491,965	¥ (29,150)	¥ (50,423)	¥ 1,664,540	¥ 79,050	¥ 1,743,590
Cumulative effects of Accounting Standards Update—adoption of ASU 2014-09, net of tax				(515)			(515)	(12)	(527)
Cumulative effects of Accounting Standards Update—adoption of ASU 2016-01, net of tax				681	(681)		—		—
Cumulative effects of Accounting Standards Update—adoption of ASU 2016-16, net of tax				(860)			(860)		(860)
Cash dividends (Note 19)				(45,301)			(45,301)	(4,558)	(49,859)
Transfer to retained earnings appropriated for legal reserve			77	(77)			—		—
Other changes		(1,476)			(2,046)		(3,522)	(3,233)	(6,755)
Net income				125,385			125,385	11,847	137,232
Other comprehensive income (loss), for the period, net of tax (Note 9)					37,751		37,751	1,854	39,605
Issuance and exercise of stock acquisition rights (Note 11)		(323)					(323)		(323)
Purchase of treasury stock						(25)	(25)		(25)
Sales of treasury stock		27				297	324		324
Restricted stock compensation (Note 11)	441	438					879		879
Balance at September 30, 2018	¥ 68,311	¥ 137,116	¥ 45,905	¥ 1,571,278	¥ 5,874	¥ (50,151)	¥ 1,778,333	¥ 84,948	¥ 1,863,281

The accompanying Notes are an integral part of these Quarterly Consolidated Financial Statements.

Consolidated Statements of Cash Flows (Unaudited)

Komatsu Ltd. and Consolidated Subsidiaries
Six months ended September 30, 2019 and 2018

	Millions of yen	
	Six months ended September 30, 2019	Six months ended September 30, 2018
Operating activities		
Net income	¥ 94,324	¥ 137,232
Adjustments to reconcile net income to net cash provided by (used in) operating activities:		
Depreciation and amortization	64,683	65,338
Deferred income taxes	(330)	1,815
Impairment loss and net loss (gain) on valuation of investment securities	(101)	443
Net loss (gain) on sale of property	(620)	(426)
Loss on disposal of fixed assets	1,618	976
Pension and retirement benefits, net	(796)	(672)
Changes in assets and liabilities:		
Decrease (increase) in trade receivables	56,322	(12,844)
Decrease (increase) in inventories	(88,414)	(85,014)
Increase (decrease) in trade payables	(12,440)	(32,093)
Increase (decrease) in income taxes payable	(17,030)	(24,423)
Other, net	38,540	22,558
Net cash provided by (used in) operating activities	<u>135,756</u>	<u>72,890</u>
Investing activities		
Capital expenditures	(91,837)	(86,350)
Proceeds from sale of property	6,979	7,673
Proceeds from sale of investment securities	525	1,708
Purchases of investment securities	(492)	(171)
Acquisition of subsidiaries and equity investees, net of cash acquired	(21,606)	(9,228)
Other, net *1	(267)	(310)
Net cash provided by (used in) investing activities	<u>(106,698)</u>	<u>(86,678)</u>
Financing activities		
Proceeds from debt issued (Original maturities greater than three months)	230,299	169,632
Payment on debt (Original maturities greater than three months)	(228,337)	(80,228)
Short-term debt, net (Original maturities three months or less)	45,511	(23,816)
Dividends paid	(55,719)	(45,301)
Other, net *2	(5,417)	(12,923)
Net cash provided by (used in) financing activities	<u>(13,663)</u>	<u>7,364</u>
Effect of exchange rate change on cash and cash equivalents	<u>(872)</u>	<u>(11,629)</u>
Net increase (decrease) in cash and cash equivalents	<u>14,523</u>	<u>(18,053)</u>
Cash and cash equivalents, beginning of year	<u>148,479</u>	<u>144,397</u>
Cash and cash equivalents, end of period	<u>¥ 163,002</u>	<u>¥ 126,344</u>

The accompanying Notes are an integral part of these Quarterly Consolidated Financial Statements.

*1 In the six months ended September 30, 2019, Komatsu (the Company and its consolidated subsidiaries) has classified "Proceeds from sale of subsidiaries and equity investees, net of cash disposed", "Collection of loan receivables", "Disbursement of loan receivables" and "Decrease (increase) in time deposits, net" as "Other, net" in the investing activities. Accordingly, the figures for the six months ended September 30, 2018 were reclassified to conform to the presentation for the six months ended September 30, 2019.

*2 In the six months ended September 30, 2019, Komatsu has classified "Repayments of finance lease obligations" and "Sale (purchase) of treasury stock, net" as "Other, net" in the financing activities. Accordingly, the figures for the six months ended September 30, 2018 were reclassified to conform to the presentation for the six months ended September 30, 2019.

Komatsu Ltd. and Consolidated Subsidiaries
Three months and six months ended September 30, 2019 and 2018
Notes to Quarterly Consolidated Financial Statements (Unaudited)

1. Basis of Quarterly Financial Statement Presentation and Summary of Significant Accounting Policies

Basis of Quarterly Financial Statement Presentation

The Company prepares and presents the accompanying quarterly consolidated financial statements in accordance with generally accepted accounting principles in the United States of America (hereinafter “U.S. GAAP”).

The accompanying quarterly consolidated financial statements are stated in Japanese yen, the currency of the country in which the Company is incorporated and principally operates.

Some adjustments without booked on each subsidiaries’ and affiliates’ quarterly financial statements are added to the accompanying quarterly consolidated financial statements. These adjustments are mainly due to the gaps of accounting principle between Japan and the United States of America. See Note 22 “Terminology, Forms and Preparation Methods of Quarterly Consolidated Financial Statements”.

Preparation of Financial Statements and Registration with the U.S. Securities and Exchange Commission

The Company has been preparing its consolidated financial statements in accordance with U.S. GAAP since 1963, because the Company issued foreign currency convertible bonds at European market in 1964. The Company registered its convertible bonds issued in the United States in 1967 and its common shares issued for U.S. shareholders as well as Japanese shareholders in 1970 with the U.S. Securities and Exchange Commission (hereinafter “SEC”). Since then, the Company, as a non-U.S. issuer, had been having the reporting obligations, such as filing annual report with its consolidated financial statements in accordance with U.S. GAAP, under the Securities Exchange Act of 1934. The Company's registration with SEC was terminated on June 30, 2014.

Summary of Significant Accounting Policies

From the three months ended June 30, 2019, Komatsu has adopted the Accounting Standards Update (hereinafter “ASU”) 2016-02 “Leases”. This update requires lessees to recognize most leases as the right-of-use assets and the lease liabilities on their balance sheets. This update does not substantially change lessor accounting. The Financial Accounting Standards Board (hereinafter “FASB”) also modified the definition of lease. Additionally, the guidance expands qualitative and quantitative disclosures related to lease. Concerning accounting in relation to this update, Komatsu has adopted the rule in which an entity does not separate lease and non-lease components and regards all components as those of a single lease, and the exceptional rule in which an entity does not recognize short-term leases on the balance sheet. Concerning the transition methods in relation to this update, Komatsu has adopted a series of practical expedients in which an entity does not reassess whether any expired or existing lease contracts are or contain leases, the lease classification for them and initial direct costs for them. Komatsu has also adopted the additional transition methods in which an entity does not retrospectively restate presentation or disclosure of comparative years at the period of the application of the new accounting standards and an entity does not assess whether existing or expired land easements that were not previously accounted for as leases. The application of the provision has no significant impact on Komatsu’s financial position and results of operations.

From the three months ended June 30, 2019, Komatsu has adopted ASU 2017-12 “Targeted Improvements to Accounting for Hedging Activities”. This update improves the application of hedge accounting under certain circumstances to reflect the economic consequences of an entity's risk management activities in financial statements more appropriately. The update eliminates the requirement to separately measure and present effective portion and ineffective portion of hedging and requires an entity to record the full amount of change in fair value of the hedging instrument in the same income statement line as gain or loss arising from the hedged item. The application of the provision has no significant impact on Komatsu’s financial position and results of operations.

Excluding the above, there is no material change for summary of significant accounting policies stated in annual report for the fiscal year ended March 31, 2019.

2. Supplemental Cash Flow Information

Additional cash flow information for the six months ended September 30, 2019 and 2018 are as follows:

	Millions of yen	
	Six months ended September 30, 2019	Six months ended September 30, 2018
Additional cash flow information:		
Interest paid	¥ 12,963	¥ 11,349
Income taxes paid	48,217	76,276

3. Business Combination

Immersive Corporation Pty Ltd

On July 1, 2019, the Company acquired Immersive Corporation Pty Ltd (hereafter “Immersive”), a mining workforce optimization company, through a wholly-owned subsidiary of the Company by purchasing all of the outstanding shares of Immersive.

Immersive develops, manufactures and sells mining equipment simulators for training machine operators for surface and underground mines. Immersive also offers educational programs designed to enhance the safety and productivity of customers’ site operations by using simulators, and provides training solutions designed to promote operational optimization by proposing recommendations.

In April 2019, Komatsu embarked on the new three-year mid-term management plan (FY2019– 2021), "DANTOTSU Value — FORWARD Together for Sustainable Growth," working together with its customers to achieve safe, highly productive, smart and clean worksites of the future. By integrating Immersive’s solutions into its line-up, Komatsu anticipates improvements in safety and productivity, as well as optimization of operations for our mining customers.

The fair value measurement of the acquired assets and assumed liabilities under Financial Accounting Standards Board Accounting Standards Codification™ (hereinafter “ASC”) 805, “Business Combinations” is not completed as of the filing date of the quarterly consolidated financial statements. Therefore, the amounts of acquired assets and assumed liabilities after the allocation of acquisition cost on the acquisition date stated in the following summary table are provisional amounts based on the information available as of the filing date of the quarterly consolidated financial statements.

	Millions of yen
Consideration	
Cash and cash equivalents	¥ 15,715
Fair value of total consideration transferred	15,715
Recognized amounts of identifiable acquired assets and assumed liabilities	
Current assets	¥ 3,596
Property, plant and equipment	427
Intangible assets	8,166
Other non-current assets	82
Total acquired assets	12,271
Current liabilities	(1,553)
Long-term liabilities	(2,578)
Total assumed liabilities	(4,131)
Net acquired assets	8,140
Goodwill	7,575
	¥ 15,715

Intangible assets of ¥8,166 million are all intangible assets subject to amortization and main ones are as follows.

	Millions of yen	
	Gross carrying amount	Amortization period
Customer relationships	¥ 2,026	16 years
Technology assets	5,851	13 years

The goodwill of ¥7,575 million was assigned to the Construction, Mining and Utility Equipment operating segment. The goodwill is not deductible for tax purpose.

Acquisition-related costs for the six months ended September 30, 2019 are ¥278 million (accumulated acquisition-related costs: ¥310 million) and included in selling, general and administrative expenses in the consolidated statements of income for the six months ended September 30, 2019.

Immersive’s results of operations included in the consolidated statements of income for the six months ended September 30, 2019 since the date of acquisition were immaterial.

Assuming this acquisition had been made on April 1, 2018, the impact on Net Sales and Net income attributable to Komatsu Ltd. for the six months ended September 30, 2019 and 2018 would be immaterial.

4. Allowance for Doubtful Receivables

At September 30, 2019 and at March 31, 2019, allowances for doubtful receivables deducted from trade notes and accounts receivable, net and long-term trade receivables, net are ¥14,914 million and ¥12,758 million, respectively.

5. Inventories

At September 30, 2019 and at March 31, 2019, inventories comprise the following:

	Millions of yen	
	September 30, 2019	March 31, 2019
Finished products, including finished parts held for sale	¥ 646,785	¥ 594,880
Work in process	179,090	171,063
Materials and supplies	68,339	71,609
Total	¥ 894,214	¥ 837,552

6. Investment Securities

The realized gains and losses and gross unrealized holding gains and losses for such equity securities which are recorded in other income (expenses), net in the accompanying consolidated statements of income, respectively, for the six months ended September 30, 2019 and 2018 are as follows:

	Millions of yen	
	Six months ended September 30, 2019	Six months Ended September 30, 2018
Net gains and losses recognized during the period on equity securities	¥ 101	¥ (443)
Less: net gains and losses recognized during the period on equity securities sold during the period	(9)	(46)
Unrealized gains and losses recognized during the period on equity securities still held as of September 30	¥ 110	¥ (397)

The realized gains and losses and gross unrealized holding gains and losses for such equity securities which are recorded in other income (expenses), net in the accompanying consolidated statements of income, respectively, for the three months ended September 30, 2019 and 2018 are as follows:

	Millions of yen	
	Three months ended September 30, 2019	Three months ended September 30, 2018
Net gains and losses recognized during the period on equity securities	¥ 83	¥ (176)
Less: net gains and losses recognized during the period on equity securities sold during the period	(25)	(47)
Unrealized gains and losses recognized during the period on equity securities still held as of September 30	¥ 108	¥ (129)

Komatsu measures equity securities without readily determinable fair values by the method where changes in observable prices in orderly transactions for identical or similar investments issued by the same issuer are added to or subtracted from the carrying amount after the write-down due to impairment, except for investments which are measured at net asset value per share. As of September 30, 2019 and as of March 31, 2019, the carrying amounts of these investments were ¥7,261 million and ¥7,043 million, respectively. Any impairment or any adjustment relating to observable price changes recorded until September 30, 2019 and until March 31, 2019 were not material.

7. Other Intangible Assets

Intangible assets at September 30, 2019 and at March 31, 2019 are as follows:

	Millions of yen					
	September 30, 2019			March 31, 2019		
	Gross carrying amount	Accumulated amortization	Net carrying amount	Gross carrying amount	Accumulated amortization	Net carrying amount
Other intangible assets subject to amortization:						
Software	¥46,930	¥ (20,251)	¥ 26,679	¥42,798	¥ (20,030)	¥ 22,768
Leasehold	7,240	(1,689)	5,551	8,363	(1,844)	6,519
Trademarks	53,893	(9,284)	44,609	55,913	(7,832)	48,081
Customer relationships	74,909	(22,319)	52,590	73,773	(20,752)	53,021
Technology assets	37,421	(10,320)	27,101	32,030	(9,177)	22,853
Other	7,067	(3,579)	3,488	7,359	(3,579)	3,780
Total	227,460	(67,442)	160,018	220,236	(63,214)	157,022
Other intangible assets not subject to amortization			9,073			9,384
Total other intangible assets			¥169,091			¥166,406

The aggregate amortization expense of other intangible assets subject to amortization during the six months ended September 30, 2019 and 2018 were ¥9,099 million and ¥10,407 million, respectively. The aggregate amortization expense of other intangible assets subject to amortization during the three months ended September 30, 2019 and 2018 were ¥4,616 million and ¥4,748 million, respectively.

8. Cost of Retirement Benefits

Net periodic cost of Komatsu's defined benefit plans for the six months ended September 30, 2019 and 2018, consisted of the following components:

	Millions of yen	
	Six months ended September 30, 2019	Six months ended September 30, 2018
Service cost	¥ 4,556	¥ 4,505
Interest cost on projected benefit obligations	3,393	3,690
Expected return on plan assets	(5,395)	(6,044)
Amortization of actuarial loss	585	645
Amortization of prior service cost	142	68
Net periodic cost	¥ 3,281	¥ 2,864

Net periodic cost of the postretirement benefit plans for the six months ended September 30, 2019 and 2018 included the following components:

	Millions of yen	
	Six months ended September 30, 2019	Six months ended September 30, 2018
Service cost	¥ 279	¥ 267
Interest cost on projected benefit obligations	277	289
Expected return on plan assets	(293)	(300)
Amortization of actuarial loss	23	57
Amortization of prior service cost	2	3
Net periodic cost	¥ 288	¥ 316

Net periodic cost of Komatsu's defined benefit plans for the three months ended September 30, 2019 and 2018, consisted of the following components:

	Millions of yen	
	Three months ended September 30, 2019	Three months ended September 30, 2018
Service cost	¥ 2,241	¥ 2,248
Interest cost on projected benefit obligations	1,661	1,845
Expected return on plan assets	(2,642)	(3,031)
Amortization of actuarial loss	292	321
Amortization of prior service cost	70	35
Net periodic cost	¥ 1,622	¥ 1,418

Net periodic cost of the postretirement benefit plans for the three months ended September 30, 2019 and 2018 included the following components:

	Millions of yen	
	Three months ended September 30, 2019	Three months ended September 30, 2018
Service cost	¥ 138	¥ 142
Interest cost on projected benefit obligations	137	154
Expected return on plan assets	(145)	(152)
Amortization of actuarial loss	11	30
Amortization of prior service cost	1	2
Net periodic cost	¥ 142	¥ 176

Net periodic cost components other than the service cost of Komatsu's defined benefit plans and the postretirement benefit plans are recorded in other income (expenses), net in the accompanying consolidated statements of income.

9. Other Comprehensive Income (Loss)

Changes in accumulated other comprehensive income (loss) for the six months ended September 30, 2019 and 2018 are as follows:

Millions of yen					
Six months ended September 30, 2019					
	Foreign currency translation adjustments	Net unrealized holding gains(losses) on securities available for sale	Pension liability adjustments	Net unrealized holding gains (losses) on derivative instruments	Total
Balance, beginning of the year	¥ (15,438)	¥ —	¥ (25,890)	¥ 1,536	¥ (39,792)
Other comprehensive income (loss) before reclassifications	(66,214)	—	(368)	527	(66,055)
Amounts reclassified from accumulated other comprehensive income (loss)	—	—	513	(1,758)	(1,245)
Net other comprehensive income (loss)	(66,214)	—	145	(1,231)	(67,300)
Less: other comprehensive income (loss) attributable to noncontrolling interests	(4,502)	—	—	(121)	(4,623)
Other comprehensive income (loss) attributable to Komatsu Ltd.	(61,712)	—	145	(1,110)	(62,677)
Equity transactions with noncontrolling interests	(29)	—	—	—	(29)
Balance, end of the period	¥ (77,179)	¥ —	¥ (25,745)	¥ 426	¥ (102,498)

All amounts are net of tax.

Millions of yen					
Six months ended September 30, 2018					
	Foreign currency translation adjustments	Net unrealized holding gains(losses) on securities available for sale	Pension liability adjustments	Net unrealized holding gains (losses) on derivative instruments	Total
Balance, beginning of the year	¥ (10,166)	¥ 681	¥ (22,745)	¥ 3,080	¥ (29,150)
Cumulative effects of Accounting Standards Update—adoption of ASU 2016-01, net of tax	—	(681)	—	—	(681)
Other comprehensive income (loss) before reclassifications	41,705	—	71	(5,116)	36,660
Amounts reclassified from accumulated other comprehensive income (loss)	—	—	519	2,426	2,945
Net other comprehensive income (loss)	41,705	—	590	(2,690)	39,605
Less: other comprehensive income (loss) attributable to noncontrolling interests	1,853	—	7	(6)	1,854
Other comprehensive income (loss) attributable to Komatsu Ltd.	39,852	—	583	(2,684)	37,751
Equity transactions with noncontrolling interests	(2,074)	—	28	—	(2,046)
Balance, end of the period	¥ 27,612	¥ —	¥ (22,134)	¥ 396	¥ 5,874

All amounts are net of tax.

Changes in accumulated other comprehensive income (loss) for the three months ended September 30, 2019 and 2018 are as follows:

	Millions of yen				
	Three months ended September 30, 2019				
	Foreign currency translation adjustments	Net unrealized holding gains(losses) on securities available for sale	Pension liability adjustments	Net unrealized holding gains (losses) on derivative instruments	Total
Balance, beginning of the period	¥ (46,124)	¥ —	¥ (25,562)	¥ 915	¥ (70,771)
Other comprehensive income (loss) before reclassifications	(32,903)	—	(440)	455	(32,888)
Amounts reclassified from accumulated other comprehensive income (loss)	—	—	257	(972)	(715)
Net other comprehensive income (loss)	(32,903)	—	(183)	(517)	(33,603)
Less: other comprehensive income (loss) attributable to noncontrolling interests	(1,877)	—	—	(28)	(1,905)
Other comprehensive income (loss) attributable to Komatsu Ltd.	(31,026)	—	(183)	(489)	(31,698)
Equity transactions with noncontrolling interests	(29)	—	—	—	(29)
Balance, end of the period	¥ (77,179)	¥ —	¥ (25,745)	¥ 426	¥ (102,498)

All amounts are net of tax.

	Millions of yen				
	Three months ended September 30, 2018				
	Foreign currency translation adjustments	Net unrealized holding gains(losses) on securities available for sale	Pension liability adjustments	Net unrealized holding gains (losses) on derivative instruments	Total
Balance, beginning of the period	¥ 7,223	¥ —	¥ (22,512)	¥ 1,389	¥ (13,900)
Other comprehensive income (loss) before reclassifications	23,709	—	93	(2,436)	21,366
Amounts reclassified from accumulated other comprehensive income (loss)	—	—	271	1,439	1,710
Net other comprehensive income (loss)	23,709	—	364	(997)	23,076
Less: other comprehensive income (loss) attributable to noncontrolling interests	1,246	—	14	(4)	1,256
Other comprehensive income (loss) attributable to Komatsu Ltd.	22,463	—	350	(993)	21,820
Equity transactions with noncontrolling interests	(2,074)	—	28	—	(2,046)
Balance, end of the period	¥ 27,612	¥ —	¥ (22,134)	¥ 396	¥ 5,874

All amounts are net of tax.

Reclassification out of accumulated other comprehensive income (loss) for the six months ended September 30, 2019 and 2018 are as follows:

	Millions of yen	
	Six months ended September 30, 2019	Affected line items in consolidated statements of income
Pension liability adjustments		
Amortization of actuarial loss and prior service cost	¥ (752)	Other income (expenses), net: Other, net
	(752)	Total before tax
	239	Income taxes
	(513)	Net of tax
Net unrealized holding gains (losses) on derivative instruments		
Forwards contracts	847	Net sales
	(11)	Cost of sales
	1,971	Other income (expenses), net: Other, net
	2,807	Total before tax
	(1,049)	Income taxes
	1,758	Net of tax
Total reclassification for the period	¥ 1,245	Net of tax

	Millions of yen	
	Six months ended September 30, 2018	Affected line items in consolidated statements of income
Pension liability adjustments		
Amortization of actuarial loss and prior service cost	¥ (773)	Other income (expenses), net: Other, net
	(773)	Total before tax
	254	Income taxes
	(519)	Net of tax
Net unrealized holding gains (losses) on derivative instruments		
Forwards contracts	(3,348)	Other income (expenses), net: Other, net
	(3,348)	Total before tax
	922	Income taxes
	(2,426)	Net of tax
Total reclassification for the period	¥ (2,945)	Net of tax

Reclassification out of accumulated other comprehensive income (loss) for the three months ended September 30, 2019 and 2018 are as follows:

	Millions of yen	
	Three months ended September 30, 2019	Affected line items in consolidated statements of income
Pension liability adjustments		
Amortization of actuarial loss and prior service cost	¥ (374)	Other income (expenses), net: Other, net
	(374)	Total before tax
	117	Income taxes
	(257)	Net of tax
Net unrealized holding gains (losses) on derivative instruments		
Forwards contracts	655	Net sales
	(132)	Cost of sales
	704	Other income (expenses), net: Other, net
	1,227	Total before tax
	(255)	Income taxes
	972	Net of tax
Total reclassification for the period	¥ 715	Net of tax

	Millions of yen	
	Three months ended September 30, 2018	Affected line items in consolidated statements of income
Pension liability adjustments		
Amortization of actuarial loss and prior service cost	¥ (388)	Other income (expenses), net: Other, net
	(388)	Total before tax
	117	Income taxes
	(271)	Net of tax
Net unrealized holding gains (losses) on derivative instruments		
Forwards contracts	(1,505)	Other income (expenses), net: Other, net
	(1,505)	Total before tax
	66	Income taxes
	(1,439)	Net of tax
Total reclassification for the period	¥ (1,710)	Net of tax

Tax effects allocated to each component of other comprehensive income (loss) for the six months ended September 30, 2019 and 2018 are as follows:

	Millions of yen		
	Six months ended September 30, 2019		
	Before tax amount	Tax (expense) or benefit	Net of tax amount
Foreign currency translation adjustments			
Foreign currency translation adjustments arising during the period	¥ (66,291)	¥ 77	¥ (66,214)
Less: reclassification adjustment for gains included in net income	—	—	—
Net foreign currency translation adjustments	(66,291)	77	(66,214)
Pension liability adjustments			
Pension liability adjustments arising during the period	(527)	159	(368)
Less: reclassification adjustment for losses included in net income	752	(239)	513
Net pension liability adjustments	225	(80)	145
Net unrealized holding gains (losses) on derivative instruments			
Unrealized holding gains arising during the period	1,204	(677)	527
Less: reclassification adjustment for gains included in net income	(2,807)	1,049	(1,758)
Net unrealized holding losses	(1,603)	372	(1,231)
Other comprehensive income (loss)	¥ (67,669)	¥ 369	¥ (67,300)

	Millions of yen		
	Six months ended September 30, 2018		
	Before tax amount	Tax (expense) or benefit	Net of tax amount
Foreign currency translation adjustments			
Foreign currency translation adjustments arising during the period	¥ 41,811	¥ (106)	¥ 41,705
Less: reclassification adjustment for gains included in net income	—	—	—
Net foreign currency translation adjustments	41,811	(106)	41,705
Pension liability adjustments			
Pension liability adjustments arising during the period	79	(8)	71
Less: reclassification adjustment for losses included in net income	773	(254)	519
Net pension liability adjustments	852	(262)	590
Net unrealized holding gains (losses) on derivative instruments			
Unrealized holding losses arising during the period	(7,151)	2,035	(5,116)
Less: reclassification adjustment for losses included in net income	3,348	(922)	2,426
Net unrealized holding losses	(3,803)	1,113	(2,690)
Other comprehensive income (loss)	¥ 38,860	¥ 745	¥ 39,605

Tax effects allocated to each component of other comprehensive income (loss) for the three months ended September 30, 2019 and 2018 are as follows:

	Millions of yen		
	Three months ended September 30, 2019		
	Before tax amount	Tax (expense) or benefit	Net of tax amount
Foreign currency translation adjustments			
Foreign currency translation adjustments arising during the period	¥ (32,973)	¥ 70	¥ (32,903)
Less: reclassification adjustment for gains included in net income	—	—	—
Net foreign currency translation adjustments	(32,973)	70	(32,903)
Pension liability adjustments			
Pension liability adjustments arising during the period	(636)	196	(440)
Less: reclassification adjustment for losses included in net income	374	(117)	257
Net pension liability adjustments	(262)	79	(183)
Net unrealized holding gains (losses) on derivative instruments			
Unrealized holding gains arising during the period	479	(24)	455
Less: reclassification adjustment for gains included in net income	(1,227)	255	(972)
Net unrealized holding losses	(748)	231	(517)
Other comprehensive income (loss)	¥ (33,983)	¥ 380	¥ (33,603)

	Millions of yen		
	Three months ended September 30, 2018		
	Before tax amount	Tax (expense) or benefit	Net of tax amount
Foreign currency translation adjustments			
Foreign currency translation adjustments arising during the period	¥ 23,762	¥ (53)	¥ 23,709
Less: reclassification adjustment for gains included in net income	—	—	—
Net foreign currency translation adjustments	23,762	(53)	23,709
Pension liability adjustments			
Pension liability adjustments arising during the period	108	(15)	93
Less: reclassification adjustment for losses included in net income	388	(117)	271
Net pension liability adjustments	496	(132)	364
Net unrealized holding gains (losses) on derivative instruments			
Unrealized holding losses arising during the period	(3,020)	584	(2,436)
Less: reclassification adjustment for losses included in net income	1,505	(66)	1,439
Net unrealized holding losses	(1,515)	518	(997)
Other comprehensive income (loss)	¥ 22,743	¥ 333	¥ 23,076

10. Revenue

(1) Disaggregation of revenue

The disaggregation of revenue by operating and geographic segment are described in Note 20.

(2) Contract balances

Contract balances arising from contracts with customers at September 30, 2019 and at March 31, 2019 are as follows:

	Millions of yen	
	September 30, 2019	March 31, 2019
Receivables *1	¥ 974,574	¥ 1,067,025
Contract assets *2	6,166	7,443
Contract liabilities *3	113,521	94,720

*1 Receivables are included in trade notes and accounts receivable, net and long-term trade receivables, net in the accompanying consolidated balance sheets. These amounts are before deducting allowance for doubtful trade receivables.

*2 Contract assets are included in trade notes and accounts receivable, net in the accompanying consolidated balance sheets. These amounts are before deducting allowance for doubtful trade receivables.

*3 Contract liabilities are included in other current liabilities and deferred income taxes and other liabilities in the accompanying consolidated balance sheets.

Revenue recognized for the six months ended September 30, 2019, that was included in the contract liability balance as of March 31, 2019 was ¥36,659 million. Revenue recognized for the three months ended September 30, 2019, that was included in the contract liability balance as of March 31, 2019 was ¥12,236 million.

The amount of revenue recognized during the six months and three months ended September 30, 2019, from performance obligations satisfied or partially satisfied in previous periods was immaterial.

(3) Transaction price allocated to the remaining performance obligations

As of September 30, 2019, the aggregate amount of the transaction price allocated to the remaining performance obligations that have original expected durations greater than one year was ¥181,658 million, of which ¥86,432 million is expected to be recognized as revenue in the twelve months following September 30, 2019.

11. Stock-Based Remuneration

The Company had a stock option plan which transfers the Company's shares to directors and certain employees, and certain representative directors of major subsidiaries under an agreement granting the right for them to request such transfers at a predetermined price until the fiscal year ended March 31, 2018.

From the fiscal year ended March 31, 2019, the Company has introduced a new compensation plan, i.e., the restricted stock compensation system for the purpose of providing directors (other than outside directors) and employees of the Company and directors and employees of major subsidiaries with medium- to long-term incentives and advancing the sharing of value between the directors and shareholders of the company. Compensation expenses during the six months ended September 30, 2019 and 2018 were recorded in selling, general and administrative expenses, and were not material to Komatsu's financial position and results of operations. Compensation expenses during the three months ended September 30, 2019 and 2018 were recorded in selling, general and administrative expenses, and were not material to Komatsu's financial position and results of operations. The Company recognizes compensation expense using the fair value method.

12. Leases

Revenues from finance and operating leases as lessor, included in net sales on the consolidated statement of income, for the six months ended September 30, 2019 are as follows:

	<u>Millions of yen</u>
	<u>Six months ended</u>
	<u>September 30, 2019</u>
Finance lease (sales-type lease) revenue	
Revenue recognized at the commencement date *1	¥ 52,917
Interest income	5,084
Total finance lease (sales-type lease) revenue	58,001
Operating lease revenue	45,708
Total	¥ 103,709

*1 The revenue recognized at the commencement date is included in net sales of the Construction, Mining and Utility Equipment operating segment.

Revenues from finance and operating leases as lessor, included in net sales on the consolidated statement of income, for the three months ended September 30, 2019 are as follows:

	<u>Millions of yen</u>
	<u>Three months ended</u>
	<u>September 30, 2019</u>
Finance lease (sales-type lease) revenue	
Revenue recognized at the commencement date *2	¥ 21,816
Interest income	2,495
Total finance lease (sales-type lease) revenue	24,311
Operating lease revenue	23,615
Total	¥ 47,926

*2 The revenue recognized at the commencement date is included in net sales of the Construction, Mining and Utility Equipment operating segment.

13. Net Income Attributable to Komatsu Ltd. per Share

The Company has the restricted stock compensation system (hereinafter, the “System”) for directors (other than outside directors) and employees of the Company and directors and employees of major subsidiaries. Among the new shares issued under the System, those transfer restrictions which have not been cancelled are distinguished as participating securities from common shares. Each common share and restricted stock has the same rights to net income attributable to Komatsu Ltd.

A reconciliation of the numerators and denominators of the basic net income attributable to Komatsu Ltd. per share computations is as follows:

	Millions of yen	
	Six months ended September 30, 2019	Six months ended September 30, 2018
Net income attributable to Komatsu Ltd.	¥ 90,062	¥ 125,385
Net income attributable to participating securities (restricted stocks)	31	6
Net income attributable to common shareholders	¥ 90,031	¥ 125,379

	Number of shares	
	Six months ended September 30, 2019	Six months ended September 30, 2018
Weighted average number of common shares outstanding, less treasury stock	944,025,303	943,425,146
Weighted average number of participating securities (restricted stocks)	329,917	43,576
Weighted average number of common shares	943,695,386	943,381,570

	Yen	
	Six months ended September 30, 2019	Six months ended September 30, 2018
Basic net income attributable to Komatsu Ltd. per share	95.40	132.90

	Millions of yen	
	Three months ended September 30, 2019	Three months ended September 30, 2018
Net income attributable to Komatsu Ltd.	¥ 42,586	¥ 62,415
Net income attributable to participating securities (restricted stocks)	17	6
Net income attributable to common shareholders	¥ 42,569	¥ 62,409

	Number of shares	
	Three months ended September 30, 2019	Three months ended September 30, 2018
Weighted average number of common shares outstanding, less treasury stock	944,114,481	943,514,170
Weighted average number of participating securities (restricted stocks)	377,649	86,678
Weighted average number of common shares	943,736,832	943,427,492

	Yen	
	Three months ended September 30, 2019	Three months ended September 30, 2018
Basic net income attributable to Komatsu Ltd. per share	45.11	66.15

A reconciliation of the numerators and denominators of the diluted net income attributable to Komatsu Ltd. per share computations is as follows:

	Millions of yen	
	Six months ended September 30, 2019	Six months ended September 30, 2018
Net income attributable to Komatsu Ltd.	¥ 90,062	¥ 125,385
Net income attributable to participating securities (restricted stocks)	31	6
Net income attributable to common shareholders	¥ 90,031	¥ 125,379

	Number of shares	
	Six months ended September 30, 2019	Six months ended September 30, 2018
Weighted average number of common shares outstanding, less treasury stock	944,025,303	943,425,146
Dilutive effect of:		
Stock options	820,742	1,147,656
Weighted average number of participating securities (restricted stocks)	329,917	43,576
Weighted average number of diluted common shares	944,516,128	944,529,226

	Yen	
	Six months ended September 30, 2019	Six months ended September 30, 2018
Diluted net income attributable to Komatsu Ltd. per share	95.32	132.74

	Millions of yen	
	Three months ended September 30, 2019	Three months ended September 30, 2018
Net income attributable to Komatsu Ltd.	¥ 42,586	¥ 62,415
Net income attributable to participating securities (restricted stocks)	17	6
Net income attributable to common shareholders	¥ 42,569	¥ 62,409

	Number of shares	
	Three months ended September 30, 2019	Three months ended September 30, 2018
Weighted average number of common shares outstanding, less treasury stock	944,114,481	943,514,170
Dilutive effect of:		
Stock options	777,632	1,100,246
Weighted average number of participating securities (restricted stocks)	377,649	86,678
Weighted average number of diluted common shares	944,514,464	944,527,738

	Yen	
	Three months ended September 30, 2019	Three months ended September 30, 2018
Diluted net income attributable to Komatsu Ltd. per share	45.07	66.07

14. Contingent Liabilities

At September 30, 2019 and at March 31, 2019, Komatsu was contingently liable for discounted and transferred receivables on a recourse basis with the financial institutions of ¥37 million and ¥103 million, respectively.

Komatsu provides guarantees to third parties of loans of the employees, affiliated companies, customers and other companies. The guarantees of loans relating to the employees are mainly made for their housing loans. The guarantees of loans relating to the affiliated companies, customers and other companies are made to enhance the credit of those companies. For each guarantee provided, Komatsu would have to perform under a guarantee if the borrower defaults on a payment within the contract terms. The contract terms are from 10 years to 30 years in the case of employees with housing loans, and from 1 year to 7 years in the case of loans relating to the affiliated companies, customers and other companies. The maximum amount of undiscounted payments Komatsu would have had to make in the event of default at September 30, 2019 and at March 31, 2019 were ¥14,087 million and ¥14,917 million, respectively. The fair value of the liabilities recognized for Komatsu's obligations as guarantors under those guarantees at September 30, 2019 were insignificant. Certain of those guarantees were secured by collateral and insurance issued to Komatsu.

Komatsu provides guarantees that subsidiaries of the Company perform the obligations of the terms and conditions of contracts by standby letters of credit issued by banks. Komatsu would have to pay the liabilities incurred to banks if the subsidiaries don't perform the obligations of the terms and conditions of contracts. The maximum amount of undiscounted payments Komatsu would have had to make in the event of defaults of the contracts at September 30, 2019 and at March 31, 2019 were ¥13,998 million and ¥16,850 million, respectively.

Management of the Company believes that losses from those contingent liabilities, if any, would not have a material effect on the quarterly consolidated financial statements.

Komatsu is involved in certain legal actions and claims arising mainly in the ordinary course of its business. It is the opinion of management and legal counsel that such litigation and claims will be resolved without material effect on Komatsu's financial position.

Komatsu has business activities with customers, dealers and associates around the world and its trade receivables from such parties and the guarantees for them are well diversified to minimize concentrations of credit risks. Management does not anticipate incurring losses on its trade receivables in excess of established allowances.

15. Derivative Financial Instruments

Notional principal amounts of derivative financial instruments outstanding at September 30, 2019 and at March 31, 2019 are as follows:

	Millions of yen	
	September 30, 2019	March 31, 2019
Forwards contracts:		
Sale of foreign currencies	¥ 166,146	¥ 209,878
Purchase of foreign currencies	104,830	145,476
Interest rate swaps and cross-currency swap agreements	83,708	108,606

Fair value of derivative instruments at September 30, 2019 and at March 31, 2019 on the consolidated balance sheets are as follows:

	Millions of yen			
	September 30, 2019			
	Derivative Assets		Derivative Liabilities	
Derivative instruments designated as hedging instruments	Location on the consolidated Balance Sheets	Estimated fair value	Location on the consolidated Balance Sheets	Estimated fair value
Forwards contracts	Other current assets	¥ 923	Other current liabilities	¥ 1,463
	Deferred income taxes and other assets	10	Deferred income taxes and other liabilities	290
Interest rate swaps and cross-currency swap agreements	Other current assets	—	Other current liabilities	4
	Deferred income taxes and other assets	—	Deferred income taxes and other liabilities	878
Total		¥ 933		¥ 2,635
Undesignated derivative instruments	Location on the consolidated Balance Sheets	Estimated fair value	Location on the consolidated Balance Sheets	Estimated fair value
Forwards contracts	Other current assets	¥ 2,106	Other current liabilities	¥ 837
	Deferred income taxes and other assets	1	Deferred income taxes and other assets	1
Interest rate swaps and cross-currency swap agreements	Other current assets	210	Other current liabilities	316
	Deferred income taxes and other assets	200	Deferred income taxes and other liabilities	—
Total		¥ 2,517		¥ 1,154
Total Derivative Instruments		¥ 3,450		¥ 3,789

Millions of yen

March 31, 2019

Derivative instruments designated as hedging instruments	Derivative Assets		Derivative Liabilities	
	Location on the consolidated Balance Sheets	Estimated fair value	Location on the consolidated Balance Sheets	Estimated fair value
Forwards contracts	Other current assets	¥ 893	Other current liabilities	¥ 577
	Deferred income taxes and other assets	1	Deferred income taxes and other liabilities	404
Interest rate swaps and cross-currency swap agreements	Other current assets	1	Other current liabilities	1
	Deferred income taxes and other assets	3	Deferred income taxes and other liabilities	513
Total		¥ 898		¥ 1,495
Undesignated derivative instruments	Derivative Assets		Derivative Liabilities	
	Location on the consolidated Balance Sheets	Estimated fair value	Location on the consolidated Balance Sheets	Estimated fair value
Forwards contracts	Other current assets	¥ 1,980	Other current liabilities	¥ 1,649
	Deferred income taxes and other assets	2	Deferred income taxes and other liabilities	2
Interest rate swaps and cross-currency swap agreements	Other current assets	98	Other current liabilities	163
	Deferred income taxes and other assets	104	Deferred income taxes and other liabilities	46
Total		¥ 2,184		¥ 1,860
Total Derivative Instruments		¥ 3,082		¥ 3,355

The effects of derivative instruments on the consolidated statements of income and the consolidated statements of comprehensive income for the six months ended September 30, 2019 and 2018 are as follows:

Derivative instruments designated as cash flow hedging relationships

Millions of yen				
Six months ended September 30, 2019				
	Amount of gains (losses) recognized in OCI on derivatives	Gains (losses) reclassified from accumulated OCI on derivatives		
		Location of consolidated statements of income		Amount
Forwards contracts	¥ 1,637	Net sales		¥ 847
		Cost of sales		(11)
		Other income (expenses), net:		1,971
		Other, net		
Interest rate swaps and cross-currency swap agreements	(433)	—		—
Total	¥ 1,204			¥ 2,807

Millions of yen					
Six months ended September 30, 2018					
	Amount of gains (losses) recognized in OCI on derivatives	Effective portion		Ineffective portion and amount excluded from effectiveness testing	
		Location of gains (losses) reclassified from accumulated OCI into income	Amount of gains (losses) reclassified from accumulated OCI into income	Location of gains (losses) recognized in income on derivatives	Amount of gains (losses) recognized in income on derivatives
Forwards contracts	¥ (7,133)	Other income (expenses), net:	¥ (4,814)	Other income (expenses), net:	¥ 1,466
		Other, net		Other, net	
Interest rate swaps and cross-currency swap agreements	(18)	—	—	—	—
Total	¥ (7,151)		¥ (4,814)		¥ 1,466

* OCI stands for other comprehensive income (loss).

Derivative instruments not designated as hedging instruments relationships

Millions of yen		
Six months ended September 30, 2019		
	Location of gains (losses) recognized in income on derivatives	Amount of gains (losses) recognized in income on derivatives
Forwards contracts	Other income (expenses), net: Other, net	¥ 40
Interest rate swaps and cross-currency swap agreements	Cost of sales	(20)
	Other income (expenses), net: Other, net	(164)
Total		¥ (144)

Millions of yen		
Six months ended September 30, 2018		
	Location of gains (losses) recognized in income on derivatives	Amount of gains (losses) recognized in income on derivatives
Forwards contracts	Other income (expenses), net: Other, net	¥ 1,233
Interest rate swaps and cross-currency swap agreements	Cost of sales	(58)
	Other income (expenses), net: Other, net	(14)
Total		¥ 1,161

The effects of derivative instruments on the consolidated statements of income and the consolidated statements of comprehensive income for the three months ended September 30, 2019 and 2018 are as follows:

Derivative instruments designated as cash flow hedging relationships

Millions of yen				
Three months ended September 30, 2019				
	Amount of gains (losses) recognized in OCI on derivatives	Gains (losses) reclassified from accumulated OCI on derivatives		
		Location of consolidated statements of income		Amount
Forwards contracts	¥ 579	Net sales		¥ 655
		Cost of sales		(132)
		Other income (expenses), net:		704
		Other, net		
Interest rate swaps and cross-currency swap agreements	(100)	—		—
Total	¥ 479			¥ 1,227

Millions of yen					
Three months ended September 30, 2018					
	Amount of gains (losses) recognized in OCI on derivatives	Effective portion		Ineffective portion and amount excluded from effectiveness testing	
		Location of gains (losses) reclassified from accumulated OCI into income	Amount of gains (losses) reclassified from accumulated OCI into income	Location of gains (losses) recognized in income on derivatives	Amount of gains (losses) recognized in income on derivatives
Forwards contracts	¥ (3,005)	Other income (expenses), net:	¥ (2,568)	Other income (expenses), net:	¥ 1,063
		Other, net		Other, net	
Interest rate swaps and cross-currency swap agreements	(15)	—	—	—	—
Total	¥ (3,020)		¥ (2,568)		¥ 1,063

* OCI stands for other comprehensive income (loss).

Derivative instruments not designated as hedging instruments relationships

		Millions of yen	
		Three months ended September 30, 2019	
	Location of gains (losses) recognized in income on derivatives		Amount of gains (losses) recognized in income on derivatives
Forwards contracts	Other income (expenses), net: Other, net	¥	218
Interest rate swaps and cross-currency swap agreements	Cost of sales		103
	Other income (expenses), net: Other, net		(156)
Total		¥	165

		Millions of yen	
		Three months ended September 30, 2018	
	Location of gains (losses) recognized in income on derivatives		Amount of gains (losses) recognized in income on derivatives
Forwards contracts	Other income (expenses), net: Other, net	¥	155
Interest rate swaps and cross-currency swap agreements	Cost of sales		(30)
	Other income (expenses), net: Other, net		(38)
Total		¥	87

16. Fair Values of Financial Instruments

(1) Cash and cash equivalents, Time deposits, Short-term debt

The carrying amounts approximate fair value because of the short maturity of these instruments.

(2) Investment securities, marketable equity securities (Note 17)

The fair values of investment securities are stated in Note 17 and therefore are not included in the table below.

(3) Long-term trade receivables

The fair values of long-term trade receivables are based on the present value of future cash flows through maturity, discounted using the current interest rates for similar receivables of comparable maturity.

(4) Long-term debt, including current portion

The fair values of each of the long-term debt are based on the quoted price in the most active market or the present value of future cash flows associated with each instrument discounted using the current market borrowing rate for similar debt of comparable maturity.

(5) Derivatives (Notes 15 and 17)

The fair values of derivative financial instruments are stated in Note 17 and therefore are not included in the table below.

The carrying amounts and the estimated fair values of the financial instruments as of September 30, 2019 and as of March 31, 2019, and fair value levels are summarized as follows:

	Millions of yen				Fair Value Levels
	September 30, 2019		March 31, 2019		
	Carrying amount	Estimated fair value	Carrying amount	Estimated fair value	
Cash and cash equivalents	¥ 163,002	¥ 163,002	¥ 148,479	¥ 148,479	Level 1
Time deposits	1,745	1,745	2,331	2,331	Level 2
Long-term trade receivables, net	420,762	420,762	416,363	416,363	Level 2
Short-term debt	427,797	427,797	404,659	404,659	Level 2
Long-term debt, including current portion	523,581	522,170	526,041	523,921	Level 2

Notes:

1) Fair value estimates are made at a specific point in time, based on relevant market information and information about the financial instrument. These estimates are subjective in nature and involve uncertainties and matters of significant judgment and therefore cannot be determined with precision. Changes in assumptions could affect the estimates.

2) The fair value levels are stated in Note 17.

17. Fair value measurements

ASC 820, "Fair Value Measurements" defines that fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. ASC 820 establishes a three-level fair value hierarchy that prioritizes the inputs used to measure fair value. The three levels of inputs used to measure fair value are as follows:

- Level 1** – Quoted prices in active markets for identical assets or liabilities
- Level 2** – Inputs other than quoted prices included within Level 1 that are observable for the assets or liabilities, either directly or indirectly
- Level 3** – Unobservable inputs for the assets or liabilities

Assets and liabilities that are measured at fair value on a recurring basis

The fair value hierarchy levels of assets and liabilities that are measured at fair value on a recurring basis at September 30, 2019 and at March 31, 2019 are as follows:

At September 30, 2019	Millions of yen			
	Level 1	Level 2	Level 3	Total
Assets				
Investment securities, marketable equity securities				
Manufacturing industry	¥ 113	¥ —	¥ —	¥ 113
Derivatives				
Forward contracts	—	3,040	—	3,040
Interest rate swaps and cross-currency swap agreements	—	410	—	410
Total	¥ 113	¥ 3,450	¥ —	¥ 3,563

Liabilities				
Derivatives				
Forward contracts	¥ —	¥ 2,591	¥ —	¥ 2,591
Interest rate swaps and cross-currency swap agreements	—	1,198	—	1,198
Total	¥ —	¥ 3,789	¥ —	¥ 3,789

At March 31, 2019	Millions of yen			
	Level 1	Level 2	Level 3	Total
Assets				
Investment securities, marketable equity securities				
Manufacturing industry	¥ 430	¥ —	¥ —	¥ 430
Derivatives				
Forward contracts	—	2,876	—	2,876
Interest rate swaps and cross-currency swap agreements	—	206	—	206
Total	¥ 430	¥ 3,082	¥ —	¥ 3,512

Liabilities				
Derivatives				
Forward contracts	¥ —	¥ 2,632	¥ —	¥ 2,632
Interest rate swaps and cross-currency swap agreements	—	723	—	723
Total	¥ —	¥ 3,355	¥ —	¥ 3,355

Investment securities

Marketable equity securities are classified in Level 1 in the fair value hierarchy. Marketable equity securities are measured using a market approach based on the quoted market prices in active markets.

Derivatives (Notes 15 and 16)

Derivatives primarily represent foreign exchange contracts and interest rate swap agreements. The fair value of foreign exchange contracts is based on a valuation model that discounts cash flows resulting from the differential between contract rate and the market-based forward rate and is classified in Level 2 in the fair value hierarchy. The fair value of interest rate swap agreements is based on a valuation model that discounts cash flows based on the terms of the contract and the swap curves and is classified in Level 2 in the fair value hierarchy.

The following table summarizes information about changes of Level 3 for the six months ended September 30, 2019 and 2018:

	Millions of yen	
	Six months ended September 30, 2019	Six months ended September 30, 2018
Balance, beginning of year	¥ —	¥ (242)
Total gains or losses (realized / unrealized)	—	36
Included in earnings	—	51
Included in other comprehensive income (loss)	—	(15)
Balance, end of period	¥ —	¥ (206)

The amount of unrealized gains on classified in Level 3 liabilities recognized in earnings for the six months ended September 30, 2018 related to liabilities still held at September 30, 2018 was gain of ¥51 million. This gain was reported in other income (expenses), net in the consolidated statements of income.

The following table summarizes information about changes of Level 3 for the three months ended September 30, 2019 and 2018:

	Millions of yen	
	Three months ended September 30, 2019	Three months ended September 30, 2018
Balance, beginning of period	¥ —	¥ (212)
Total gains or losses (realized / unrealized)	—	6
Included in earnings	—	12
Included in other comprehensive income (loss)	—	(6)
Balance, end of period	¥ —	¥ (206)

The amount of unrealized gains on classified in Level 3 liabilities recognized in earnings for the three months ended September 30, 2018 related to liabilities still held at September 30, 2018 was gain of ¥12 million. This gain was reported in other income (expenses), net in the consolidated statements of income.

Assets and liabilities that are measured at fair value on a non-recurring basis

During six months ended September 30, 2019 and 2018 assets and liabilities that were measured at fair value on a non-recurring basis were not material.

18. Committed Credit Lines

Certain consolidated subsidiaries have entered into contracts with certain financial institutions for committed credit lines. These total amounts of committed credit lines at September 30, 2019 and at March 31, 2019 were ¥122,496 million and ¥136,014 million, respectively. These total amounts of unused committed credit lines available for full and immediate borrowings at September 30, 2019 and at March 31, 2019 were ¥118,123 million and ¥124,150 million, respectively.

19. Dividends

Six months ended September 30, 2019

(1) Payment amount of dividends

Resolution	Type of stock	Aggregate amount of dividends (Millions of yen)	Resource of dividends	Dividend per share (Yen)	Record date	Effective date
Ordinary general meeting of shareholders held on June 18, 2019	Common stock	55,718	Retained earnings	59	March 31, 2019	June 19, 2019

Note : The amount is rounded down to nearest million yen.

(2) Dividends to be paid for the six months ended September 30, 2019, of which effective date is after September 30, 2019

Resolution	Type of stock	Aggregate amount of dividends (Millions of yen)	Resource of dividends	Dividend per share (Yen)	Record date	Effective date
Board of Directors held on October 30, 2019	Common stock	51,967	Retained earnings	55	September 30, 2019	December 2, 2019

Note : The amount is rounded down to nearest million yen.

Six months ended September 30, 2018

(1) Payment amount of dividends

Resolution	Type of stock	Aggregate amount of dividends (Millions of yen)	Resource of dividends	Dividend per share (Yen)	Record date	Effective date
Ordinary general meeting of shareholders held on June 19, 2018	Common stock	45,301	Retained earnings	48	March 31, 2018	June 20, 2018

Note : The amount is rounded down to nearest million yen.

(2) Dividends to be paid for the six months ended September 30, 2018, of which effective date is after September 30, 2018

Resolution	Type of stock	Aggregate amount of dividends (Millions of yen)	Resource of dividends	Dividend per share (Yen)	Record date	Effective date
Board of Directors held on October 29, 2018	Common stock	48,155	Retained earnings	51	September 30, 2018	November 29, 2018

Note : The amount is rounded down to nearest million yen.

20. Business Segment and Geographic Information

Komatsu has three operating segments: 1) Construction, Mining and Utility Equipment, 2) Retail Finance, and 3) Industrial Machinery and Others. Those operating segments which have separate financial information are available for allocating resources and assessing its performance by management.

The accounting policies employed for the preparation of segment information are identical to those employed for the preparation of the quarterly consolidated financial statements of the Company.

Segment profit available for allocating resources and assessing its performance by management is determined by subtracting the cost of sales and selling, general and administrative expenses from net sales attributed to the operating segment. Segment profit excludes certain general corporate administration and finance expenses, such as costs of executive management, corporate development, corporate finance, human resources, internal audit, investor relations, legal and public relations. Segment profit also excludes certain charges which may otherwise relate to operating segments, including impairments of long-lived assets and goodwill.

Operating segments:

Information about operating segments for the six months ended September 30, 2019 and 2018 is as follows:

	Millions of yen	
	Six months ended September 30, 2019	Six months ended September 30, 2018
Net sales:		
Construction, Mining and Utility Equipment –		
External customers	¥ 1,109,313	¥ 1,195,186
Intersegment	2,361	5,410
Total	1,111,674	1,200,596
Retail Finance –		
External customers	31,144	26,625
Intersegment	3,639	2,812
Total	34,783	29,437
Industrial Machinery and Others –		
External customers	73,028	96,230
Intersegment	701	812
Total	73,729	97,042
Elimination	(6,701)	(9,034)
Consolidated	¥ 1,213,485	¥ 1,318,041
Segment profit:		
Construction, Mining and Utility Equipment	¥ 129,833	¥ 183,938
Retail Finance	6,810	9,582
Industrial Machinery and Others	4,039	7,514
Total segment profit	140,682	201,034
Corporate expenses and elimination	7	(1,901)
Consolidated	¥ 140,689	¥ 199,133

Information about operating segments for the three months ended September 30, 2019 and 2018 is as follows:

	Millions of yen	
	Three months ended September 30, 2019	Three months ended September 30, 2018
Net sales:		
Construction, Mining and Utility Equipment –		
External customers	¥ 548,715	¥ 603,063
Intersegment	1,482	3,322
Total	550,197	606,385
Retail Finance –		
External customers	15,678	13,654
Intersegment	1,826	1,524
Total	17,504	15,178
Industrial Machinery and Others –		
External customers	39,325	55,264
Intersegment	383	533
Total	39,708	55,797
Elimination	(3,691)	(5,379)
Consolidated	¥ 603,718	¥ 671,981
Segment profit:		
Construction, Mining and Utility Equipment	¥ 61,144	¥ 95,620
Retail Finance	3,406	4,090
Industrial Machinery and Others	3,485	4,470
Total segment profit	68,035	104,180
Corporate expenses and elimination	(89)	(957)
Consolidated	¥ 67,946	¥ 103,223

Reconciliation of total segment profit to consolidated income before income taxes and equity in earnings of affiliated companies for the six months ended September 30, 2019 and 2018 is as follows:

	Millions of yen	
	Six months ended September 30, 2019	Six months ended September 30, 2018
Total segment profit	¥ 140,682	¥ 201,034
Corporate expenses and elimination	7	(1,901)
Consolidated	140,689	199,133
Other operating income (expenses), net	1,293	1,174
Operating income	141,982	200,307
Interest and dividend income	3,732	3,683
Interest expense	(13,108)	(11,410)
Other, net	(4,394)	(71)
Consolidated income before income taxes and equity in earnings of affiliated companies	¥ 128,212	¥ 192,509

Reconciliation of total segment profit to consolidated income before income taxes and equity in earnings of affiliated companies for the three months ended September 30, 2019 and 2018 is as follows:

	Millions of yen	
	Three months ended September 30, 2019	Three months ended September 30, 2018
Total segment profit	¥ 68,035	¥ 104,180
Corporate expenses and elimination	(89)	(957)
Consolidated	67,946	103,223
Other operating income (expenses), net	(724)	1,036
Operating income	67,222	104,259
Interest and dividend income	1,986	1,710
Interest expense	(6,458)	(5,987)
Other, net	(1,448)	(413)
Consolidated income before income taxes and equity in earnings of affiliated companies	¥ 61,302	¥ 99,569

Business categories and principal products and services included in each operating segment are as follows:

a) Construction, Mining and Utility Equipment operating segment:

Excavating equipment, loading equipment, grading and roadbed preparation equipment, hauling equipment, forestry equipment, tunneling machines, underground mining equipment, recycling equipment, industrial vehicles, other equipment, engines and components, casting products and logistics

b) Retail Finance:

Financing

c) Industrial Machinery and Others operating segment:

Metal forging and stamping presses, sheet-metal machines, machine tools, defense systems, temperature-control equipment and others
Transfers between segments are made at estimated arm's length prices.

Geographic information:

Net sales determined by customer location for the six months ended September 30, 2019 and 2018 are as follows:

	Millions of yen			
	Six months ended September 30, 2019			
	Construction, Mining and Utility Equipment	Retail Finance	Industrial Machinery and Others	Total
Japan	¥ 148,738	¥ 1,003	¥ 34,094	¥ 183,835
The Americas	440,065	24,140	7,438	471,643
Europe and CIS	178,580	1,364	3,429	183,373
China	61,444	1,644	11,057	74,145
Asia (excluding Japan and China) and Oceania	218,525	2,960	16,820	238,305
Middle East and Africa	61,961	33	190	62,184
Total	¥ 1,109,313	¥ 31,144	¥ 73,028	¥ 1,213,485

	Millions of yen			
	Six months ended September 30, 2018			
	Construction, Mining and Utility Equipment	Retail Finance	Industrial Machinery and Others	Total
Japan	¥ 137,488	¥ 913	¥ 40,508	¥ 178,909
The Americas	443,297	20,066	18,659	482,022
Europe and CIS	165,824	1,334	7,151	174,309
China	81,440	1,601	10,465	93,506
Asia (excluding Japan and China) and Oceania	287,603	2,665	19,416	309,684
Middle East and Africa	79,534	46	31	79,611
Total	¥ 1,195,186	¥ 26,625	¥ 96,230	¥ 1,318,041

Net sales determined by customer location for the three months ended September 30, 2019 and 2018 are as follows:

	Millions of yen			
	Three months ended September 30, 2019			
	Construction, Mining and Utility Equipment	Retail Finance	Industrial Machinery and Others	Total
Japan	¥ 84,961	¥ 558	¥ 20,240	¥ 105,759
The Americas	222,103	12,149	4,209	238,461
Europe and CIS	85,383	689	2,330	88,402
China	25,207	808	4,840	30,855
Asia (excluding Japan and China) and Oceania	100,007	1,459	7,531	108,997
Middle East and Africa	31,054	15	175	31,244
Total	¥ 548,715	¥ 15,678	¥ 39,325	¥ 603,718

	Millions of yen			
	Three months ended September 30, 2018			
	Construction, Mining and Utility Equipment	Retail Finance	Industrial Machinery and Others	Total
Japan	¥ 73,584	¥ 466	¥ 23,045	¥ 97,095
The Americas	225,999	10,273	12,230	248,502
Europe and CIS	80,597	716	3,807	85,120
China	30,913	810	5,935	37,658
Asia (excluding Japan and China) and Oceania	150,594	1,356	10,234	162,184
Middle East and Africa	41,376	33	13	41,422
Total	¥ 603,063	¥ 13,654	¥ 55,264	¥ 671,981

Net sales determined by geographic origin for the six months ended September 30, 2019 and 2018 are as follows:

	Millions of yen	
	Six months ended September 30, 2019	Six months ended September 30, 2018
Japan	¥ 253,075	¥ 301,222
The Americas	441,105	436,698
Europe and CIS	187,061	180,228
China	66,426	86,525
Others	265,818	313,368
Total	¥ 1,213,485	¥ 1,318,041

Net sales determined by geographic origin for the three months ended September 30, 2019 and 2018 are as follows:

	Millions of yen	
	Three months ended September 30, 2019	Three months ended September 30, 2018
Japan	¥ 137,842	¥ 161,018
The Americas	223,727	223,102
Europe and CIS	89,091	89,314
China	27,263	34,691
Others	125,795	163,856
Total	¥ 603,718	¥ 671,981

There were no sales to a single major external customer for the six months and three months ended September 30, 2019 and 2018.

21. Material Subsequent Events

Not applicable.

Komatsu evaluated subsequent events through November 13, 2019, the issue date of its quarterly consolidated financial statements.

22. Terminology, Forms and Preparation Methods of Quarterly Consolidated Financial Statements

The terminology, forms and preparation methods of the Company's quarterly consolidated financial statements are in accordance with U.S. GAAP.

The main differences between quarterly consolidated financial statements prepared in accordance with U.S. GAAP and those prepared in accordance with the Accounting Standards for Quarterly Consolidated Financial Statements and the Ordinance on Terminology, Forms and Preparation Methods of Quarterly Consolidated Financial Statements of Japan (hereinafter "J. GAAP") are as follows.

(1) Scope of consolidation

For quarterly consolidated financial statements in accordance with J. GAAP, the scope of consolidation is determined on an effective control and influence basis. For quarterly consolidated financial statement in accordance with U.S. GAAP, the scope of consolidation is determined on the shareholding basis on which the determination is based on voting rights and on a consolidation basis of variable interest entities.

(2) Accounting policies

a. Deferred income on installment sales

Although deferral of income on installment sales is permitted in accordance with J. GAAP, the Company recognizes income at the time of sales without deferring income on installment sales in its quarterly consolidated financial statements in accordance with U.S. GAAP.

b. Share issuance cost

Although in accordance with J. GAAP, share issuance cost is permitted to be recognized in profit or loss when incurred, the Company treats such cost in a deduction item from capital surplus as expenses incidental to capital transactions in its quarterly consolidated financial statements in accordance with U.S. GAAP.

c. Accounting for retirement benefits

Although in accordance with J. GAAP, net actuarial gains or losses are required to be amortized over certain periods that are shorter than the average remaining years of service, the Company has adopted the corridor approach in its quarterly consolidated financial statements in accordance with U.S. GAAP.

d. Business combination and goodwill

Goodwill is required to be amortized over certain periods in accordance with J. GAAP, while U.S. GAAP requires companies to implement impairment test at least once annually without goodwill being amortized. For intangible fixed assets with indefinite useful lives, U.S. GAAP also requires companies to implement impairment test without such assets being amortized.

(3) Presentation methods and other matters

a. Presentation of legal retained earnings

Although in accordance with J. GAAP, legal retained earnings is recorded as retained earnings together with other surplus, the Company separately presents as appropriated legal reserve in its quarterly consolidated financial statements in accordance with U.S. GAAP.

b. Extraordinary income and loss

In accordance with J. GAAP, gain or loss on certain sales of non-current assets, such as gain or loss from the sale of properties, is presented as extraordinary income or loss. However, since there is no concept of extraordinary items in U.S. GAAP, extraordinary income or loss is not presented in the Company's quarterly consolidated financial statements.