

Financial Report 2019

Japan Aviation Electronics Industry, Limited and consolidated subsidiaries. Years ended March 31

Business Overview

Overview of financial position, operating results and cash flows of the JAE Group (JAE and subsidiaries) for the consolidated fiscal year under review (fiscal year ended March 31, 2019, hereinafter “fiscal 2019”) are outlined below.

JAE Group has applied the “Partial Amendments to Accounting Standard for Tax Effect Accounting” (ASBJ Statement No. 28, February 16, 2018) from the beginning of fiscal 2019. We have conducted analysis and comparison with the preceding consolidated fiscal year, using the data applied the abovementioned standard retroactively.

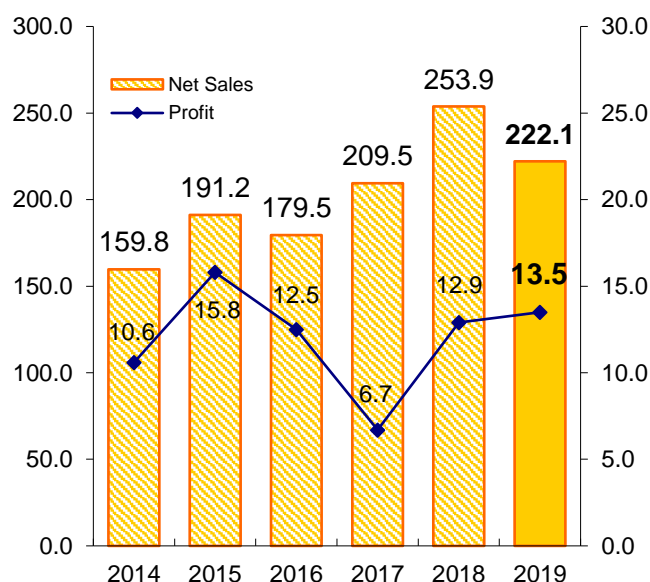
As for the global economy during fiscal 2019, the United States has grown steadily backed by the expansion of personal consumption, but overall there have been signs of growth deceleration on a global scale as exemplified by the moves toward curbing of production and investment due to the negative impact of trade issues in China. The Japanese economy also stayed on the course of gradual recovery, but in the second half of the fiscal year, it suffered a decline in exports and deceleration in capital investment, which weakened the economy.

With regard to the electronics markets relevant for the JAE Group, in addition to the maturity of the mobile device market, the industrial machinery market declined due to the impact of the trend for curbing of capital investment that originally started from China. The automotive market, on the other hand, experienced rapid deceleration in Europe and China, but remained strong in Japan.

Against this backdrop, the JAE Group worked to improve business performance especially in Connector Segment as the pillar of our business. Specifically, we worked to improve our performance through focusing on expanding orders and sales by implementation of global marketing and acceleration of initiatives for development of new products. Also we worked to improve efficiency across whole business operations such as reducing costs by promoting in-house manufacturing, streamlining facilities and curbing expenses.

Despite these efforts, however, our operations in the fields of mobile devices and industrial machinery suffered the negative impact of reduced demand, and, as a result, sales in the consolidated fiscal year under review dropped to 222.14 billion yen (87% of the previous year).

In terms of profits, operating profit dropped to 17.302 billion yen (84% of the previous year) in line with the decline in sales. At the same time, the decrease in the loss on retirement of fixed assets, which is part of non-operating expenses, and the appropriation of the foreign exchange gains resulted in increased profits, specifically 18.041 billion yen in ordinary profits (104% of the previous year) and 13.508 billion yen in net profits (104% of the previous year).



(Years ended March 31)

Years ended March 31	Yen in billions			% of Previous Year	U.S. dollars in millions
	2017	2018	2019 From April1, 2018 to March31, 2019		2019 From April1, 2018 to March31, 2019
Net sales	¥ 209.5	¥ 253.9	¥ 222.1	87%	\$ 2,001
Gross profit	33.1	42.9	40.0	93%	360
Operating profit	12.06	20.63	17.30	84%	155.9
to sales ratio	5.8%	8.1%	7.8%	(0.3%)	7.8%
Ordinary profit	9.15	17.36	18.04	104%	162.5
to sales ratio	4.4%	6.8%	8.1%	1.3%	8.1%
Profit	6.74	12.94	13.51	104%	121.7
to sales ratio	3.2%	5.1%	6.1%	1.0%	6.1%
Profit attributable to owners of parent	6.74	12.94	13.51	104%	121.7
to sales ratio	3.2%	5.1%	6.1%	1.0%	6.1%

Note: U.S. dollar amounts are translated from yen, for convenience only, at the rate of JPY 111=U.S.\$1

Sales-by-segment

■ Connector Business: Sales of 197.9 billion yen (85% of the previous year)

Sales of products for the automotive markets posted robust performance, while products for the smartphone field in the mobile device market suffered decline in demand, and products for the industrial machinery markets were negatively impacted by the restraint imposed on capital investment in China in the second half of fiscal 2019.

■ User Interface Solutions (UIS) Business: Sales of 8.1 billion yen (95% of the previous year)

Sales of control panels for medical equipment, industrial robots in the industrial machinery field and products for the automotive market decreased. In addition, increase of development costs related to new products for the automotive market negatively affected operating profit.

■ Aerospace Business: Sales of 15.2 billion yen (118% of the previous year)

Demand of products for the defense and aerospace field declined, but sales of products for oil drilling equipment and products for the domestic machinery field has grown strong.

Sales by Business Segment

Years ended March 31	Yen in billions			% of Previous Year	U.S.dollars in millions 2019
	2017	2018	2019		
Connector	189.3	231.6	197.9	85%	\$ 1,783
UIS	8.1	8.6	8.1	95%	73
Aerospace	11.4	12.9	15.2	118%	137
Others	0.7	0.9	0.8	99%	8
Total	209.5	253.9	222.1	87%	2,001
Overseas	152.6	188.5	157.4	84%	1,418
%	72.8%	74.2%	70.9%	—	70.9%
Domestic	56.9	65.4	64.7	99%	583

Operating profit by Business Segment

Years ended March 31	Yen in billions			% of Previous Year	U.S. dollars in millions 2019
	2017	2018	2019		
Connector	16.1	23.3	19.3	83%	\$ 174
UIS	0.8	0.8	0.4	54%	4
Aerospace	(0.6)	0.7	1.8	252%	17
Others	(4.2)	(4.2)	(4.2)	—%	(38)
Total	12.1	20.6	17.3	84%	156

Connector Sales by Segment

Years ended March 31	Yen in billions			% of Previous Year	U.S. dollars in millions 2019
	2017	2018	2019		
Mobile Devices	105.2	137.9	104.9	76%	\$ 945
Automotive	59.7	64.4	67.7	105%	610
Industrial & Infrastructure	17.1	21.4	18.4	86%	166
Others	7.3	8.0	7.0	88%	63
Total	189.3	231.6	197.9	85%	1,783
Overseas	146.8	180.9	148.0	82%	1,333
%	77.6%	78.1%	74.8%	—	74.8%
Domestic	42.5	50.7	49.9	99%	450

Management Policies, Management Environment and Outstanding Issues

(1) JAE's basic management policy

Ever since its establishment, the JAE Group has aimed to increase its corporate value and contribute to the creation of a sustainable society through growth based on the corporate philosophy of "Explore, Create and Practice."

In the pursuit of our business, our basic policy has been the development of operations on a global scale and management that places priority on consolidated management performance and cash flow.

Also, based on the JAE Group Charter of Corporate Behavior, as a good corporate citizen, we will abide by relevant laws and rules, and fulfill social responsibilities toward customers, stockholders and investors, business partners, and other related parties in the community at large.

(2) Medium- and long-term management strategies

As for our major markets, with the global spread of the Internet of Things (IoT), we expect further advancement of in-vehicle electronics in the automotive market, and development of smart factories and robotization in industrial machinery markets. Growth in the volume of smartphone units in the mobile device market has slowed down, but we expect that the market expansion in emerging economies and the functional sophistication of smartphones will stimulate demand, and that wearable devices and VR/AR devices will become widespread.

Against this backdrop, the JAE group has held up as our vision for growth the following concept: "Contribute to society by providing technology of "connecting information" and "connecting people and devices", for the realization and development of the next-generation mobility and IoT society connected with 5G networks." In line with this concept, we shall work to boost our corporate value.

Based on this policy, we shall implement the strategies outlined below.

1. We will continue efforts to expand business by capturing demand for devices with potential for growth and global emerging trends in new markets.
2. Enhancement of proactive global marketing and technology development capacities and incorporating them in the global corporate slogan, "Technology to Inspire Innovation," in order to promote sustainable development of new products and their horizontal development and thus increase profits
3. Increasing profitability by slashing costs, reduction of lead times, enhancement of efficiency and further quality improvement based on a synergy effect of company-wide management innovation activities evolved from manufacturing improvement and technological innovation focused on efforts for in-house manufacturing, and active investment in construction of plants and reinforcement of production facilities

The JAE Group aims to secure the growth of the Connector Segment, the UIS Segment, and the Aerospace Segment, which represent the business of the company, over the mid-to-long term, based on the following strategies.

1. Connector Business

While keeping our current position in mobile devices market which advances the technology, we aim to expand our sales in the following market fields—the automotive market where electrification is making big leaps as a result of the spread of ADAS, autonomous and EV, the market of FA and industrial machinery where mid-to-long term growth is projected due to the mounting needs for automation and labor saving against the backdrop of the aging of the population and the labor shortage and the communications infrastructure market that will expand as a result of the commercialization and spread of 5G.

2. User Interface Solutions (UIS) Business

We shall aim to secure the growth of the business with capacitive touch panels for vehicles as demand is expected to expand in line with the evolution of vehicles, and shall also advance expansion of sales of control panels, in the industrial machinery market where improvement of operability is required.

3. Aerospace Business

We shall aim to achieve growth by applying technologies that we have fostered through our defense and aerospace

business into the private sector. Specifically, we shall apply motion sensing and control technologies used in accelerometers and gyroscopes to sensors for oil drilling field and linear motors for semiconductor manufacturing equipment.

(3) Outstanding issues

As for the business environment that surrounds the JAE Group, the global economy is projected to remain unstable due to protectionist trade policies and the impact of the UK leaving the European Union.

The electronics markets would be in unstable conditions due to the stagnation in sales of smartphone units in the mobile device markets, and delayed recovery of the industrial machinery markets, despite the steady growth of electronic components for vehicles are prospected in line with the advancement of EV and ADAS.

In order to respond to this environment, we shall focus efforts into the implementation of the three strategies outlined in the abovementioned “Mid-to-long Term Management Strategy,” build a robust business structure that will remain strong amidst changes in the business environment, and at the same time boost management speeds.

Consolidated Balance Sheets

Japan Aviation Electronics Industry, Limited, and consolidated subsidiaries Years ended March 31

Assets	Yen in millions		U.S. dollars
	2018	2019	in thousands
	As of March 31	As of March 31	As of March 31
Current assets:			
Cash and deposits	¥ 39,439	¥ 47,192	\$ 425,154
Notes and accounts receivable	53,864	41,449	373,415
Inventories	18,940	18,012	162,274
Other current assets	1,272	1,340	12,075
Allowance for doubtful accounts	(89)	(80)	(729)
Total current assets	113,427	107,913	972,190
Property, plant and equipment:			
Land	6,069	6,471	58,301
Buildings and structures	50,900	55,690	501,717
Machinery, equipment and others	172,371	179,551	1,617,579
Construction in progress	5,182	6,542	58,941
Less: Accumulated depreciation and impairment loss	(172,505)	(182,956)	(1,648,252)
Net property, plant and equipment	62,018	65,299	588,287
Investments and long-term loans receivable:			
Investment securities	3,022	2,686	24,205
Shares of subsidiaries and associates	153	139	1,255
Long-term loans receivable	1,095	1,149	10,358
Total investments and long-term loans receivable	4,270	3,976	35,820
Other assets:			
Net defined benefit asset	1,572	1,561	14,071
Deferred tax assets	4,066	3,607	32,495
Other assets	4,601	4,386	39,514
Allowance for doubtful accounts	(139)	(138)	(1,252)
Total other assets	10,099	9,416	84,830
Total assets	189,817	186,605	1,681,128

Liabilities and net assets	Yen in millions		U.S. dollars
	2018	2019	in thousands
	As of March 31	As of March 31	As of March 31
Current liabilities:			
Short-term borrowings	¥ 6,189	¥ 4,914	\$ 44,274
Notes and accounts payable	41,324	33,135	298,514
Accrued expenses	6,281	6,013	54,178
Income taxes payable	3,786	1,735	15,639
Other current liabilities	2,407	2,157	19,437
Total current liabilities	59,988	47,956	432,044
Non-current liabilities:			
Long-term loans borrowings	7,258	4,344	39,138
Net defined benefit liability	873	873	7,872
Other non-current liabilities	800	1,718	15,477
Total non-current liabilities	8,932	6,936	62,489
Net assets:			
Capital stock			
At March 31, 2018 - Shares authorized: 350,000,000, shares issued: 92,302,608	10,690		
At March 31, 2019 - Shares authorized: 350,000,000, shares issued: 92,302,608		10,690	96,308
Capital surplus	14,508	14,523	130,844
Retained earnings	94,092	104,873	944,803
Less: Treasury shares			
At March 31, 2018 - 1,411,404 shares	(1,070)		
At March 31, 2019 - 1,382,826 shares		(1,052)	(9,484)
Valuation difference on available-for-sale securities	1,411	1,236	11,140
Foreign currency translation adjustment	(213)	498	4,492
Remeasurements of defined benefit plans	1,330	769	6,934
Subscription rights to shares	147	172	1,556
Total net assets	120,895	131,712	1,186,595
Total liabilities and net assets	189,817	186,605	1,681,128
	Yen		U.S. dollars
Net assets per share	¥ 1,328.49	¥ 1,446.76	\$ 13.034

Notes : U.S.dollar amounts are translated from yen, for convenience only, at the rate of 111=U.S.\$1

Consolidated Statements of Income and Retained Earnings

Japan Aviation Electronics Industry, Limited, and consolidated subsidiaries Years ended March 31

U.S. dollars
in thousands

	Yen in millions		U.S. dollars
	2018	2019	2019
Net sales	¥ 253,947	¥ 222,140	\$ 2,001,264
Cost of sales	211,076	182,149	1,640,983
Gross profit	42,871	39,991	360,280
Selling, general and administrative expenses	22,238	22,688	204,398
Operating profit	20,632	17,302	155,882
Other income (expenses):			
Interest expenses	(80)	(58)	(523)
Interest and dividend income	155	305	2,751
Foreign exchange gains (losses)	(1,268)	946	8,531
Loss on retirement of non-current assets	(2,184)	(696)	(6,271)
Other, net	102	240	2,165
	(3,275)	738	6,653
Ordinary profit	17,357	18,041	162,535
Profit before income taxes	17,357	18,041	162,535
Income taxes-current	4,644	3,610	32,528
Income taxes-deferred	(223)	922	8,312
Profit	12,936	13,508	121,695
Profit attributable to owners of parent	12,936	13,508	121,695
Retained earnings:			
Balance at beginning of the year	82,958	94,092	847,677
Add:			
Profit attributable to owners of parent	12,936	13,508	121,695
Change of scope of consolidation	923	-	-
Deduct:			
Dividends of surplus	2,726	2,727	24,568
Balance at end of the year	94,092	104,873	944,803
		Yen	U.S. dollars
Net income per share (*1)	¥ 142.34	¥ 148.58	\$ 1.339

(*1) Figures represents profit attributable to owners of the parent.

Consolidated Statements of Cash Flows

Japan Aviation Electronics Industry, Limited, and consolidated subsidiaries Years ended March 31

U.S. dollars
in thousands

	Yen in millions		U.S. dollars
	2018	2019	2019
Net cash provided by (used in) operating activities			
Profit before income taxes	¥ 17,357	¥ 18,041	\$ 162,535
Depreciation and amortization	20,750	19,563	176,247
Increase (decrease) in net defined benefit liability	(1,501)	1	15
Loss on retirement of non-current assets	2,184	696	6,271
Decrease (increase) in notes and accounts receivable-trade	(4,263)	10,857	97,818
Decrease (increase) in inventories	(2,464)	988	8,908
Increase (decrease) in notes and accounts payable-trade	1,045	(9,174)	(82,650)
Other, net	(675)	(3,423)	(30,839)
Net cash provided by (used in) operating activities	32,432	37,552	338,306
Net cash provided by (used in) investing activities			
Purchase of property, plant and equipment	(17,533)	(22,182)	(199,844)
Proceeds from sales of property, plant and equipment	51	17	157
Purchase of investment securities	(3)	(4)	(39)
Other, net	(2,301)	(872)	(7,860)
Net cash provided by (used in) investing activities	(19,787)	(23,042)	(207,586)
Net cash provided by (used in) financing activities			
Repayments of long-term borrowings	(6,122)	(4,189)	(37,742)
Cash dividends paid	(2,726)	(2,727)	(24,568)
Other, net	19	25	227
Net cash provided by (used in) financing activities	(8,828)	(6,891)	(62,084)
Effect of exchange rate change on cash and cash equivalents	(1,087)	134	1,210
Net increase (decrease) in cash and cash equivalents	2,729	7,752	69,846
Cash and cash equivalents at beginning of period	36,529	39,439	355,307
Increase in cash and cash equivalents from newly consolidated subsidiary	180	-	-
Cash and cash equivalents at end of period	39,439	47,192	425,154
Supplemental disclosure of cash flow information			
Cash paid during the year for:			
Interest expenses paid	79	57	521
Income taxes paid	2,522	5,669	51,076

Notes : U.S.dollar amounts are translated from yen, for convenience only, at the rate of 111=U.S.\$1

Notes to Consolidated Financial Statements

Japan Aviation Electronics Industry, Limited and consolidated subsidiaries Years ended March 31

1. Basis of presenting consolidated financial statements

Japan Aviation Electronics Industry, Limited (the "Company"), a Japanese corporation and its domestic subsidiaries maintain their records and prepare financial statements in Japanese yen in conformity with accounting principles generally accepted in Japan.

Overseas consolidated subsidiaries prepare financial statements in accordance with either Accounting Standards generally accepted in the United States of America or International Financial Reporting Standards.

The accompanying consolidated financial statements are basically an English version of those that have been prepared for Japanese domestic purposes in accordance with the provisions of the Financial Instruments and Exchange Law of Japan, and filed with the Ministry of Finance Japan, and the Tokyo Stock Exchange. Certain modifications, including presentation of the statements of net assets and the cash flows have been made in the accompanying financial statements to facilitate understanding by readers outside Japan.

The translations of the Japanese yen amounts into U.S. dollars are included solely for the convenience of readers and have been calculated at the rate of ¥111=U.S.\$1.

2. Scope of consolidation

(1) Number of consolidated subsidiaries: 18

The consolidated subsidiaries are as follows: JAE Hirosaki, Ltd., JAE Yamagata, Ltd., JAE Fuji, Ltd., JAE Shinshu, Ltd., Meiyu - Giken Co., Ltd., JAE Taiwan, Ltd., JAE Oregon, Inc., Nikko Logistics, Corp., JAE Hakko Ltd., JAE Electronics, Inc., JAE Philippines, Inc., JAE Hong Kong, Ltd., JAE Singapore Pte Ltd., JAE Europe, Ltd., JAE Wuxi Co., Ltd., JAE Korea, Inc., JAE Wujiang Co., Ltd. and JAE Shanghai Co., Ltd.

(2) Number of non-consolidated subsidiaries: 7

The non-consolidated subsidiaries are as follows: JAE Business Support, Ltd., JAE Foods, Ltd., Hirosaki Hakko Co., Ltd., Meiyu Automation Corporation, JAE Houston, LLC, JAE Tijuana, S. A. de C. V. and JAE Dongguan Service Co., Ltd.

(3) Reason for exclusion of non-consolidated subsidiaries from scope of consolidation

The 7 non-consolidated subsidiaries were excluded from the scope of consolidation because they are all small in terms of their total assets, net sales, profit and retained earnings, and would have no significant overall impact on the consolidated financial statements.

3. Application of equity method

The impact of the 7 non-consolidated subsidiaries and 2 affiliated companies on the consolidated profit and consolidated retained earnings is slight, and overall they are of minor importance.

Investments in said companies have therefore been valued according to the cost method rather than the equity method.

4. Business years of consolidated subsidiaries

Since the consolidated subsidiaries, JAE Wuxi Co., Ltd., JAE Wujiang Co., Ltd. and JAE Shanghai Co., Ltd. have closing dates falling on December 31, the financial statements contained herein are based on the statements of the provisional settlement of accounts, which were performed on the consolidated closing date.

5. Accounting standards

(1) Standards and methods for valuing major assets

1. Securities

Other securities:

Listed shares: Market value method based on the market on the closing date.

(The entire difference between the acquisition cost and the market price is accounted for by the direct-inclusion-to-net assets method, and the cost of sales is calculated by the moving average method.)

Unlisted shares: Cost method based on the moving average method.

2. Derivatives: Market value method

3. Inventories: Lower of cost or market method for valuation

Mainly weighted average method for costing

(2) Depreciation on major depreciable assets

Property, plant and equipment

Buildings: The Company and 16 out of the 18 consolidated subsidiaries use the straight line method, while the remaining 2 use the declining balance method.

Items other than buildings: The Company and 9 out of the 18 consolidated subsidiaries use the declining balance method, while the remaining 9 use the straight line method.

(3) Standards for calculating allowance for doubtful accounts

As provision against losses from bad debts, bad debts reserve has been calculated in accordance with past records of bad debts in the case of general credits. In cases of the specialized credits such as doubtful credits, the possibility of recovery has been considered individually, and the estimated non-recoverable amount has been accrued.

(4) Treatment of major hedge accounts

1. Hedge accounting

Deferred treatment. Interest rate swap is applied, however, in cases meeting the necessary requirements.

In addition, forward exchange contract and currency swap is applied in cases meeting the necessary requirements.

2. Hedge method and transactions

Hedge method: derivatives (interest rate swap, forward exchange contract, currency swap and currency option trading)

Hedged transaction: A part of debts due to variable interest rate, foreign currency assets and liabilities and time deposit.

3. Hedge policy

It is our policy not to conduct speculative transactions. Derivatives are used to avoid risks from interest rate fluctuations on debts, and exchange rate fluctuations on foreign currency transactions and so on.

4. Evaluation of hedge effectiveness

Effectiveness is assessed by rate analysis of the sum total of price fluctuation involving hedged transactions, or cash flows, and the sum total of price fluctuation involving hedge methods, or cash flows.

(5) Funds involved in consolidated statements of cash flows

Funds (cash and cash equivalents) stated in consolidated statements of cash flows consist of cash on hand, demand deposits, and short-term investments which are redeemable within 3 months from the acquisition date, having high liquidity and convertibility into cash and low risk against price fluctuation.

(6) Method of accounting for retirement benefit

1. Method of period attribution for estimated retirement benefit

We adopt the fixed period standard to impute the estimated retirement benefit amount until the current consolidated fiscal year end upon calculation of the defined benefit obligation.

2. Method of cost processing of actuarial gains and losses

We process the actuarial gains and losses in the fixed amount method for a specified period (mostly 15 years) in the average remaining service time of the employee upon occurrence from the subsequent consolidated fiscal year.

3. Adoption of a simplified method in small-scale consolidated subsidiaries

In determining net defined benefit liability and periodic benefit cost, some consolidated subsidiaries apply a simplified method that the amount required for voluntary termination of employees at end of year is treated as defined benefit obligations.

(7) Treatment of consumption taxes

Consumption taxes are recorded by the tax exclusion method.

6. Relating to the Consolidated Statements of Income and Retained Earnings

Years ended March 31	Yen in millions		U.S.dollars in thousands
	2018	2019	2019
(1) Selling, general and administrative expenses			
Main categories and amounts			
1. Packing and transportation expenses	¥ 3,828	¥ 3,631	\$ 32,720
2. Salaries and bonuses	7,611	7,823	70,482
3. Commission fee	2,411	2,294	20,667
4. Retirement benefit expenses	380	327	2,953
5. Depreciation	224	647	5,836
(2) R&D expenses included in administrative expenses and current manufacturing expenses			
General and administrative expenses	1,368	1,415	12,752
Current manufacturing expenses	8,243	8,915	80,320
Total	9,612	10,331	93,073

7. Relating to the Consolidated Statements of Cash Flows

Years ended March 31	Yen in millions		U.S.dollars in thousands
	2018	2019	2019
Cash and deposits	¥ 39,439	¥ 47,192	\$ 425,154
Cash and cash equivalents	39,439	47,192	425,154

8. Pension and retirement plans

Outline of retirement schedule

JAE and some of our consolidated subsidiaries have mainly introduced the consolidated defined-benefit corporate group pension plan. This plan adopts the cash balance plan, in which we open assumed private accounts equivalent to the reserve and pension resource amounts. In the assumed private accounts, the contributed credits based on the interest credit, salary level, etc. are accumulated. Employees may select a lump-sum or a pension plan (limited period pension up to 15 years) at retirement, and when they select the pension plan, the interest that fluctuates mostly by the market interest is added during the effective period.

Some consolidated subsidiaries adopt the lump-sum plan or defined-contribution pension benefit plan.

Some consolidated subsidiaries adopt a simplified method in calculating defined benefit obligations.

Defined benefit plan

(1) Reconciliation between the beginning balance and the ending balance of defined benefit obligation (excluding simplified method)

Years ended March 31	Yen in millions		U.S.dollars in thousands
	2018	2019	2019
Balance at beginning of year	¥ 28,943	¥ 29,013	\$ 261,387
Service cost	1,361	1,344	12,111
Interest cost	288	285	2,568
Actuarial gains and losses	(551)	(248)	(2,240)
Benefit paid	(1,176)	(1,578)	(14,218)
Others	148	(2)	(18)
Balance at end of year	29,013	28,814	259,590

(2) Reconciliation between the beginning balance and the ending balance of pension assets (excluding simplified method)

Years ended March 31	Yen in millions		U.S.dollars
	2018	2019	in thousands
Balance at beginning of year	¥ 26,764	¥ 29,313	\$ 264,086
Expected return on pension assets	664	727	6,551
Actuarial gains and losses	1,114	(935)	(8,430)
Contributions from the employer	1,933	1,626	14,650
Benefit paid	(1,174)	(1,578)	(14,222)
Others	10	(7)	(64)
Balance at end of year	29,313	29,145	262,571

(3) Reconciliation between the beginning balance and the ending balance of net defined benefit liability for simplified method

Years ended March 31	Yen in millions		U.S.dollars
	2018	2019	in thousands
Balance at beginning of year	¥ (128)	¥ (399)	\$ (3,595)
Periodic benefit cost	(4)	169	1,522
Contributions paid to pension plan	(111)	(127)	(1,151)
Others	(154)	0	7
Balance at end of year	(399)	(357)	(3,217)

(4) Reconciliation between the ending balance of defined benefit obligations and pension assets and net defined benefit liability and asset recorded on the consolidated balance sheet

Years ended March 31	Yen in millions		U.S.dollars
	2018	2019	in thousands
Funded defined benefit obligations	¥ 30,158	¥ 29,997	\$ 270,252
Pension assets	(30,874)	(30,705)	(276,622)
	(715)	(707)	(6,370)
Unfunded defined benefit obligations	17	19	171
Net liability and asset recorded on the consolidated balance sheet	(698)	(688)	(6,198)
Net defined benefit liability	873	873	7,872
Net defined benefit asset	(1,572)	(1,561)	(14,071)
Net liability and asset recorded on the consolidated balance sheet	(698)	(688)	(6,198)

Note) Includes plan that adopt a simplified method

(5) Components of periodic benefit costs

Years ended March 31	Yen in millions		U.S.dollars
	2018	2019	in thousands
Service cost	¥ 1,361	¥ 1,344	\$ 12,111
Interest cost	288	285	2,568
Expected return on pension assets	(664)	(727)	(6,551)
Recognized actuarial gains and losses	29	(137)	(1,236)
Periodic benefit cost in simplified method	(4)	169	1,522
Periodic benefit costs of defined benefit plan	1,010	934	8,415

(6) Reconciliation of remeasurements of defined benefit plans before income tax effect

Years ended March 31	Yen in millions		U.S.dollars in thousands
	2018	2019	2019
Actuarial gains and losses	1,695	(824)	(7,426)
Total	1,695	(824)	(7,426)

(7) Components of remeasurements of defined benefit plans before income tax effect

Years ended March 31	Yen in millions		U.S.dollars in thousands
	2018	2019	2019
Unrecognized actuarial gains and losses	¥ (1,953)	¥ (1,129)	\$ (10,176)
Total	(1,953)	(1,129)	(10,176)

(8) Items relating to pension assets**1. Components of pension assets by major categories**

Years ended March 31	2018	2019
Japanese bonds	24.2%	24.5%
Foreign bonds	6.3%	5.6%
Japanese equities	20.7%	17.4%
Foreign equities	15.8%	17.7%
General account	24.4%	25.3%
Others	8.6%	9.5%
Total	100.0%	100.0%

2. Method determining expected long-term rate of return on pension assets

Expected long-term rate of return on pension assets is determined based on the current and the expected allocation of pension assets and the current and the expected long-term rates of return from various assets composing the pension assets.

(9) Assumptions used for actuarial calculation

Years ended March 31	2018	2019
Discount rate	1.0%	1.0%
Expected long-term rate of return on pension assets	2.5%	2.5%
Expected rate of future salary increases	3.7%	3.6%

Defined contribution plan

Years ended March 31	Yen in millions		U.S.dollars in thousands
	2018	2019	2019
Required contribution amount to the defined contribution plan of consolidated subsidiaries	¥ 136	¥ 132	\$ 1,192