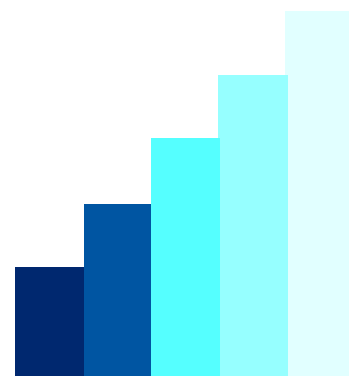


DATA BOOK



FY2019

2nd Quarter ended September 30, 2018

November 1st, 2018

ARAKAWA CHEMICAL INDUSTRIES, LTD.

Achievement Transition (Consolidated)



consolidated	FY 2017 (2Q)		FY 2018 (2Q)		FY 2019 (2Q)		FY 2017		FY 2018		FY 2019 forecast	
	Millions of yen	% Change	Millions of yen	% Change	Millions of yen	% Change	Millions of yen	% Change	Millions of yen	% Change	Millions of yen	% Change
Net sales	37,937	△ 3.2	39,890	5.1	39,501	△ 1.0	77,380	△ 2.2	80,782	4.4	81,500	0.9
Operating income	2,553	66.0	2,662	4.3	1,896	△ 28.8	5,095	40.0	4,892	△ 4.0	4,000	△ 18.2
Ordinary income	2,477	44.5	2,843	14.8	2,216	△ 22.0	5,314	38.0	5,218	△ 1.8	4,400	△ 15.7
Profit attributable to owners of parent	1,707	53.2	2,063	20.8	1,425	△ 30.9	3,416	47.8	3,111	△ 8.9	4,000	28.6

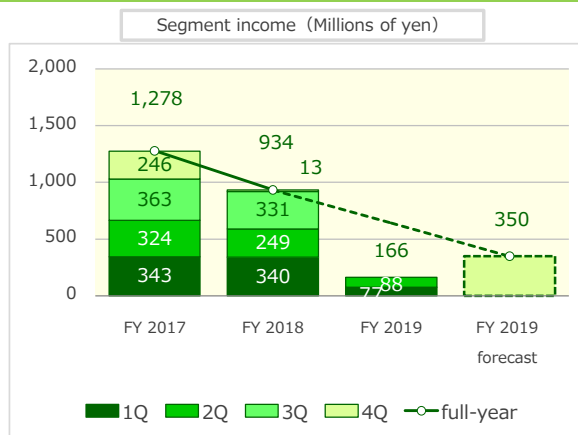
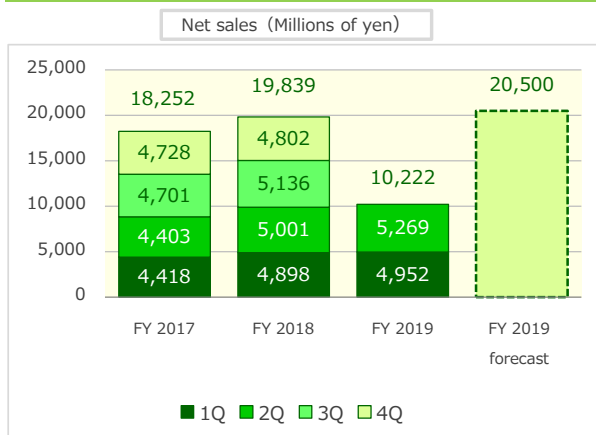
Management index transition

consolidated	FY 2017 (2Q)		FY 2018 (2Q)		FY 2019 (2Q)		FY 2017		FY 2018		FY 2019 forecast	
	Millions of yen	Increase /Decrease	Millions of yen	Increase /Decrease	Millions of yen	Increase /Decrease	Millions of yen	Increase /Decrease	Millions of yen	Increase /Decrease	Millions of yen	Increase /Decrease
Capital investment	1,145	312	812	△ 333	1,038	226	2,107	△ 885	1,937	△ 170	4,300	2,362
Depreciation and amortization	1,289	0	1,254	△ 34	1,319	64	2,661	△ 55	2,613	△ 48	2,850	236
R&D expenses	1,521	114	1,591	70	1,506	△ 84	3,179	359	3,220	41	3,300	79
Interest-bearing debt	14,205	△ 4,853	11,553	△ 2,652	10,873	△ 679	13,300	△ 4,126	11,269	△ 2,031	15,500	4,230
EBITDA	3,842	1,015	3,916	74	3,215	△ 701	7,757	1,400	7,506	△ 251	6,850	△ 656

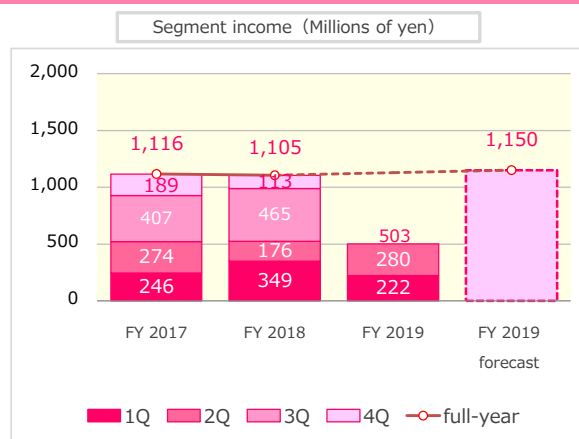
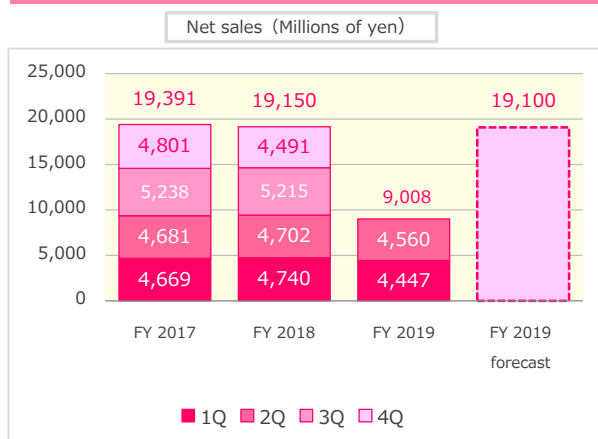
[EBITDA] Earnings Before Interest , Taxes , Depreciation , and Amortization

Segment Information (Consolidated)

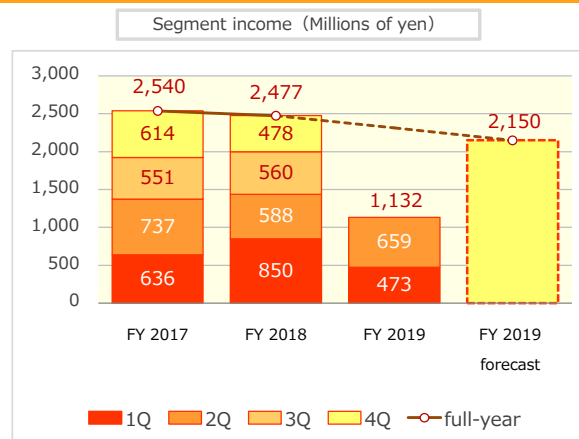
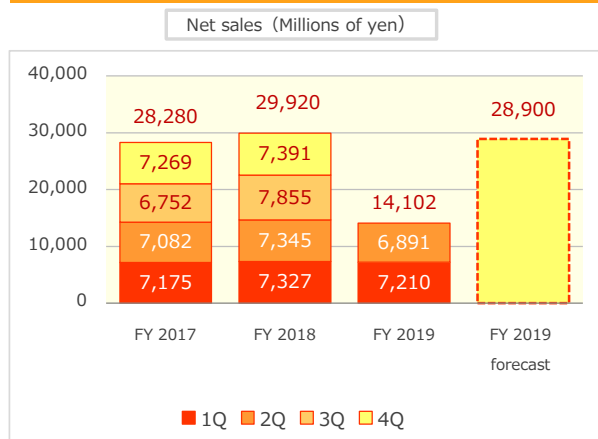
Paper chemicals



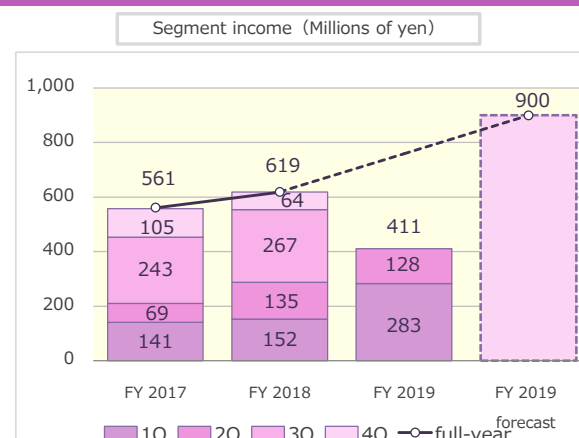
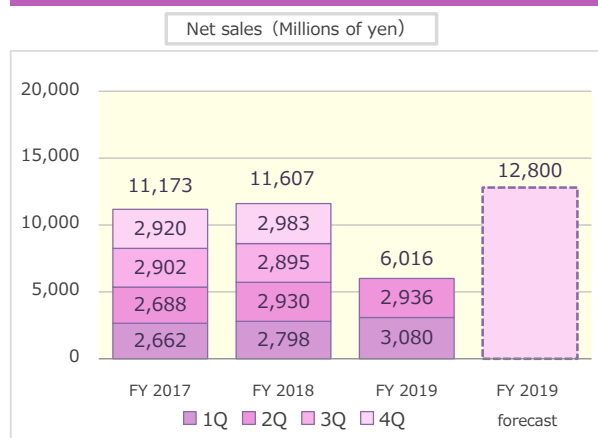
Coating chemicals



Adhesive Materials



Functional Materials



Segment Information (Consolidated)

Consolidated		FY 2017 (2Q)		FY 2018 (2Q)		FY 2019 (2Q)		FY 2017		FY 2018		FY 2019 forecast	
		Millions of yen	% Change	Millions of yen	% Change	Millions of yen	% Change	Millions of yen	% Change	Millions of yen	% Change	Millions of yen	% Change
Paper chemicals	Net sales	8,822	△ 12.2	9,900	12.2	10,222	3.3	18,252	△ 8.0	19,839	8.7	20,500	3.3
	Segment income	668	15.6	590	△ 11.7	166	△ 71.8	1,278	△ 2.0	934	△ 26.9	350	△ 62.6
	Segment income/sales	7.6%		6.0%		1.6%		7.0%		4.7%		1.7%	
Coating chemicals	Net sales	9,351	△ 7.5	9,443	1.0	9,008	△ 4.6	19,391	△ 5.4	19,150	△ 1.2	19,100	△ 0.3
	Segment income	520	62.5	525	1.0	503	△ 4.3	1,116	28.9	1,105	△ 1.0	1,150	4.0
	Segment income/sales	5.6%		5.6%		5.6%		5.8%		5.8%		6.0%	
Adhesive Materials	Net sales	14,258	–	14,673	2.9	14,102	△ 3.9	28,280	–	29,920	5.8	28,900	△ 3.4
	Segment income	1,374	–	1,438	4.6	1,132	△ 21.3	2,540	–	2,477	△ 2.5	2,150	△ 13.2
	Segment income/sales	9.6%		9.8%		8.0%		9.0%		8.3%		7.4%	
Functional Materials	Net sales	5,351	–	5,728	7.1	6,016	5.0	11,173	–	11,607	3.9	12,800	10.3
	Segment income	211	–	287	35.9	411	43.1	561	–	619	10.5	900	45.2
	Segment income/sales	4.0%		5.0%		6.8%		5.0%		5.3%		7.0%	
Others	Net sales	154	△ 2.1	144	△ 6.1	151	5.0	282	△ 3.1	265	△ 5.8	200	△ 24.7
	Segment income	11	15.1	15	26.5	16	6.3	16	19.3	24	55.3	20	△ 19.5
	Segment income/sales	7.7%		10.4%		10.5%		5.7%		9.4%		10.0%	
Subtotal	Net sales	37,937	△ 3.2	39,890	5.1	39,501	△ 1.0	77,380	△ 2.2	80,782	4.4	81,500	0.9
	Segment income	2,787	69.9	2,857	2.5	2,229	△ 22.0	5,512	41.7	5,162	△ 6.4	4,570	△ 11.5
	Segment income/sales	7.3%		7.2%		5.6%		7.1%		6.4%		5.6%	
Consolidated total	Development Investment	△ 174	–	△ 181	–	△ 165	–	△ 385	–	△ 374	–	△ 400	–
	Segment income	2,612	76.6	2,675	2.4	2,063	△ 22.8	5,126	42.9	4,787	△ 6.6	4,170	△ 12.9
	Segment income/sales	6.9%		6.7%		5.2%		6.6%		5.9%		5.1%	

*Applied research and development expense that will be the source of growth in the medium to long term.

The sales of business segmentation do not include intersegment sales.

[Paper chemicals] Size agent, Paper strengthening agent, Latex, etc.

[Coating chemicals] Printing ink resin, Paint resin, Polymerization emulsifier, UV/EB curable resin, etc.

[Adhesive Materials] Adhesive resin, Colorless rosin derivatives, etc.

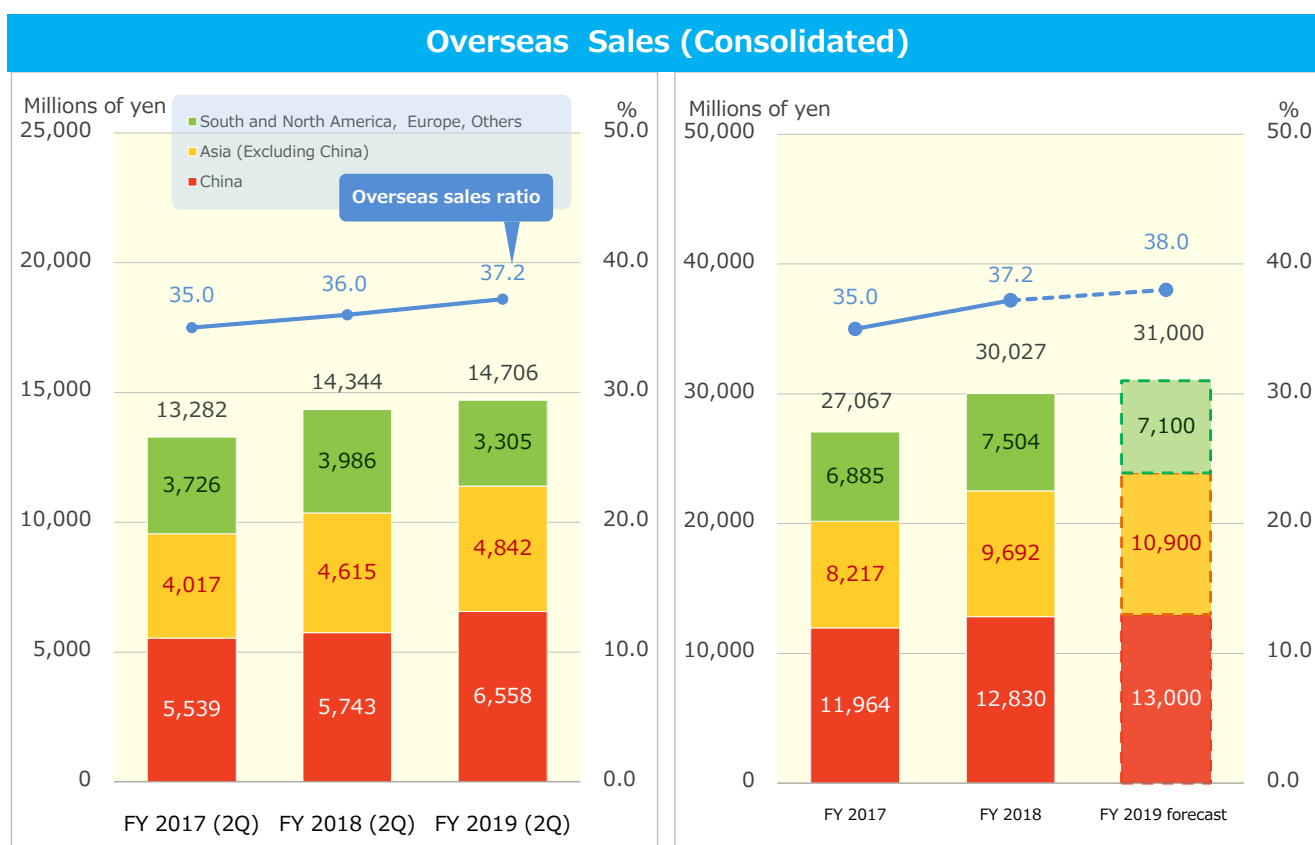
[Functional Materials] Compound materials for electronics, Functional fine chemical materials, Polishing agent for hard disk substrates, Flux cleanig System, etc.

[Others] Insurance business, Real estate agent, etc.

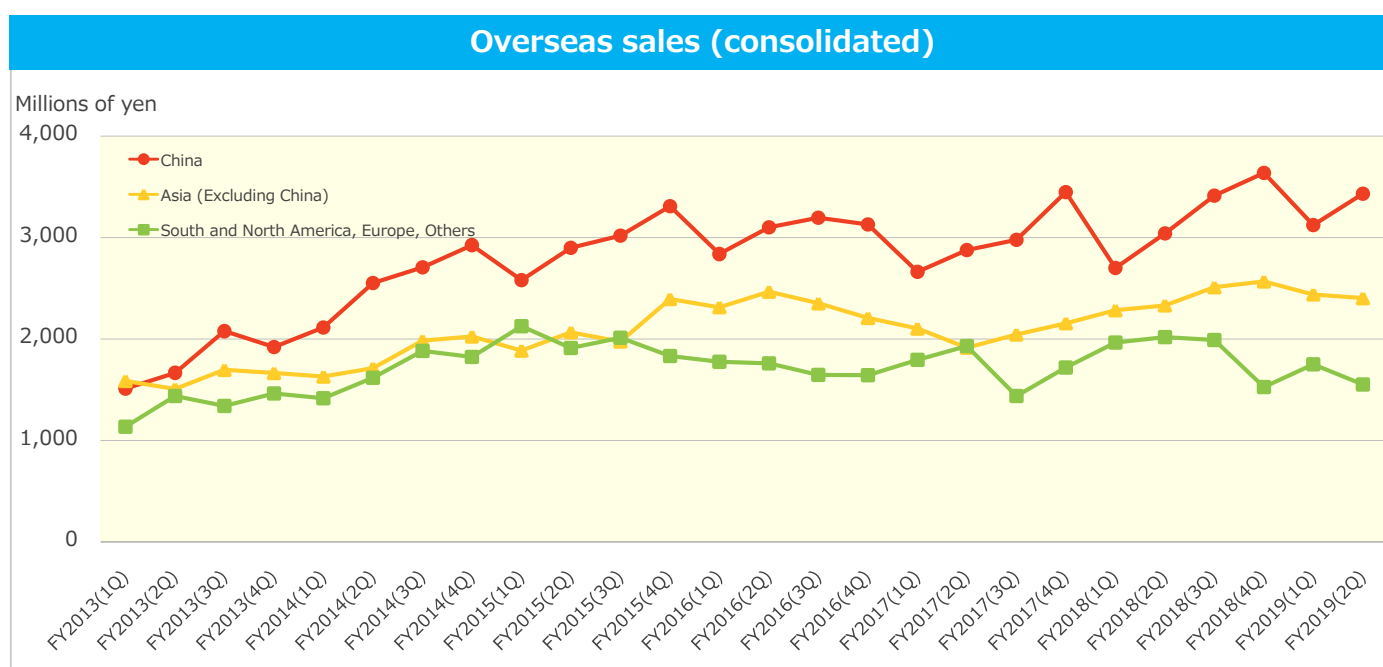
From FY2018, classification of some products has been changed from Functional Materials to Adhesive Materials.

The figures of FY2016 and FY2017 stated above have been modified to reflect the operating results based on the business segment after this change.

Overseas Sales (Consolidated)



Consolidated	FY 2017 (2Q)		FY 2018 (2Q)		FY 2019 (2Q)		FY 2017		FY 2018		FY 2019 forecast	
	Millions of yen	% Change	Millions of yen	% Change	Millions of yen	% Change	Millions of yen	% Change	Millions of yen	% Change	Millions of yen	% Change
Overseas sales	13,282	△ 6.9	14,344	8.0	14,706	2.5	27,067	△ 4.8	30,027	10.9	31,000	3.2
Overseas sales in Asia	9,556	△ 10.8	10,358	8.4	11,400	10.1	20,182	△ 6.6	22,522	11.6	23,900	6.1
Overseas sales in China	5,539	△ 6.7	5,743	3.7	6,558	14.2	11,964	△ 2.4	12,830	7.2	13,000	1.3
Overseas sales ratio	35.0%		36.0%		37.2%		35.0%		37.2%		38.0%	



Balance Sheets (Consolidated)

(Unit: Millions of yen)

Item	FY2018 (2Q) (As of September 30, 2017)		FY2019 (2Q) (As of September 30, 2018)		FY2018 (As of March 31, 2018)		Increase /Decrease (A) - (B)
	Amount	Com- position ratio	Amount (A)	Com- position ratio	Amount (B)	Com- position ratio	
(Assets)		%		%		%	
I Current assets							
1. Cash and deposits	8,053		7,853		8,471		△ 617
2. Notes and accounts receivable - trade	28,228		26,894		28,342		△ 1,447
3. Electronically recorded monetary claims - operating	1,556		2,018		1,829		189
4. Merchandise and finished goods	7,450		8,101		8,051		49
5. Work in process	1,024		1,026		893		133
6. Raw materials and supplies	7,083		6,939		7,272		△ 332
7. Other	1,012		1,358		1,420		△ 62
Allowance for doubtful accounts	△ 127		△ 123		△ 123		△ 0
Total Current assets	54,280	63.6	54,069	61.7	56,158	63.1	△ 2,088
II Noncurrent assets							
1. Property, plant and equipment							
(1) Buildings and structures	7,620		7,547		7,708		△ 160
(2) Machinery, equipment and vehicles	6,319		5,786		6,181		△ 394
(3) Land	5,191		5,140		5,195		△ 55
(4) Construction in progress	403		2,594		1,139		1,455
(5) Other	487		491		466		24
Total property, plant and equipment	20,022	23.5	21,560	24.6	20,691	23.2	869
2. Intangible assets							
(1) Goodwill	965		684		824		△ 140
(2) Other	376		416		379		36
Total intangible assets	1,341	1.6	1,100	1.2	1,204	1.4	△ 104
3. Investments and other assets							
(1) Investment securities	8,409		8,665		8,806		△ 141
(2) Net defined benefit asset	530		1,736		1,538		198
(3) Deferred tax assets	300		275		291		△ 15
(4) Other	519		343		401		△ 58
Allowance for doubtful accounts	△ 84		△ 68		△ 72		4
Total investments and other assets	9,675	11.3	10,952	12.5	10,964	12.3	△ 12
Total noncurrent assets	31,040	36.4	33,613	38.3	32,861	36.9	752
Total assets	85,321	100.0	87,683	100.0	89,019	100.0	△ 1,336

(Unit: Millions of yen)

Item	FY2018 (2Q) (As of September 30, 2017)		FY2019 (2Q) (As of September 30, 2018)		FY2018 (As of March 31, 2018)		Increase / Decrease (A) - (B)
	Amount	Com- position ratio	Amount (A)	Com- position ratio	Amount (B)	Com- position ratio	
(Liabilities)		%		%		%	
I Current liabilities							
1. Notes and accounts payable - trade	11,194		11,599		12,043		△ 444
2. Short-term loans payable	6,553		5,648		6,269		△ 620
3. Income taxes payable	609		378		642		△ 263
4. Accrued consumption taxes	136		127		135		△ 8
5. Provision for bonuses	1,179		1,163		1,272		△ 109
6. Provision for directors' bonuses	44		36		80		△ 44
7. Provision for repairs	11		89		-		89
8. Notes payable - facilities	89		74		214		△ 139
9. Other	4,234		4,480		4,993		△ 513
Total current liabilities	24,054	28.2	23,598	26.9	25,651	28.8	△ 2,053
II Noncurrent liabilities							
1. Bonds payable	5,000		5,000		5,000		-
2. Long-term loans payable	-		225		-		225
3. Deferred tax liabilities	1,584		1,815		1,724		91
4. Provision for repairs	12		-		45		△ 45
5. Net defined benefit liability	342		324		328		△ 3
6. Asset retirement obligations	219		288		297		△ 8
7. Other	294		290		276		13
Total noncurrent liabilities	7,453	8.7	7,943	9.1	7,671	8.6	272
Total liabilities	31,507	36.9	31,541	36.0	33,323	37.4	△ 1,781
(Net assets)							
I Shareholders' equity							
1. Capital stock	3,343		3,343		3,343		-
2. Capital surplus	3,564		3,564		3,564		-
3. Retained earnings	40,412		42,101		41,068		1,033
4. Treasury shares	△ 12		△ 13		△ 13		△ 0
Total shareholders' equity	47,306	55.5	48,995	55.9	47,962	53.9	1,033
II Accumulated other comprehensive income							
1. Valuation difference on available-for-sale securities	3,572		3,739		3,880		△ 140
2. Foreign currency translation adjustment	958		930		1,434		△ 503
3. Remeasurements of defined benefit plans	269		800		847		△ 46
Total accumulated other comprehensive income	4,800	5.6	5,470	6.2	6,161	6.9	△ 690
III Minority interests	1,705	2.0	1,675	1.9	1,572	1.8	102
Total net assets	53,813	63.1	56,141	64.0	55,696	62.6	444
Total liabilities and net assets	85,321	100.0	87,683	100.0	89,019	100.0	△ 1,336

Statements of Income (Consolidated)

(Unit: Millions of yen)

Item	FY2018 (2Q) '17/4-'17/9		FY2019 (2Q) '18/4-'18/9		Increase/ Decrease		FY2018 '17/4-'18/3		
	Amount	Ratio %	Amount	Ratio %	Amount	Rate of Change %	Amount	Ratio %	
I Net Sales	39,890	100.0	39,501	100.0	△ 388	△ 1.0	80,782	100.0	
II Cost of sales	30,628	76.8	30,737	77.8	109	0.4	62,478	77.3	
Gross profit	9,262	23.2	8,764	22.2	△ 498	△ 5.4	18,303	22.7	
III Selling, general and administrative expenses	6,600	16.5	6,867	17.4	267	4.1	13,410	16.6	
Operating income	2,662	6.7	1,896	4.8	△ 765	△ 28.8	4,892	6.1	
IV Non-operating income									
Interest income	5		9				13		
Dividend income	93		103				184		
Real estate rent	56		56				113		
Foreign exchange gains	27		144				23		
Other	110	294	116	430	135	46.1	233	568	
V Non-operating expenses									
Interest expenses	82		80				164		
Other	30	113	29	110	△ 3	△ 2.8	78	242	
Ordinary income		2,843		2,216	△ 626	△ 22.0		5,218	
VI Extraordinary income									
Gain on sales of non-current assets	0		5				0		
Gain on sales of investment securities	0		7				151		
Insurance income	-		63				-		
Reversal of provision foreign currency translation adjustment	287		-				285		
State subsidy	-	287	-	75	△ 211	△ 73.6	15	452	
VII Extraordinary loss									
Loss on sales and retirement of non-current assets	12		34				99		
Loss on explosion and fire	-		-				554		
Loss on valuation of investment securities	-		-				44		
Loss on business liquidation of subsidiaries and associates	-	12	-	34	21	166.7	251	949	
Income before income taxes		3,117		2,258	△ 859	△ 27.6		4,721	
Income taxes-current	628		473				1,258		
Income taxes-deferred	128	756	186	659	△ 97	△ 12.8	△ 123	1,134	
Net income		2,361		1,599	△ 762	△ 32.3		3,587	
Income before minority interests		298		174	△ 124	△ 41.7		475	
Profit attributable to owners of parent		2,063		1,425	△ 637	△ 30.9		3,111	
<Reference> Statements of Comprehensive Income (Consolidated)									
Net income		2,361		1,599	△ 762	△ 32.3		3,587	
Other comprehensive income									
Valuation difference on available-for-sale securities		667		△ 140	△ 808			975	
Foreign currency translation adjustment		△ 148		△ 575	△ 426			367	
Remeasurements of defined benefit plans, net of tax		△ 16		△ 46	△ 29			557	
Total other comprehensive income		501		△ 762	△ 1,264			1,900	
Comprehensive income		2,863		837	△ 2,026	△ 70.8		5,487	

Statements of Cash Flows (Consolidated)

(Units: Millions of yen)

Item	FY2018 (2Q)	FY2019 (2Q)	Increase / Decrease	FY2018
	'17/4-'17/9	'18/4-'18/9		'17/4-'18/3
	Amount	Amount	Amount	Amount
I Cash flows from operating activities				
Income before income taxes	3,117	2,258	△ 859	4,721
Depreciation	1,254	1,319	64	2,613
Amortization of goodwill	141	140	△ 1	282
Increase (decrease) in allowance for doubtful accounts	△ 25	1	26	△ 47
Increase (decrease) in provision for bonuses	△ 96	△ 105	△ 9	△ 6
Increase (decrease) in provision for directors' bonuses	△ 36	△ 44	△ 8	-
Increase (decrease) in net defined benefit liability	△ 6	△ 2	△ 8	△ 9
Decrease (increase) in net defined benefit asset	△ 143	△ 198	△ 55	△ 1,151
Loss (gain) on sales of investment securities	△ 0	△ 7	△ 7	△ 151
Loss (gain) on valuation of investment securities	-	-	-	44
Reversal of foreign currency transaction adjustment	△ 287	-	287	△ 285
Loss on explosion and fire accident	-	-	-	554
Loss on liquidation of subsidiaries and associates	-	-	-	251
Loss (gain) on sales and retirement of non-current assets	12	29	16	98
Insurance income	-	△ 63	△ 63	-
Interest and dividend income	△ 99	△ 113	△ 13	△ 198
Interest expenses	△ 82	80	△ 1	164
Decrease (increase) in notes and accounts receivable - trade	△ 2,676	923	3,599	△ 2,705
Decrease (increase) in inventories	△ 482	△ 97	385	△ 912
Increase (decrease) in notes and accounts payable - trade	1,205	△ 291	△ 1,496	1,897
Increase (decrease) in accrued consumption taxes	△ 58	32	91	△ 54
Other	△ 51	△ 291	△ 239	203
Subtotal	1,863	3,570	1,707	5,310
Interest and dividend income received	99	119	20	194
Interest expenses paid	△ 57	△ 98	△ 41	△ 145
Proceeds from insurance income	-	132	132	-
Income taxes (paid) refund	△ 885	△ 688	196	△ 1,551
Cash flows from operating activities	1,019	3,035	2,015	3,808
II Cash flows from investing activities				
Decrease (increase) in time deposits	37	△ 7	△ 45	26
Purchase of property, plant and equipment	△ 772	△ 2,871	△ 2,099	△ 2,160
Proceeds from sales of property, plant and equipment	1	65	63	21
Purchase of investment securities	△ 16	△ 17	△ 0	△ 32
Proceeds from sales of investment securities	0	9	9	179
Purchase of intangible assets	△ 41	△ 25	15	△ 55
Decrease (increase) in short-term loans receivable	-	-	-	34
Decrease (increase) in other investments	1	2	0	5
Other	△ 6	△ 32	△ 25	△ 66
Cash flows from investing activities	△ 796	△ 2,877	△ 2,081	△ 2,048
III Cash flows from financing activities				
Net increase (decrease) in short-term loans payable	△ 591	△ 169	421	△ 549
Proceeds from long-term loans payable	-	300	300	-
Repayments of long-term loans payable	△ 1,158	△ 358	800	△ 1,688
Purchase of treasury shares	△ 0	△ 0	0	△ 0
Cash dividends paid	△ 454	△ 392	61	△ 846
Proceeds from share issuance to non-controlling shareholders	-	-	-	19
Dividends paid to non-controlling interests	△ 153	-	153	△ 521
Cash flows from financing activities	△ 2,357	△ 619	1,737	△ 3,586
IV Effect of exchange rate change on cash and cash equivalents	12	△ 161	△ 174	111
V Net increase (decrease) in cash and cash equivalents	△ 2,120	△ 623	1,497	△ 1,714
VI Cash and cash equivalents at beginning of period	10,118	8,404	△ 1,714	10,118
VII Cash and cash equivalents at end of period	7,998	7,781	△ 216	8,404