

2018

ADEKA CORPORATION
1st Half Consolidated Financial Results

November 22, 2018

Briefings on Financial Results **For the 1st half of the Fiscal 2018**

Financial Results Overview

1st Half of FY2018

April 1, 2018 – March 31, 2019

President and Chief Operating Officer
Hidetaka Shirozume

1. The 1st Half of the Fiscal 2018 Consolidated Performance
2. Fiscal 2018 Prospective Performance and Business Strategy
3. The 1st Half of the Fiscal 2018 Topics
4. For Reference
 - Overseas Sales

The 1st Half of the Fiscal 2018 Consolidated Performance

The 1st Half of the Fiscal 2018 Consolidated Performance

Consolidated
data

(Unit: 100 million yen)

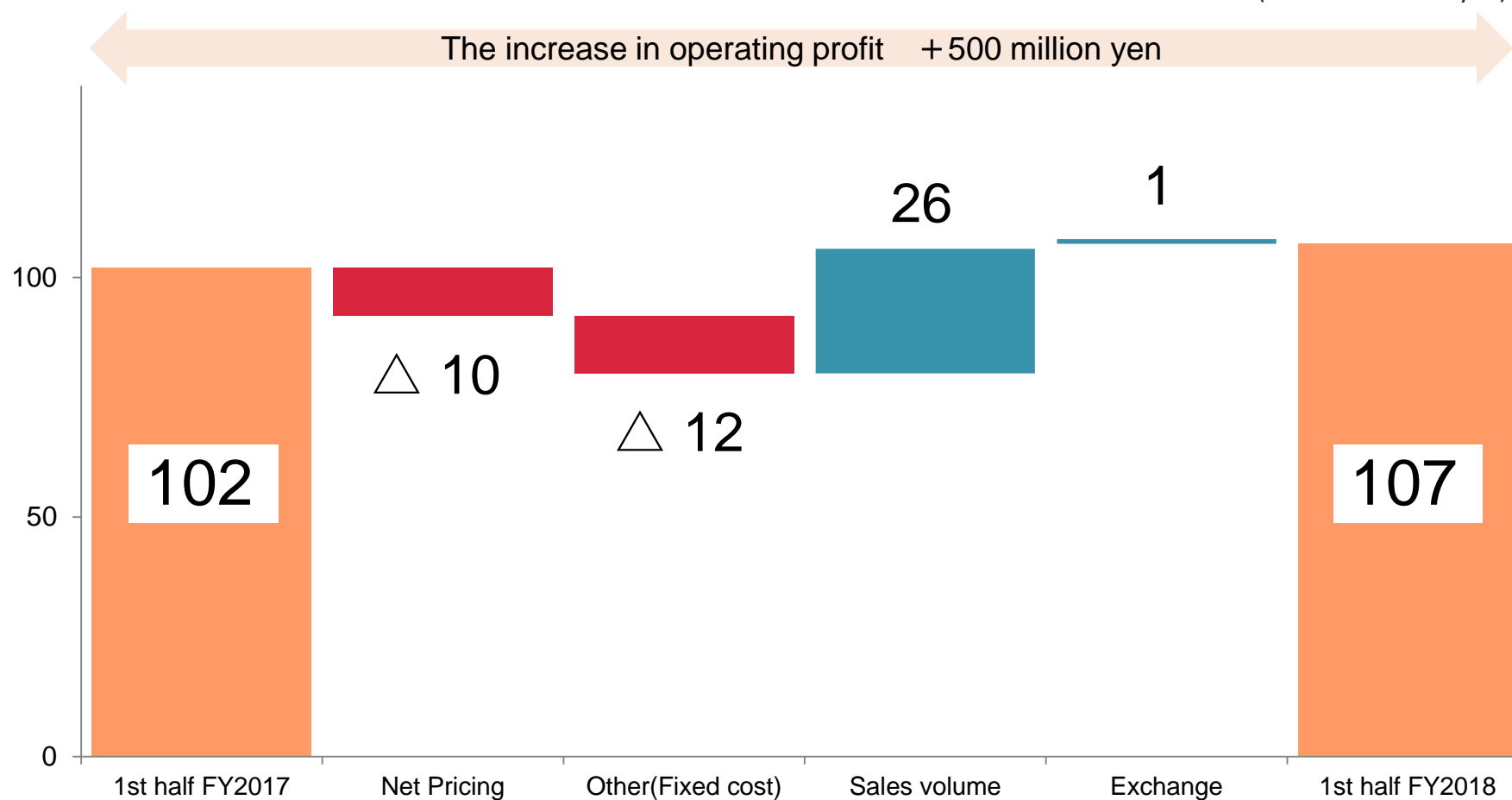
	1 st half FY2017	1 st half FY2018	Increase/ decrease	Increase/ decrease ratio (%)
Sales	1,147	1,261	114	10.0
Operating profit	102	107	5	4.9
Current profit	105	112	7	6.7
Profit attributable to owners of parent	72	77	4	6.8
Net profit per share (yen/share)	¥ 70.6	¥ 75.3	¥ 4.7	
Dividend (yen/share)	¥ 17	¥ 21	¥ 4	

- Sales increased after both chemicals and food products attained brisk sales.
- Operating profit grew overall, following favorable sales of electronics and IT materials, although profit was significantly affected by higher raw material costs, as well as by increased fixed costs due to active capital investment for future growth of both chemicals and food products.
- Ordinary profit and profit increased with a rise in share of profit of entities accounted for by the equity method.

Note : Figures are expressed in units of 100 million yen and have been rounded off.

Analysis of Operating Profit

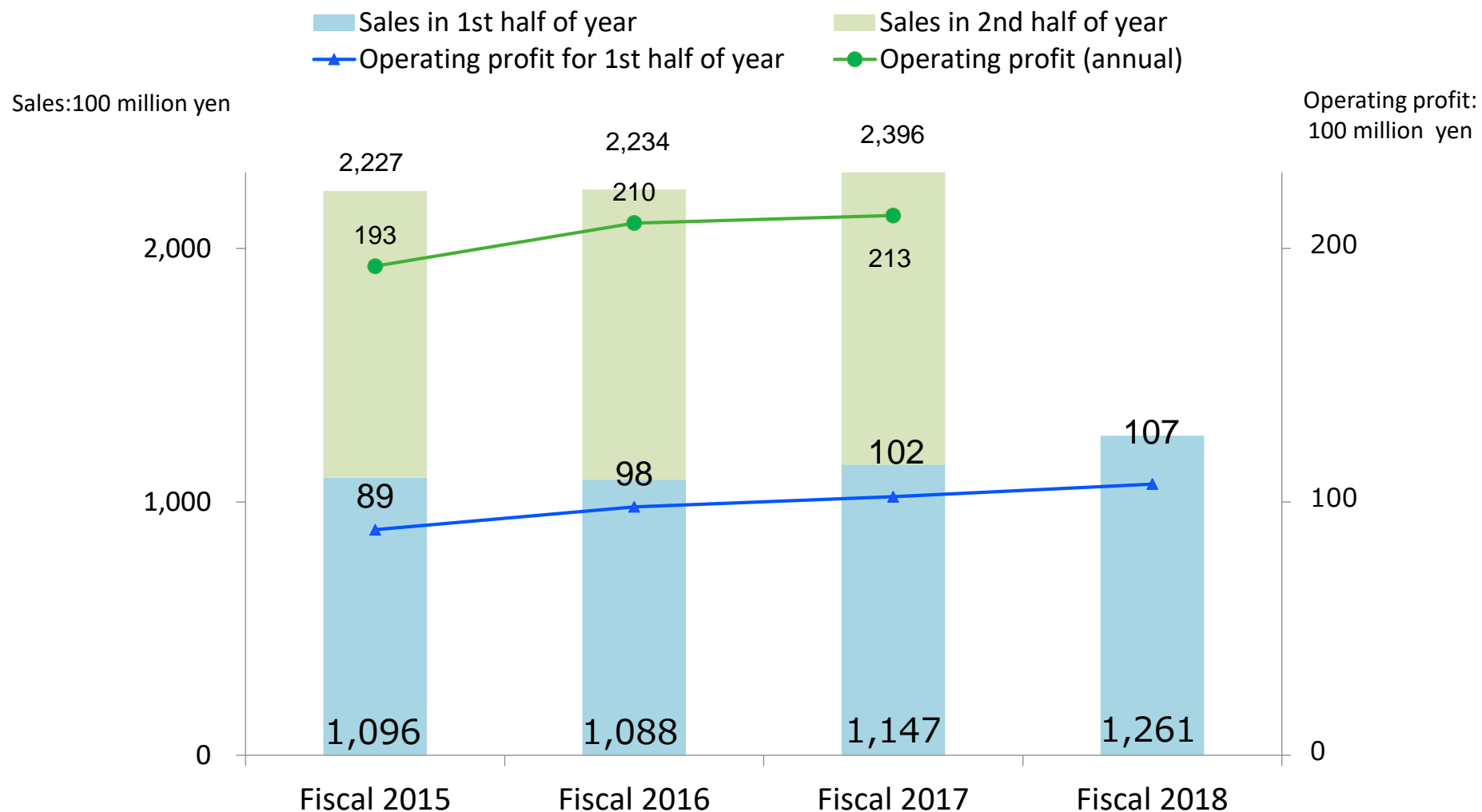
(Unit: 100 million yen)



Note : Figures are expressed in units of 100 million yen and have been rounded off.

Trends in Consolidated Performance

Consolidated data



Note : Figures are expressed in units of 100 million yen and have been rounded off.

The 1st Half of the Fiscal 2018 Consolidated Performance (By segment)

Consolidated
data

(Unit: 100 million yen)

	1 st half Fiscal 2017	1 st half Fiscal 2018	Increase/ decrease	Increase/ decrease ratio (%)
Sales	1,147	1,261	114	10.0
Chemicals	764	848	84	11.0
<i>Polymer Additives</i>	400	452	52	13.2
<i>Electronics and IT materials</i>	107	126	18	16.8
<i>Functional chemicals</i>	256	270	13	5.2
Food products	338	352	13	4.0
Other	43	60	16	38.2
Operating profit	102	107	5	4.9
Chemicals	93	100	7	8.3
<i>Polymer Additives</i>	37	33	△ 3	△ 9.3
<i>Electronics and IT materials</i>	21	34	12	61.0
<i>Functional chemicals</i>	34	32	△ 1	△ 5.1
Food products	6	3	△ 3	△ 46.0
Other	2	2	0	22.3

Note : Figures are expressed in units of 100 million yen and have been rounded off.

Segmental Information : Polymer additives

Consolidated
data

Polymer additives(increase in sales/decreased in profit)

1. In additives for polyolefins, sales of high-performance additives such as nucleating/clarifying agents and light stabilizers and general-purpose antioxidants grew steadily outside Japan against the backdrop of increased demand for polymers worldwide.
 2. In plasticizers and stabilizers for PVC, sales of plasticizers for rubber used in automobile components were strong outside Japan, whereas sales of stabilizers for PVC were sluggish, which the result that overall sales were on a par with the same period of the previous year.
 3. In flame retardants, sales of condensed phosphoric acid ester-based flame retardants for electrical appliances were favorable outside Japan. In addition, sales of intumescent-type flame retardants for building materials and electrical wires were firm as the market is being cultivated.
- ◆ Polymer additives overall, due to the increased fixed costs caused by the impact of higher raw material prices and active capital investment, profits declined overall.

(Unit: 100 million yen)

	1 st half Fiscal 2017	1 st half Fiscal 2018	Increase/decrease
Sales	400	452	52
Operating profit	37	33	△ 3

Note : Figures are expressed in units of 100 million yen and have been rounded off.

Segmental Information :

Electronics and IT materials

Consolidated
data

Electronics and IT materials (increase in both sales and profit)

1. In information media materials, sales of photo (light) curing resins and photoinitiators used in optical films and photoresists were favorable, along with the trend of high-definition and large-sized LCDs. In addition, sales of materials for semiconductor photolithography including photoacid generators grew, in response to demand in the strong semiconductor market.
2. In electronic materials, demand continued to be robust, mainly for data centers, and sales of dielectric constant materials used in DRAM and 3D-NAND remained favorable. In addition, sales of circuit materials for the etching process for LCDs were brisk in Japan.

(Unit: 100 million yen)

	1 st half Fiscal 2017	1 st half Fiscal 2018	Increase/decrease
Sales	107	126	18
Operating profit	21	34	12

Note : Figures are expressed in units of 100 million yen and have been rounded off.

Segmental Information : Functional Chemicals

Consolidated
data

Functional chemicals(increase in sales/decreased in profit)

1. In surface specialties, lubricant additives that contribute to improving fuel efficiency and reducing CO₂ emissions in automobiles showed strength in Japan and overseas. In addition, glycol-based moisturizers for cosmetics achieved firm sales, mainly in overseas markets.
 2. In functional polymers, sales of waterborne resins used for paints and others remained robust. In addition, sales of high-performance epoxy resins used for adhesion in electronics were again favorable.
 3. In industrial chemicals, sales of propylene glycols for daily necessities such as toiletries remained firm. In addition, sales of peroxidation products for electronic circuits were strong.
- ◆ Because of the impact of higher raw material prices on functional chemicals, the spread became narrower, causing a drop in profits.

(Unit: 100 million yen)

	1 st half Fiscal 2017	1 st half Fiscal 2018	Increase/decrease
Sales	256	270	13
Operating profit	34	32	△ 1

Note : Figures are expressed in units of 100 million yen and have been rounded off.

Consolidated
data

Food products (increased in sales/decreased in profit)

1. In Japan, despite a decrease in demand due to heat waves, heavy rains, and earthquakes, the focus on sales of strategic products contributed to the robust sales of margarine and shortenings mainly for bakery and confectionery, and whipping cream and other products for Western confectionery and desserts, remaining on a level with the same period of the previous year.
 2. Overseas, the company achieved strong sales of margarine and shortenings for use in bakery and confectionery, as well as fillings and other processed foods, sales of which have been expanding especially in China, by strengthening its sales and development structure and developing products that meet local needs.
- ◆ The food business as a whole was affected by rising prices for raw materials such as milk ingredients.

(Unit: 100 million yen)

	1 st half Fiscal 2017	1 st half Fiscal 2018	Increase/decrease
Sales	338	352	13
Operating profit	6	3	△ 3

Note : Figures are expressed in units of 100 million yen and have been rounded off.

Fiscal 2018 Prospective Performance and Business Strategy

Revision of Earnings Forecast for Fiscal 2018

➤ Revision of Earnings Forecast

- As of September 28, 2018, NIHON NOHYAKU CO., LTD. and its nine subsidiaries were included in the scope of consolidation. Because of this, the performance outlook has been revised as their performance from October 1, 2018 to March 31, 2019 are included in the ADEKA's consolidated financial performance in FY2018.
- For the third quarter and later, we assumed the exchange rate to be 109 yen for 1 US dollar and 130 yen for 1 euro.

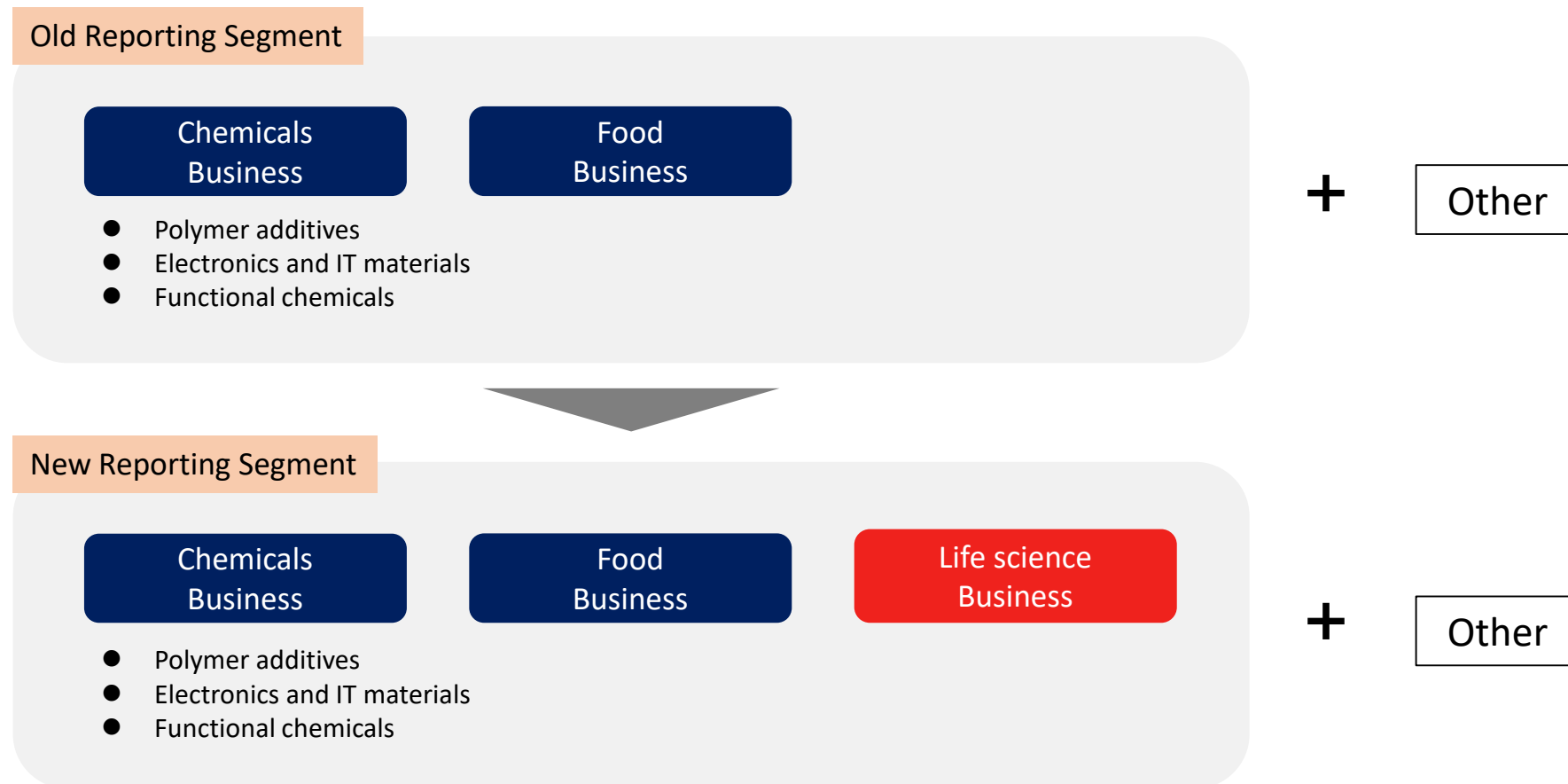
(Unit: 100 million yen)

FY2018 Prospective Performance	Previous forecast	Revised forecast	Difference
Sales	2,590	2,980	390
Operating profit	221	255	34
Current profit	232	260	28
Profit attributable to owners of parent	159	164	5

Note : Figures are expressed in units of 100 million yen and have been rounded off.

Change Reporting Segment

- As a result of including NIHON NOHYAKU and its nine subsidiaries in the scope of consolidation, the “life science business” has been added to the reporting segment.



Note : For the main product groups and services of each changed reporting segment, please refer to page 43 of the supplemental documents.

Revision of Dividend Forecast

➤ Revision of Dividend Forecast

- The year-end dividend forecast in FY2018 has been revised at ¥24 per share, an increase of ¥2 per share from previous forecast of ¥22 per share. With the addition of the interim dividend of ¥21, the annual dividend per share is expected to be ¥45, an increase of ¥6 per share from previous dividend of ¥39 per share.

(This is to be submitted to the 157th ordinary general meeting of shareholders to be held in June 2019.)

	Previous forecast	Revised forecast	Performance	Increase /decrease
Interim dividend	¥ 21	—	¥ 21 (¥ 21 for previous term)	¥ 0
Year-end dividend	¥ 22	¥ 24 (¥ 22 for previous term)	—	¥ 2
Annual dividend	¥ 43	¥ 45 (¥ 39 for previous term)	—	¥ 2

Fiscal 2018 Prospective Performance

Consolidated
data

(Unit: 100 million yen)

	Fiscal 2018			Fiscal 2017 performance	Increase /decrease	Increase/ decrease ratio (%)
	1 st half (performance)	2 nd half (forecast)	Whole FY (forecast)			
Sales	1,261	1,718	2,980	2,396	583	24.4
Operating profit	107	147	255	213	41	19.5
Current profit	112	147	260	223	36	16.4
Profit attributable to owners of parent	77	86	164	153	10	6.9
Net profit per share (yen/share)	¥ 75.3	¥ 84.2	¥ 159.6	¥ 149.2	¥ 10.4	
Dividend (yen/share)	¥ 21	¥ 24	¥ 45	¥ 39	¥ 6	

		Fiscal 2018 assumption		Fiscal 2017 Performance
		Beginning of the period	2 nd Half	
Exchange Rates	¥ / \$	110.00	109.00	110.85
	¥ / €	133.00	130.00	129.70
Naphtha	¥ / KL	50,000	52,000	41,925

Note : Figures are expressed in units of 100 million yen and have been rounded off.

Fiscal 2018 Prospective Performance (By segment)

(Unit: 100 million yen)

Consolidated
data

	1 st half (a)	2 nd half (b)	Forecast for Fiscal 2018 (a)+(b)	Fiscal 2017 performance (c)	Increase/ Decrease (a+b-c)	Increase/ decrease ratio (%)
Sales	1,261	1,718	2,980	2,396	583	24.4
Chemicals	848	911	1,760	1,621	138	8.6
<i>Polymer Additives</i>	452	457	910	825	84	10.2
<i>Electronics and IT materials</i>	126	138	265	233	31	13.7
<i>Functional chemicals</i>	270	314	585	562	22	3.9
Food products	352	372	725	698	26	3.8
Life Science	—	390	390	—	390	—
Other	60	44	105	76	28	38.1
Operating profit	107	147	255	213	41	19.5
Chemicals	100	105	206	197	8	4.5
<i>Polymer Additives</i>	33	34	68	73	△ 5	△ 7.2
<i>Electronics and IT materials</i>	34	37	72	52	19	37.1
<i>Functional chemicals</i>	32	33	66	71	△ 5	△ 7.5
Food products	3	11	15	13	1	8.1
Life Science	—	30	30	—	30	—
Other	2	1	4	2	1	72.4

Note : Figures are expressed in units of 100 million yen and have been rounded off.

Fiscal 2018 Business Strategy

Polymer additives

- In Japan, we will focus on expanding sales of high-performance additives such as nucleating/clarifying agents and light stabilizers, which have been enhanced in facilities at the Mie Plant, while ensuring we meet steady demand for resins.
- Overseas, particularly in Asia, Europe, and North America, we will make efforts to expand sales of plasticizers, light stabilizers, general-purpose antioxidants, and flame retardants.

Electronics and IT materials

- Information media materials: Focus on expanding sales of photo (light) curing resins for optical films, mainly in Asia and Japan, and developing their applications, while expanding the use of new products, like photoinitiators for color filters.
- Electronic materials: Expand sales of semiconductor materials such as dielectric constant materials for DRAM, 3D-NAND, and logic semiconductors, which are expected to grow due to the spread of IoT and use of big data, and focus on sales expansion of etching chemicals for LCDs.

Functional chemicals

- Surface specialties: Strengthen sales of engine oil additives particularly in the U.S. market, and focus on expanding sales through a tie-up with advertising agencies and distributors for cosmetics manufacturers at exhibitions of cosmetic ingredients in Japan and overseas, or ON other occasions.
- Functional polymers: Expand sales of special epoxy resins targeting the automotive and electronics fields, and strengthen the marketing of waterborne resins to expand their use.

Food products

- Expand sales of strategic products and new products in the bakery, confectionery, and Western confectionery markets to solidify the domestic business's foundations, and strengthen collaboration with three overseas bases (in China, Singapore, and Malaysia) to accelerate overseas business development targeting Asia. In addition, focus on sales expansion by developing applications for functional food.

Life science

- Under the new mid-term management plan commenced from October, increase the Group profitability with Nihon Nohyaku, which became a consolidated subsidiary of ADEKA.
- In addition to promoting research and development of decellularization technology materials for regenerative medicine, utilize the knowledge and expertise of Nihon Nohyaku and accelerate the creation and expansion of new businesses.

The mid-term management plan

Progress of "BEYOND 300"

- From April 2018, ADEKA commenced "BEYOND 300," the three-month mid-term management plan.
- The forecast for FY2018 (the first year) is a solid start for the final-year management goal.

	Fiscal 2018 forecast 1st year of "BEYOND 300"	Fiscal 2020 Final year of "BEYOND 300"
Consolidated sales	298 billion yen *	Over 300 billion yen (Via organic growth)
Operating income margin	8.6%	10.0%
ROE	8.2%	10.0%
Investment and finance	35.3 billion yen / year	100 billion yen / 3 years
Capital investment	16.5 billion yen / year	50 billion yen / 3 years
M&A funds	18.8 billion yen execution	50 billion yen / 3 years
Dividend	Dividend payout ratio 28.2%	Dividend payout ratio 30% (Target for the final year of the plan after incremental increases)

* Including sales forecast of 39 billion yen for life science business

The 1st Half of the Fiscal 2018 Topics

Capital investment for growth

Segment	Period	Item
Polymer additives	Mar. 2018	The Mie Plant increases the production capacity of additives for polyolefins (e.g. light stabilizers) and commences commercial operation.
''	—	The Mie Plant is enhancing facilities for the production of additives for polyolefins (nucleating/clarifying agents and antioxidants). 【Scheduled to be completed in Sep. 2019】
Electronics and IT materials	—	South Korea-based ADEKA KOREA CORP. is enhancing facilities for the production of semiconductor materials for memories. 【Scheduled to commence commercial operation from Jan. 2019】
Functional Chemicals	—	The Soma Plant is enhancing facilities for the production of lubricant Additives. 【(Scheduled to commence commercial operation from Jan. 2019)】
''	Oct. 2018	The Chiba Plant increases the production capacity of functional Cosmetic Ingredients and commences commercial operation.
Polymer additives / Functional Chemicals	—	China-based ADEKA FINE CHEMICAL (ZHEJIANG) CO., LTD. is constructing a new plant. 【Scheduled to commence commercial operation in Jan. 2020】
Food Products	Oct. 2018	China-based ADEKA FOODS (CHANGSHU) CO., LTD. increases the production capacity of processed foods (completes the new manufacturing building) and commences commercial operation.



▲ Equipment for manufacturing additives for polyolefins (e.g. light stabilizers) [Mie plant]



▲ Equipment for manufacturing of functional Cosmetic Ingredients [Chiba plant]



▲ New manufacturing building for manufacturing of processed foods [ADEKA FOODS (CHANGSHU) CO., LTD.]

Conversion of NIHON NOHYAKU to a Consolidated Subsidiary

Aims of this matter

- Strategic acquisition to achieve the mid-to long-term vision
- Growth and expansion of the fourth business pillar “life science”
- Growth prospects of NIHON NOHYAKU

<p>Additional stock acquisition</p>	<p>ADEKA acquired 51% of the shares of NIHON NOHYAKU in combination with a takeover bid (TOB) and capital increase through private placement or third-party allocation shares (TPA).</p> <p><TOB> Price : ¥ 900 (the premium on the closing price on Aug. 20 was 34.3%.) No. of shares acquired : 12,056,100 shares (Approximately ¥10.8 billion)</p> <p><TPA> Price : ¥ 670 No. of shares acquired : 11,940,300 shares (Approximately ¥10.8 billion)</p>	<ul style="list-style-type: none"> • Aug. 21 : Signed contract of TOB,TPA • Aug. 22 : Commencement of TOB • Sep. 19 : End of TOB • Sep. 27 : Settlement date of TOB • Sep. 28 : Payment date of TPA • Sep. 28 : Submission of the notification concerning change in subsidiaries to TSE
<p>Capital and business alliance</p>	<ul style="list-style-type: none"> • Agreement on TOB / TPA • Agreement on business alliance details • Agreement on maintaining the listing and company name of NIHON NOHYAKU CO., LTD., etc. 	<ul style="list-style-type: none"> • Aug. 21 : Conclusion of a capital and business alliance • Nov. 22 : Launch of the Committee for Business alliance Promotion

Group Synergy

- Acceleration of development speed through mutual complement in the R&D domain
- Improvement of productivity through the mutual utilization of production technologies and process chemistry
- Expansion of sales channels through the mutual utilization of global networks
- Development of high performance compounds through the provision of technologies such as synthesis reaction, dispersion technology and analysis technology
- Exchange of researchers with knowledge in multiple areas

Conversion of NIHON NOHYAKU to a Consolidated Subsidiary

Creation of New Life Science Businesses

Establishing business models and promoting commercialization in the new domain

With a view to evolving into the fourth main business, strengthen personnel, enhance facilities, and speed up commercialization utilizing NIHON NOHYAKU's knowledge and expertise concerning the authorization and registration of medical materials and GMP* manufacturing.

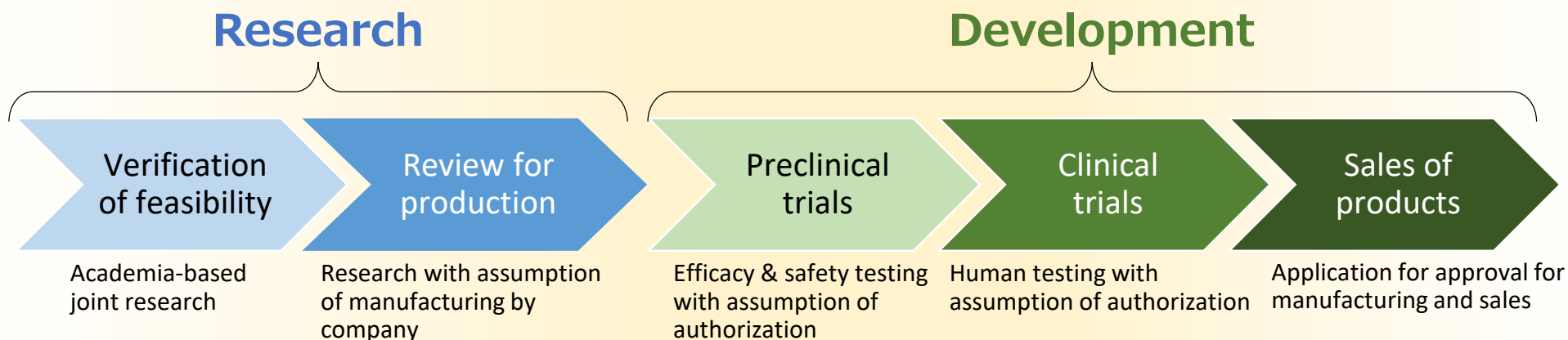
<p>Regenerative medicine</p>	<p>Decellularized tissue</p>	<ul style="list-style-type: none"> ◆ We are working for their practical use by progressing the confirmation of fundamental functionality as medical materials and through safety assessments.
<p>Preventive medicine</p>	<p>Nasal vaccine absorption promoter (Adjuvant)</p>	<ul style="list-style-type: none"> ◆ Based on experiments, we have confirmed nasal absorption of protein drugs is greatly improved. ◆ We are also promoting their development as transfection materials (for introducing nucleic acids into cells).
<p>Improvement quality of life</p>	<ul style="list-style-type: none"> ■ Functional food ingredients (Support for health maintenance) <ul style="list-style-type: none"> Beta-glucan Alkyl phospholipid ■ Functional cosmetic ingredients (moisturizing, aging care, bacteriostatic action, etc) <ul style="list-style-type: none"> Mevalonolactone Beta-glucan Novel glycolic moisturizer 	<ul style="list-style-type: none"> ◆ 「Barley beta-glucan 30SP」 to market → Can be applied to a wide range of foods due to their improved water solubility and reduced unique wheat flavor. ◆ We are developing cosmetic ingredients using fermentation technologies of fermented beta-glucan, mevalonolactone, etc.

Under development

Already commercialized

* GMP: Good manufacturing practice. Quality control standards for pharmaceutical products defined by Japan, US, and EU individually.

Acceleration of Commercialization in Life Science

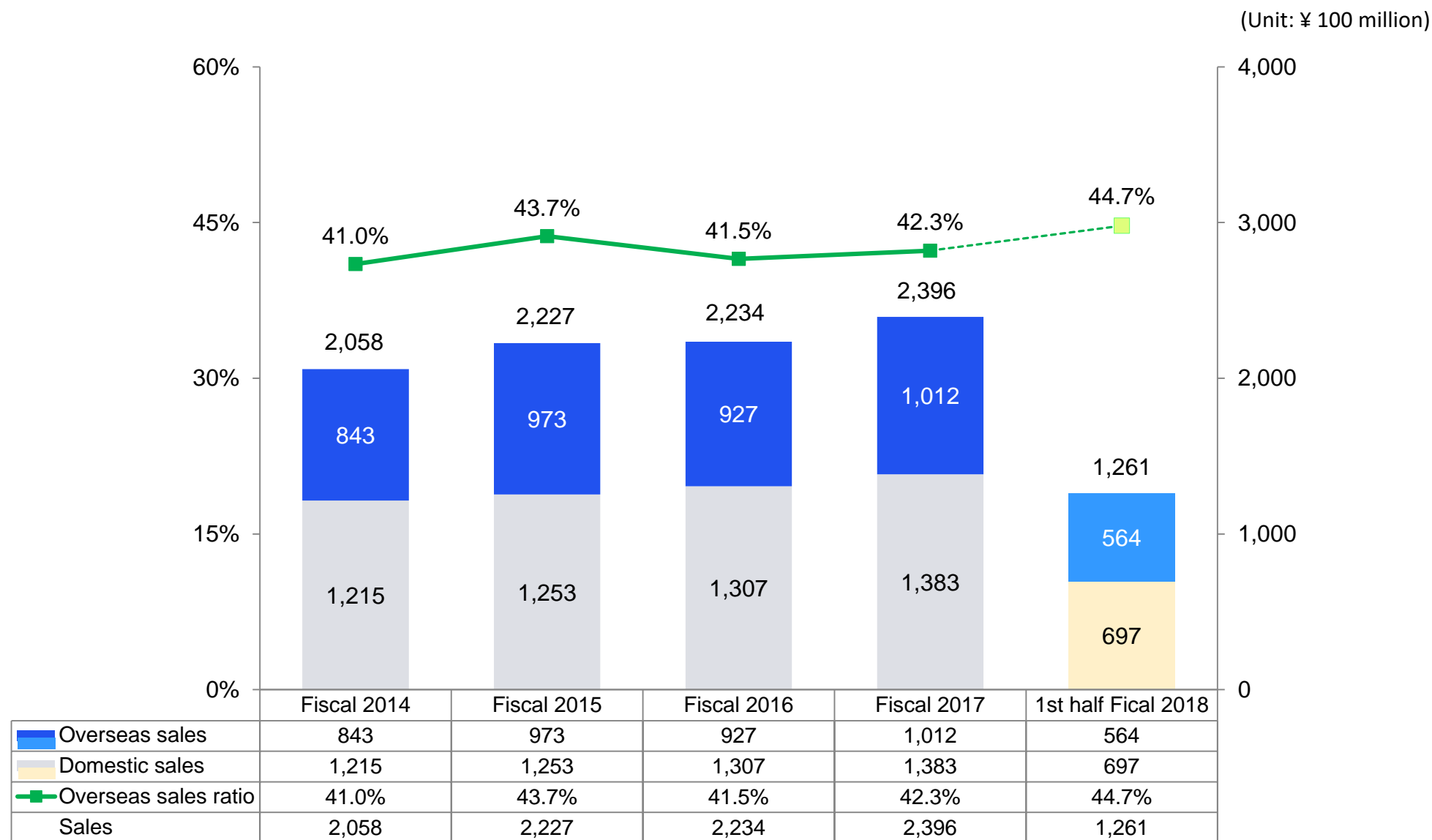


Accelerate the expansion of life science businesses utilizing NIHON NOHYAKU's knowledge and expertise of businesses that require authorization (e.g. medical materials, diagnostic pharmaceuticals).



For Reference

Overseas Sales (for reference)



Note : Figures are expressed in units of 100 million yen and have been rounded off.

The 1st half of the Fiscal 2018

Supplemental Documents for Financial Results Overview

Director and Operating Officer **Youji Shiga**

- I .Supplementary Data for consolidated Closing of Accounts
- II .Management indexes, etc.
- III .For information purposes:
 - ◆ Overview of non-consolidated and consolidated closing accounts
 - ◆ Overview of ADEKA Group
 - ◆ Core products of each business segments

I . Supplementary Data for consolidated Closing of Accounts

1.Consolidated Balance Sheet

Consolidated
data

(Unit: ¥ million)

	As of Mar. 31, 2018	As of Sep. 30, 2018	increase/ decrease
Assets			
Current assets ①	164,953	231,291	66,337
Fixed assets	147,198	172,322	25,124
Tangible fixed assets ②	85,546	104,731	19,185
Intangible fixed assets	4,080	13,048	8,967
Investment and other assets	57,571	54,542	△ 3,028
Total assets	312,152	403,613	91,461
Liabilities			
Current liabilities ③	75,815	119,095	43,280
Long-term liabilities ④	31,248	49,110	17,862
Total liabilities	107,063	168,206	61,142
Net assets			
Shareholders' equity	178,363	183,212	4,849
Capital stock	22,944	22,944	—
Capital surplus	19,985	20,022	37
Retained earnings	135,988	141,466	5,478
Treasury stock	△ 554	△ 1,221	△ 667
Accumulated other comprehensive income	18,256	16,011	△ 2,244
Valuation difference on available-for-sale securities	12,002	11,421	△ 581
Reserve for land revaluation	4,276	4,276	—
Translation adjustment	4,346	2,533	△ 1,812
Adjustments for retirement Benefits	△ 2,368	△ 2,219	149
Minority interests	8,468	36,182	27,714
Total net assets	205,088	235,407	30,319
Total liabilities and net assets	312,152	403,613	91,461

Note : Figures are expressed in units of million yen and have been rounded off.

(Unit: ¥ 100 million)

POINT①

Increase in current assets	663
Increase due to NIHON NOHYAKU becoming a consolidated subsidiary	655

POINT②

Increase in tangible fixed assets	191
Increase due to NIHON NOHYAKU becoming a consolidated subsidiary	160

POINT③

Increase in investments and other assets	432
Increase due to NIHON NOHYAKU becoming a consolidated subsidiary	277
Increased loans due to the bridge loan executed for the acquisition of NIHON NOHYAKU shares	190

POINT④

Increase in current liabilities	178
Increase due to Nihon Nohyaku becoming a consolidated subsidiary	140

I . Supplementary Data for the Consolidated Closing of Accounts

2. Cash Flow Statement (Summary)

Consolidated
data

(Unit: ¥ million)

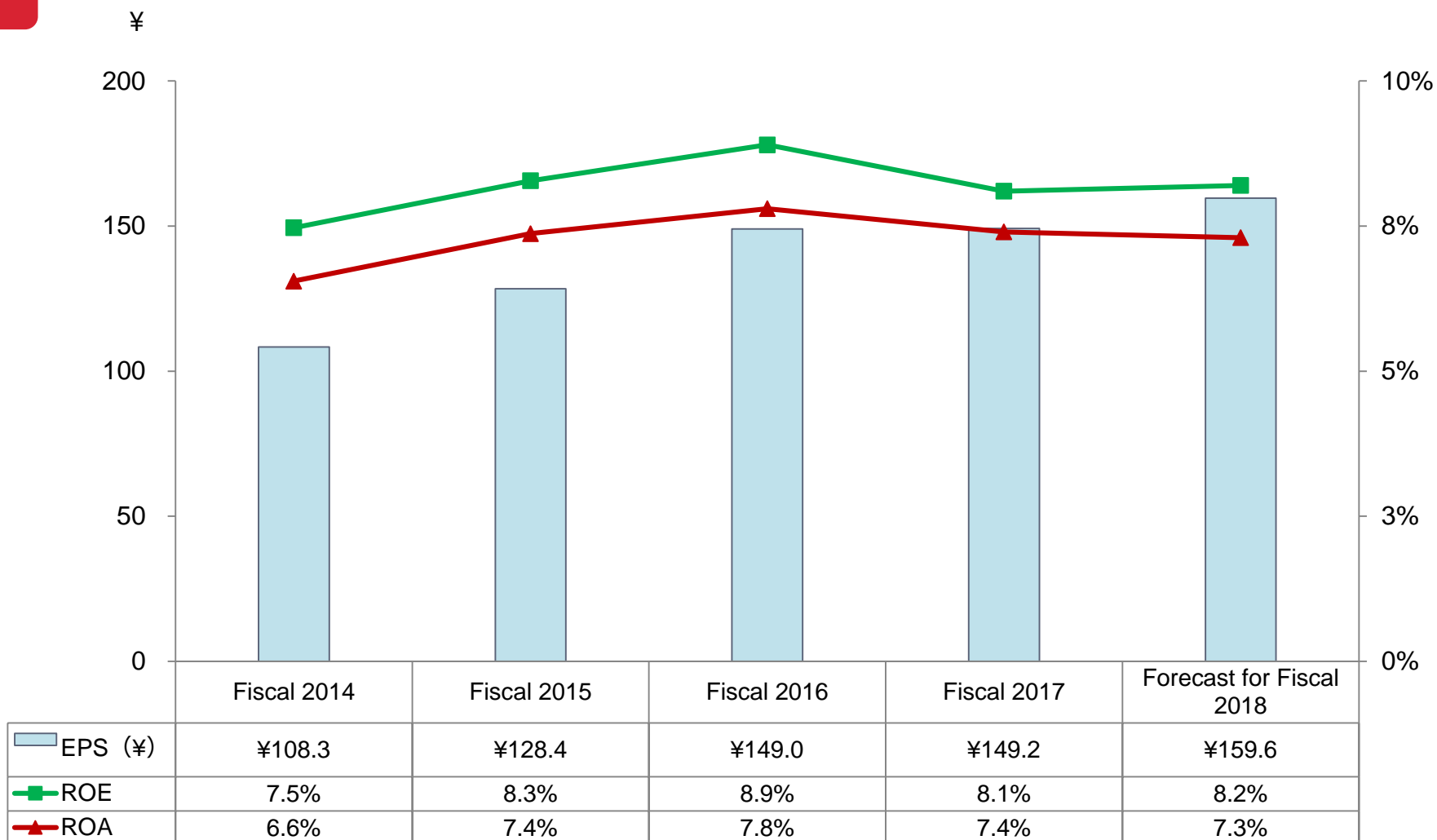
	1 st half FY2017 (from Apr. 1, 2017 to Sep. 30, 2017)	1 st half FY2018 (from Apr. 1, 2018 to Sep. 30, 2018)
Cash flows from operating activities	6,862	9,763
Cash flows from investing activities	△ 7,217	△ 8,280
Cash flows from financing activities	△ 2,613	18,244
Effect of exchange-rate changes on cash and cash equivalents	57	△ 787
Net increase/decrease in cash and cash equivalents (increase)	△ 2,909	18,939
Cash and cash equivalents at the beginning of period	50,762	48,902
Cash and cash equivalents from newly consolidated subsidiaries	—	—
Cash and cash equivalents at the end of period	47,852	67,841

Note : Figures are expressed in units of million yen and have been rounded off.

II. Management Indexes, etc.

1. Profitability

Consolidated
data

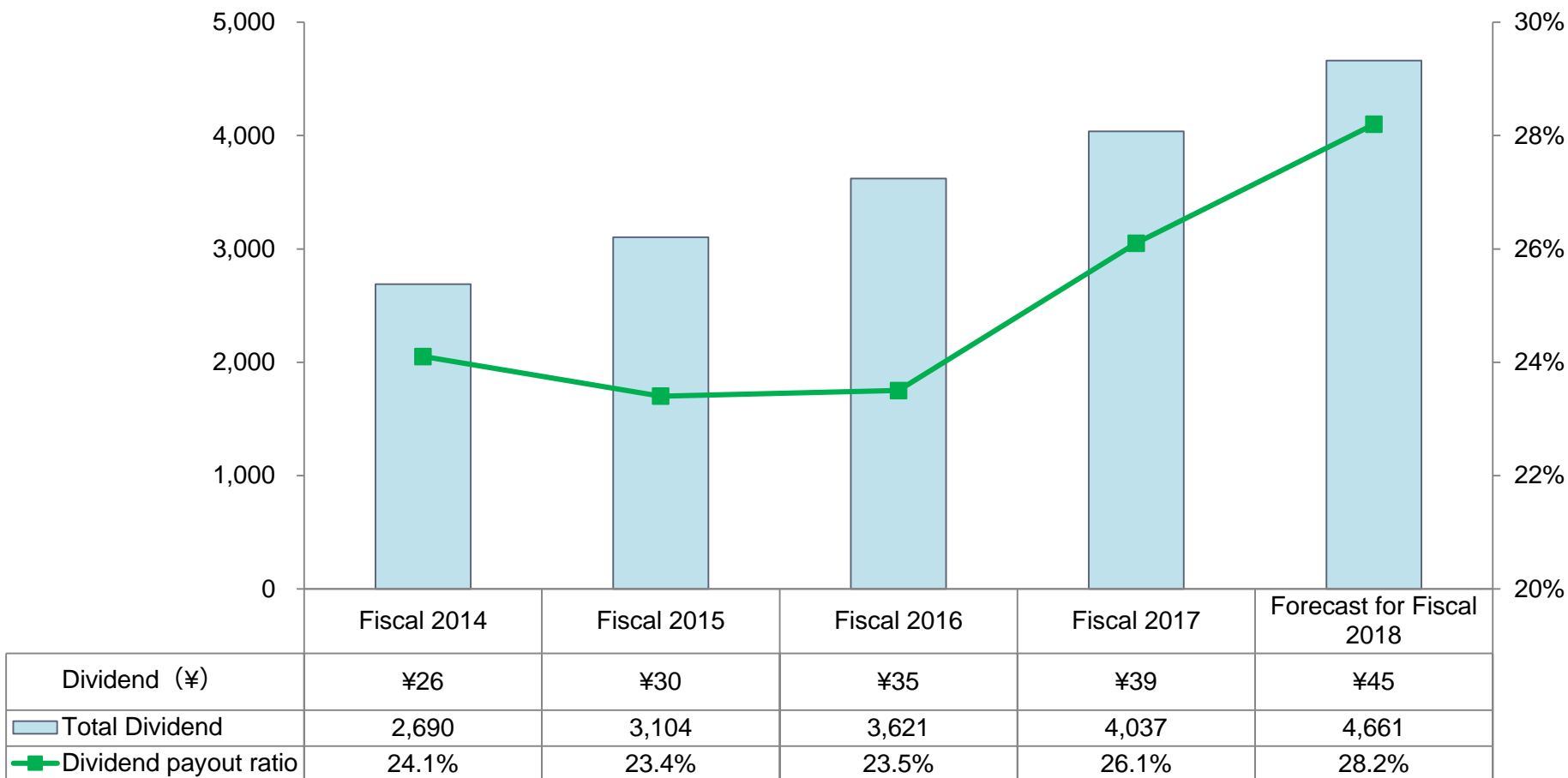


Note: The data of FY2014 has been readjusted by applying the accounting method change retroactively.

2. Dividend payout ratio and dividends

Consolidated
data

¥ million

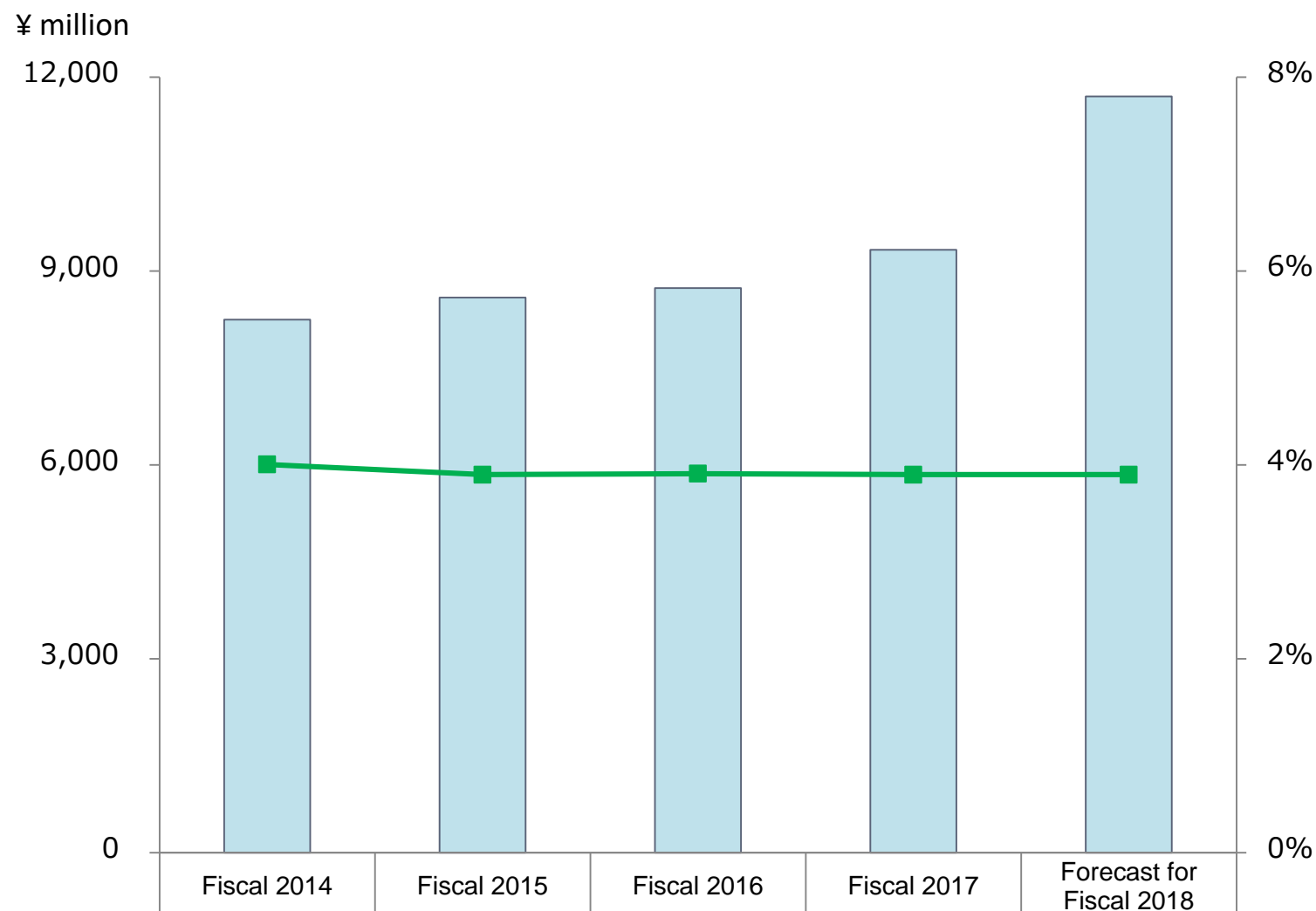


Note 1: Dividends in FY2016 include a commemorative dividend of 5 yen in commemoration of the 100th anniversary of our founding.

Note 2: Figures are expressed in units of million yen and have been rounded off.

3. Research and development costs

Consolidated data



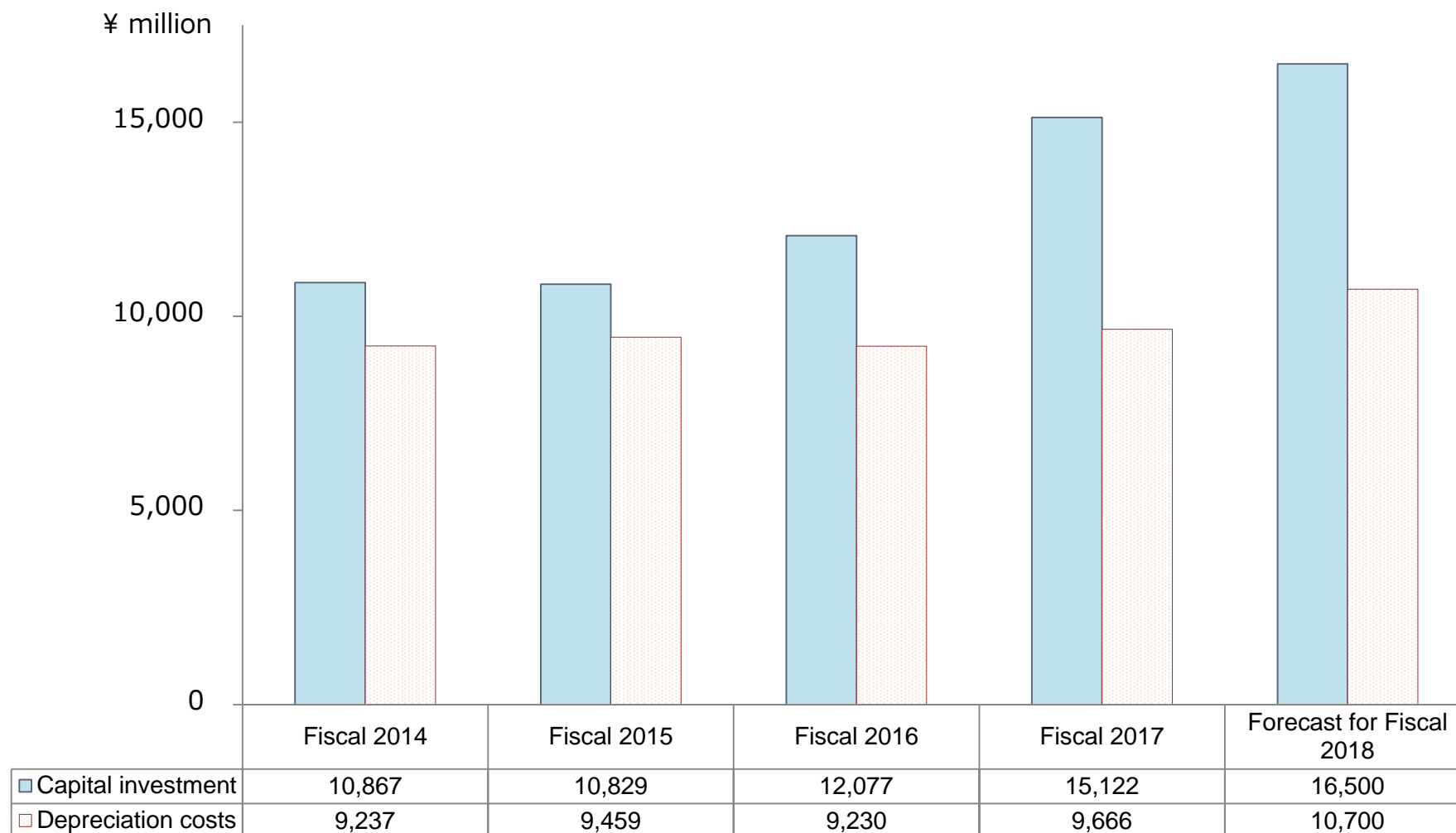
■ Research and development costs	8,247	8,588	8,735	9,327	11,700
■ Rate of research and development costs to sales	4.0%	3.9%	3.9%	3.9%	3.9%

Note : Research and development expense are expressed in units of million yen and have been rounded off.

II. Management Indexes, etc.

4. Capital investment

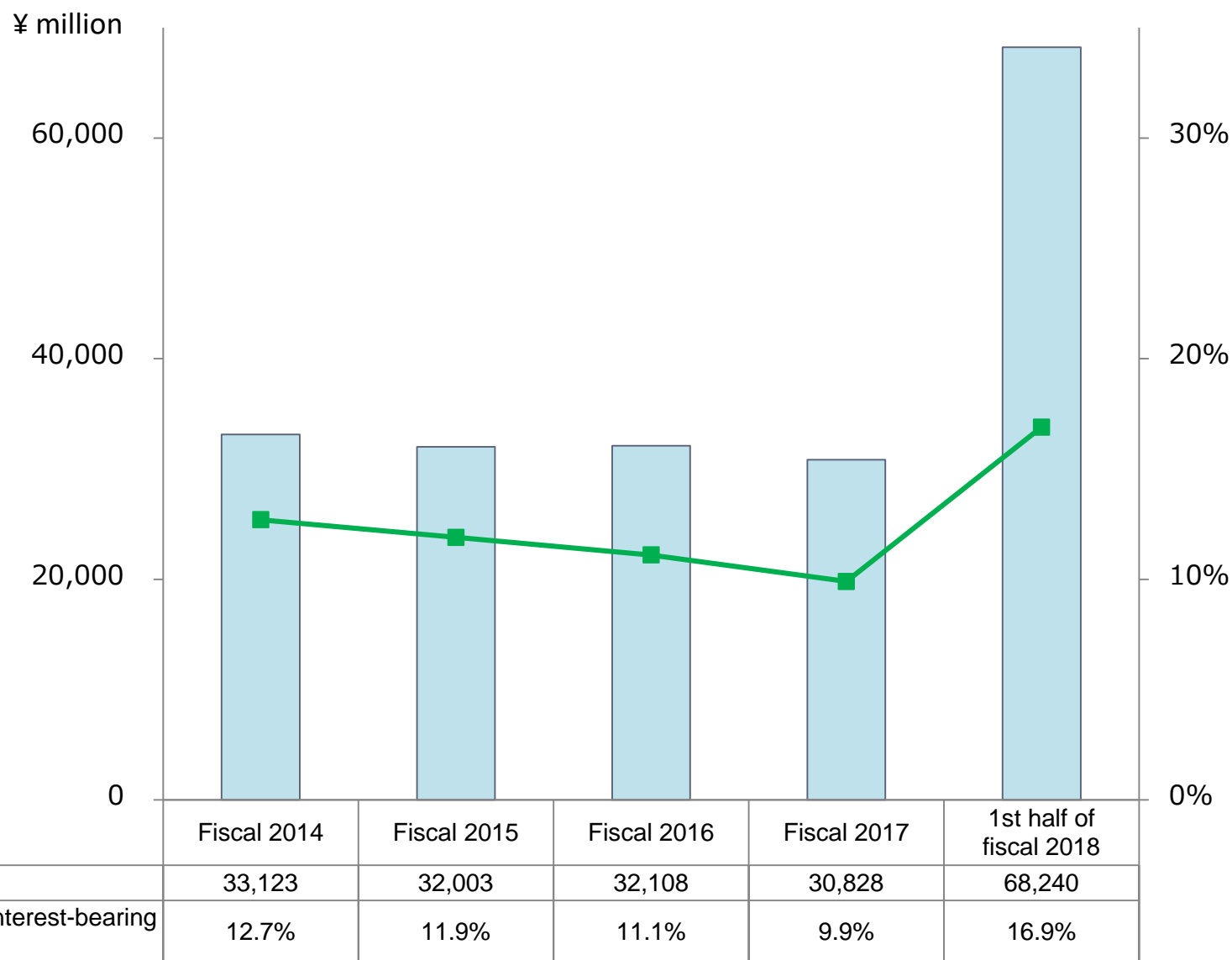
Consolidated
data



Note : Capital investment and depreciation are expressed in units of million yen and have been rounded off.

5. Interest-bearing liabilities

Consolidated data



Note : Liabilities with interest are expressed in units of million yen and have been rounded off.

III. For information purposes

1. Overview of non-consolidated and consolidated closing accounts

(Unit: ¥100 million)

Non-consolidated closing of accounts				
	Results in 1 st half Fiscal 2017	Results in 1 st half Fiscal 2018	Increase/ decrease	Increase/ decrease ratio (%)
Sales	633	666	32	5.1
Operating profit	59	55	△ 3	△ 5.5
Current profit	65	66	0	1.0
NET profit for the Term	50	50	0	0.1
NET profit per share for the Term	49.0	49.0		

Note : Figures are expressed in units of 100 million yen and have been rounded off.

Domestic companies (16)				
	Results in 1 st half Fiscal 2017	Results in 1 st half Fiscal 2018	Increase/ decrease	Increase/ decrease ratio (%)
Sales	437	470	32	7.5
Operating profit	9	10	1	12.7

Overseas companies (21)				
	Results in 1 st half Fiscal 2017	Results in 1 st half Fiscal 2018	Increase/ decrease	Increase/ decrease ratio (%)
	618	730	112	18.2
	39	46	7	19.1

Consolidation adjustment accounts (deleted)		
	Results in 1 st half Fiscal 2017	Results in 1 st half Fiscal 2018
Sales	△ 542	△ 606
Operating profit	△ 5	△ 6

III. For information purposes

2. Consolidated Subsidiaries (16 companies in Japan①)

Segment	Consolidated subsidiary	Capital	Controlling share(%)	Line of business
Chemicals	ADEKA CHEMICAL SUPPLY CORP.	¥ 104million	98.04 (Indirect ownership: 3.61)	Sales of chemical products, and the development, manufacturing and sales of metal processing oils, etc.
Chemicals	ADEKA CLEAN AID CORP.	¥ 140million	100.00	Development and sales of kitchen detergents for commercial use, industrial detergents, etc.
Chemicals	OXIRANE CHEMICAL CORP.	¥ 600million	51.00	Manufacturing and sales of epoxy plasticizers, etc.
Food products	ADEKA FOOD SALES CORP.	¥ 42million	100.00	Sales of edible processed oils and fats for confectionary and breads, and sales of other foodstuffs, etc.
Food products	YONGO CO.,LTD.	¥ 18million	92.14	Wholesaling of ingredients for confectionery and bakery business use.
Food products	ADEKA FINE FOODS CORP.	¥ 50million	100.00	Manufacturing and sales of mayonnaise products, oil and fat processed food products and processed products using seafood.
Food products	UEHARA FOOD INDUSTRY CO.,LTD.	¥ 70million	100.00	Manufacturing and sales of flour paste products, bean-jams and retort pouch foods.
Food products	CROWN CO.,LTD.	¥ 10million	100.00	Wholesale business of food materials such as fatty oils, flour milling and flavors and processed foods.

Note : Capitals are expressed in units of million yen and have been rounded off.

III. For information purposes

2. Consolidated Subsidiaries (16 companies in Japan②)

Segment	Consolidated subsidiary	Capital	Controlling share(%)	Line of business
Life science	NIHON NOHYAKU.,LTD. (Note)	¥14,939million	51.00	Agrochemicals, Wood Preservative, Agricultural Materials, Pharmaceuticals & Veterinary Products
Life science	NICHINO RYOKKA CO.,LTD. (Note)	¥160million	51.00 (Indirect ownership: 51.00)	Sales of Chemical/Pesticides for Professional Turf, Planning for GOLF Courses and Amenity Areas
Life science	NICHINO SERVICE CO.,LTD. (Note)	¥3,400million	51.00 (Indirect ownership: 51.00)	Production and Logistic Services of Agrochemical, Cultivation & Management of Experimental Field/Laboratories
Life science	NIHON ECHOTECH CO.,LTD. (Note)	¥20million	51.00 (Indirect ownership: 51.00)	Agrochemical Residue Analysis, Chemical Substance Safety Testing, and Related Activities
Life science	AGRIMART CORPORATION (Note)	¥50million	51.00 (Indirect ownership: 51.00)	Sales of Termite Control Agents/Devices, Pest Control Agents/Devices
Others	ADEKA LOGISTICS CORP.	¥ 50million	100.00	General and principal contracting of logistics for the company, warehousing, leasing of vehicles, etc.
Others	ADEKA ENGINEERING & CONSTRUCTION CORP.	¥ 130million	100.00	Design, construction, and construction supervision of facility plants, and facilities maintenance.
Others	ADEKA LIFE-CREATE CORP.	¥ 65million	90.00 (Indirect ownership: 10.00)	Trading, brokerage and management of real estate, property and life insurance agency, sales in the OA equipment area, and management of buildings and company-owned apartments

Note 1: NIHON NOHYAKU and its nine subsidiaries have been included in the scope of consolidation because of share acquisition.

Note 2: Capitals are expressed in units of million yen and have been rounded off.

III. For information purposes

3. Consolidated Subsidiaries (21overseas companies①)

Country	Segment	Consolidated subsidiary	Capital	Controlling share(%)	Line of business
U.S.	Chemicals	ADEKA USA CORP.	US\$1 million	100.00	Sales of chemical products.
U.S.	Chemicals	AMFINE CHEMICAL CORP.	US\$16 million	60.00	Manufacturing and sales of polymer additives.
U.S.	Chemicals	AM STABILIZERS CORP.	US\$8.5 million	60.00 (Indirect ownership:60.00)	Manufacturing and sales of polymer additives.
U.S.	Life science	NICHINO AMERICA, INC. (Note)	US\$0.7million	51.00 (Indirect ownership:51.00)	Sales and R&D of agrochemicals in America
BLAZIL	Life science	SIPCAM NICHINO BRASIL S.A. (Note)	R\$224million	25.50 (Indirect ownership:25.50)	Production and sales of agrochemicals in Brazil
GERMANY	Chemicals	ADEKA Europe GmbH	€0.5 million	100.00	Sales of chemical products.
FRANCE	Chemicals	ADEKA POLYMER ADDITIVES EUROPE SAS	€3million	100.00 (Indirect ownership:100.00)	Manufacturing and sales of polymer additives.
CHINA	Chemicals	ADEKA (CHINA) CO., LTD.	US\$31 million	100.00	Sales of chemical products.
CHINA	Chemicals	ADEKA FINE CHEMICAL (SHANGHAI) CO., LTD.	US\$20.50million	100.00	Manufacturing and sales of polymer additives, functional resins, electronic materials and similar products.
CHINA	Chemicals	ADEKA FINE CHEMICAL (CHANGSHU) CO., LTD.	US\$21.54million	50.00	Manufacturing and sales of polymer additives.
CHINA	Food products	ADEKA FOODS (CHANGSHU) CO., LTD.	US\$15 million	70.00	Manufacturing and sales of processed oils and fats, processed foods.

Note: NIHON NOHYAKU and its nine subsidiaries have been included in the scope of consolidation because of share acquisition.

III. For information purposes

3. Consolidated Subsidiaries (21overseas companies②)

Country	Segment	Consolidated subsidiary	Capital	Controlling share(%)	Line of business
TAIWAN	Chemicals	CHANG CHIANG CHEMICAL CO., LTD.	NT\$30 million	50.50	Sales of polymer additives and plasticizers .
TAIWAN	Chemicals	ADEKA FINE CHEMICAL TAIWAN CORP.	NT\$200 million	100.00	Manufacturing and sale of chemical products.
TAIWAN	Life science	TAIWAN NIHON NOHYAKU CO.,LTD (Note)	NT\$40million	26.01 (Indirect ownership:26.01)	Sales and R&D of agrochemicals in Taiwan
INDIA	Life science	NICHINO INDIA PVT. LTD. (Note)	₹10.5million	50.96 (Indirect ownership:50.96)	Production, sales and R&D of agrochemicals in India
INDIA	Life science	NICHINO CHEMICAL INDIA PVT. LTD. (Note)	₹3.27million	50.96 (Indirect ownership:50.96)	Production and sales of agrochemicals in India
SOUTH KOREA	Chemicals	ADEKA KOREA CORP.	₩1.5 billion	100.00	Manufacturing and sale of chemical products.
THAILAND	Chemicals	ADEKA FINE CHEMICAL(THAILAND)CO.,LTD.	฿350 million	81.00	Manufacturing and sale of chemical products.
SINGAPORE	Chemicals	ADEKA (ASIA) PTE.LTD.	US\$ 0.8 million	100.00	Sales of chemical products.
SINGAPORE	Food products	ADEKA(SINGAPORE)PTE.LTD.	S\$8 million	90.00	Manufacturing and sales of processed oils and fats, frozen piecrusts and related food products.
Malaysia	Food products	ADEKA FOODS(ASIA)SDN.BHD.	RM45million	60.00	Manufacturing and sales of processed oils and fats.

Note: NIHON NOHYAKU and its nine subsidiaries have been included in the scope of consolidation because of share acquisition.

III. For information purposes

4. Equity method-applicable companies

Two equity method-applicable companies	Capital	Controlling share(%)	Line of business
CO-OP CLEAN CO., LTD.	¥80 million	46.88%	Development and sales of soap, detergents and similar products.
SHOWA KOSAN CO.,LTD.	¥550 million	20.81%	Sale of synthetic resins, chemical products, industrial materials, electronic materials and environmental concerns.
AGRICULTURAL CHEMICALS (MALAYSIA) SDN. BHD. (Note)	MYR2.05million	12.33%	Production and sales of agrochemicals in Malaysia
SIPCAM EUROPE S.P.A. (Note)	€36.94million	10.20%	Production and sales of agrochemicals in Europe

Note: NIHON NOHYAKU was removed from equity method-applicable companies because of the share acquisition, and AGRICULTURAL CHEMICALS (MALAYSIA) SDN. BHD. and SIPCAM EUROPE S.P.A. have been added.

5. Core products of each business segments

Business category		Core products	
Reporting segment	Chemicals business	Polymer Additives	Additives for polyolefins, PVC plasticizers/stabilizers, Flame retardants, and others.
		Electronics and IT materials	High-purity materials for semiconductors, AFES System and etching agents, Photo(Light)/heat curing materials, photoinitiators, Imaging materials, and others.
		Functional Chemicals	Epoxy resins, Polyurethanes, Water-borne resins, Surfactants, Lubricant additives, Kitchen detergent, Cosmetic ingredients, Polypropylene glycol, Hydrogen peroxide and derivative products, Water-swelling sealing materials, and others.
	Food products business	Margarines, Shortenings, Oil and fats for chocolate, Oils and fats for frying, Whipping cream, Enriched milk products, Fillings, Frozen pie crusts, Mayonnaise dressing, functional foods, and others.	
	Life science business	Agrochemicals, Agricultural materials, Pharmaceuticals & Veterinary products, Wood preservative, and others.	
Other business		Designing of equipment plants, Construction and construction management, Maintenance of equipment, Logistic services, Warehousing, Leasing of vehicles, Real estate and insurance business, and others.	

Notice on Forecast Performance and Business Plans

The forecast performance and business plans specified in this document have been prepared based on information available as of the date of publication, as well as on various prerequisites; therefore, the actual results may differ from these forecasts or plans depending on various factors that may arise hereafter.