

Second Quarter FY2020 Financial Results

Ushio Inc.
October 30, 2020

This report contains forward-looking statements, including earnings forecasts, which are based on information currently available to the Company and on certain assumptions deemed to be reasonable. Please be advised that actual results may differ substantially from those forward-looking statements due to various factors.

- * All figures in the material have been rounded down to the nearest billion yen.
- * FY2020 starts from April 1st, 2020 through March 31st, 2021.

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USHIO
Applying Light to Life



- Update on Impact of the Spread of the Novel Coronavirus (COVID-19)
- **Net Sales and Earnings Decreased** to YoY for 2 Q FY2020 (Result) and YoY for FY2020 (Full-year Forecast) because of COVID-19 impact
- YoY for FY2020 (Full-year Forecast):
Reasons on FY2020 Financial Results Forecast Revision

- I. Update on Impact of the Spread of the Novel Coronavirus (COVID-19)**
- II. Financial Results for 2Q FY2020
- III Forecast for FY2020
- IV. Topics
- V. Supplementary Information

Update on Impact of the Spread of the Novel Coronavirus (COVID-19)

Latest status of Ushio Group's business sites (summary)

(Note) Information as of October 30, 2020

- ✓ For the purpose of preventing chances for infection, continue to operate under teleworking and flex-time basis at domestic sites and mainly in North America.
- ✓ For production sites, production adjustments have been made at domestic and overseas sites as follows:
 - Lamps for cinema (Japan and Philippines): maintaining production adjustments
 - Imaging equipment (Canada and China): maintaining production adjustments (implementing headcount reduction)

FY2020 Performance Impact (precondition)

Visual Imaging Field

- ✓ Please refer to slide 12 for "Update on latest business environment of imaging related business"

Electronics Field

- ✓ While demand remains steady, we might expect delays in and acceptance inspections caused by delays in installations.

Others

- ✓ UV light disinfection and virus inactivation device Care222 has started selling from this September (Please refer to slide 20)
- ✓ FY2020 YoY forecast does not include impact of second wave of COVID-19 and additional lockdowns.

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Highlights of Financial Results for FY2020

Net Sales : 52.0 billion yen (▲29.9 billion yen YoY, ▲36.6%)

Significant decline in sales of image equipment and lamps for cinema (light source business) due to COVID-19

Operating Income : ▲1.0 billion yen (▲5.9 billion yen YoY)

Decline in profit due to COVID-19, despite of SGA reduction effort

Profit Attributable to Owner of Parent: ▲1.9 billion yen
(▲4.9 billion yen YoY)

COVID-19 related: Non-operating Income
Extraordinary Expense

Employment Adjustment Subsidy

0.8 billion yen

Restructuring Costs

0.8 billion yen

Loss on Temporary Closing and others

0.8 billion yen

※FOREX (FY20_1H) : US\$1 = 107 yen

Summary of Financial Results

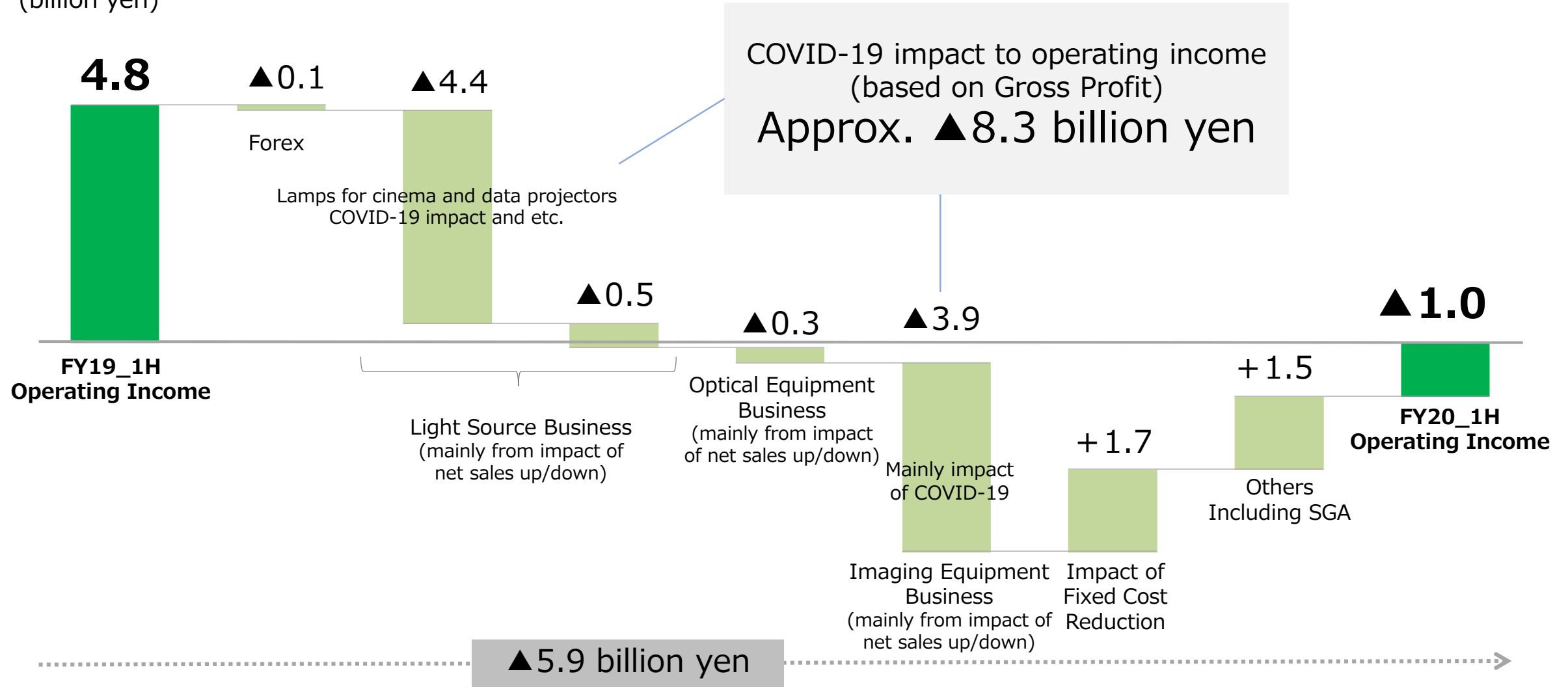
(billion yen)		FY19 1H	FY20 1H	YoY		FY20 Forecast	
				changes	%	10.30 Center Value after revision	Achievement Rate (%)
Net Sales		82.0	52.0	▲29.9	▲36.6	119.0	43.7
Operating Income (Loss)		4.8	▲1.0	▲5.9	—	▲2.2	—
Operating Income (Loss) (%)		5.9	▲2.1	▲8.0P	—	▲1.9	—
Ordinary Income		5.8	0.4	▲5.4	▲93.1	0.2	161.6
Profit (Loss) Attributable to Owners of Parent		3.0	▲1.9	▲4.9	—	▲3.2	—
EPS (yen)		24.41	▲16.36	▲40.77	—	▲26.96	—
Forex (yen)	USD	109	108	▲2	—	105	—
	EUR	122	118	▲1	—	120	—

FOREX sensitivity: Amount of impact from 1 yen fluctuations
(full-year)

against USD	Net Sales	Operating Income
	Approx. ¥ 1.0 billion	Approx. ¥ 0.15 billion

YoY Variation Analysis of Operating Income

(billion yen)



Note: Figures other than "FOREX" exclude forex impact

Financial Results by Business Segments

(billion yen)		FY19 1H	FY20 1H	YoY		Ref : Net sales breakdown for Light Source Business				
				Changes	%	FY19 1H	FY20 1H	Changes	%	
Light Source Business	Net Sales	30.4	21.0	▲9.3	▲30.8	UV lamp	20.8	13.9	▲6.8	▲32.8
	Operating Income	3.6	0.6	▲2.9	▲81.3	Halogen lamp	5.3	3.9	▲1.3	▲25.9
	Operating Income (%)	11.9	3.2	▲8.7P	-	Solid state light source	4.2	3.0	▲1.1	▲27.4
Optical Equipment Business	Net Sales	18.0	16.3	▲1.7	▲9.5					
	Operating Income	0.3	0.1	▲0.1	▲51.4					
	Operating Income (%)	1.8	1.0	▲0.8P	-					
Image Equipment Business (*)	Net Sales	31.7	13.4	▲18.3	▲57.8					
	Operating Income (Loss)	0.6	▲1.9	▲2.6	-					
	Operating Income (%)	2.2	▲14.4	▲16.6P	-					
Others	Net Sales	1.7	1.2	▲0.4	▲29.2					
	Operating Income (Loss)	0	▲0.0	▲0.0	▲229.1					
	Operating Income (%)	1.1	▲1.9	▲3.0P	-					
Elimination and corporate	Operating Income	0.1	0.0	▲0.1	-					

* : Including 「Illumination Equipment and others subtracted from Equipment Business」 by FY2019

* : Net sales indicates sales to unaffiliated customers. Operating income ratio indicates the ratio of operating income against sales to unaffiliated customers.

Business Environment and Business Segment Overview

Electronics Field

<p>Business Environment</p>	<p>In electronics-related markets, operation is coming back to pre-COVID-19 level, while new capital investments are in recovering stage.</p> <ul style="list-style-type: none"> • FPD: New investment is shifting from LCD to OLED. Despite LCD production slowing down in Korea, operation in China is solid. • Semiconductor and PCB: 5G related investments are solid, while smartphone-related consumer demand is unclear. 	
<p>Light Source Business</p>	<p><u>Comparison to 1H FY2019</u></p> <p>UV Lamps +0.0 billion yen +0%</p>	<ul style="list-style-type: none"> • Lamp demand decreased due to Korean manufacturer's LCD production decline • Demand for semiconductor and electronic components is solid
<p>Equipment Business</p>	<p>UV Equipment +1.4 billion yen ▲16%</p>	<ul style="list-style-type: none"> • Sales decreased of exposure system for electronic components and COF • Sales increased of Large Field Stepper for latest IC package
	<p>Cure Equipment ▲3.3 billion yen ▲64%</p>	<ul style="list-style-type: none"> • Sales decreased of LCD-related equipment as investments settled down
	<p>Others +0.2 billion yen +5%</p>	<ul style="list-style-type: none"> • Sales increased of EUV light source for EUV lithography mask inspection

Note: Indicated value (income, %) represents YoY comparison.

Business Environment and Business Segment Overview

Visual Imaging Field

<p>Business Environment</p>	<p>Due to COVID-19, visual imaging-related markets are generally sluggish.</p> <ul style="list-style-type: none"> • Movie theaters are partially reopened from the end of 1H; however, operation in main markets, such as North America and China is limited. • Amusement parks and industrial facilities have reopened in some areas in Asia but at low levels; continuous suspensions of world's events • Due to impact of COVID-19, demand declined for data projectors and OA equipment 	
<p>Light Source Business</p>	<p><u>Comparison to 1H FY2019</u></p> <p>Lamps for cinema ▲5.1 billion yen ▲81%</p>	<ul style="list-style-type: none"> • Replacement demand decreased as movie theaters closed worldwide and screen operation diminished substantially
	<p>Lamps for data projectors ▲1.9 billion yen ▲58%</p>	<ul style="list-style-type: none"> • Lamp demand declined as projector demand declined due to COVID-19
	<p>Lamps for OA ▲0.8 billion yen ▲29%</p>	<ul style="list-style-type: none"> • Lamp demand declined as OA equipment declined due to COVID-19
<p>Equipment Business</p>	<p>Cinema ▲9.8 billion yen ▲62%</p>	<ul style="list-style-type: none"> • Projector sales decreased as investment movements declined due to prolonged suspensions of movie theaters worldwide
	<p>General Imaging ▲8.2 billion yen ▲55%</p>	<ul style="list-style-type: none"> • Projects decreased for events and industrial facilities, such as amusement parks

Latest business environment

Continued to experience a difficult time, particularly in cinema and event-related business

- Cinema: Continuous impact of COVID-19
 - Postponement of distribution of major Hollywood movies have been announced one after another and Europe and US have been forced to close or change their operational systems
 - Major area trends
 - North America: Gradual movement to reopen; however, policies vary from state to state
Movie theaters in some states are still closed and unclear when to reopen
 - China: Resumed operations with limited scale
 - EMEA: Re-closure increased due to second wave of COVID-19
- Non-cinema: Event related markets with continuous self-restraints, other markets gradual recovering

Production system of lamps for cinema

Maintain certain level of production adjustment after October

“Structural Reform” effort of imaging equipment

Headcount reduction of 300 employees have been implemented and completed

- Recorded 0.8 billion yen for restructuring cost (extraordinary expense) and expects cost-cutting effect (production expenses and SGA) after 2H.

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Summary of Financial Results FY2020

Financial Results Forecast Revision

As uncertain outlook continues in the image related business, Ushio revised both upper and lower limits of the sales range downward. On the other hand, we will strive to improve profitability through cost reductions and other measures.

(billion yen)

	FY20 Forecast			Changes	FY19 Result	Changes	
	Revision	Announced on 05.12					
Net Sales	115.0 ~ 123.0	125.0	~ 135.0	▲10.0 ~ ▲12.0	159.0	▲44.0	~ ▲36.0
Operating Income (Loss)	▲ 4.0 ~ ▲ 0.5	▲5.0	~ 0.5	+1.0 ~ ▲1.0	6.6	▲10.6	~ ▲7.1
Operating Income (%)	▲ 3.5 ~ ▲ 0.4	▲4.0	~ 0.4	+0.5P ~ ▲0.8P	4.2	▲7.7	~ ▲4.6
Ordinary Income (Loss)	▲ 1.5 ~ 2.0	▲3.5	~ 2.0	+2.0 ~ -	8.7	▲10.2	~ ▲6.7
Profit (Loss) Attributable to Owners of Parent	▲ 5.0 ~ ▲ 1.5	▲7.5	~ ▲2.0	+2.5 ~ +0.5	8.9	▲13.9	~ ▲10.4
EPS (yen)	▲ 41.48 ~ ▲ 12.44	▲62.23	~ ▲16.59	▲20.75 ~ ▲4.15	73.25	▲114.73	~ ▲85.69
ROE (%)	▲ 2.5 ~ ▲ 0.8	▲3.8	~ ▲1.0	0.2 ~ 1.3	4.3	▲6.8	~ ▲5.1
FOREX (yen)	USD	105	105	-	109	▲4	
	EUR	120	120	-	121	▲1	

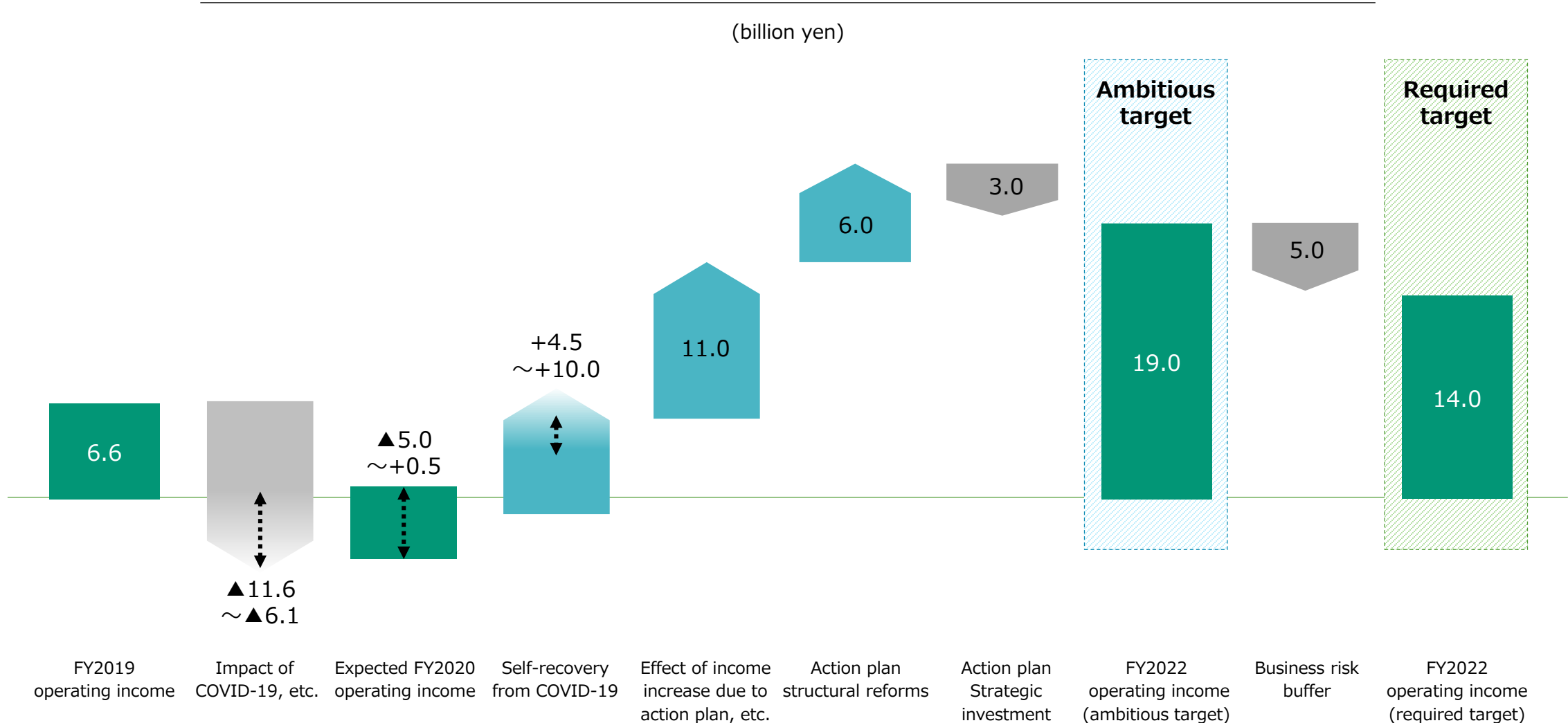
Net Sales and Operating Income Forecast by Sub-segment / Outlook for 2H

(billion yen)		FY20 Forecast (revision)	1H (Result)	Achievement Rate※ (%)	Outlook for 2H
Light Source Business	Net sales	44.0 ~ 47.0	21.0	46.3	<ul style="list-style-type: none"> • Lamps for cinema: Uncertain business environment continues (Max) After 3Q, reopening gradually expand, movie theater operation will recover (Min) From 3Q to 4Q, reopening gradually expand, however, movie theater operation remain sluggish • UV lamps: Market demand mainly in semiconductor slowly increasing • Lamps for data projectors: Demand remain sluggish • Lamps for OA: Slowly recovering
	Operating Income	0.5 ~ 1.5	0.6	67.8	
	Operating Income (%)	1.1% ~ 3.2%	3.2	—	
Optical Equipment Business	Net sales	40.0 ~ 42.0	16.3	39.9	<ul style="list-style-type: none"> • Sales increasing of Large Field Stepper for latest IC package • Sales increasing of EUV light source for mast inspection as planned • Sales slowly increasing of Di exposure system for print circuit board due to 5G-related demand increasing • Sluggish demand for COF exposure system
	Operating Income	0.0 ~ 1.0	0.1	32.2	
	Operating Income (%)	0.0% ~ 2.4%	1.0	—	
Imaging Equipment Business*	Net sales	27.0 ~ 30.0	13.4	47.1	<ul style="list-style-type: none"> • Same as lamps for cinema, movie theater operation will gradually reopen; however, uncertain business environment and investments will remain weak • Amusement parks/industrial facilities and investments to companies will slowly restart but at lower levels than the past years • Continuous suspensions of world's events • Continuous investigation of measures such as sales sites review
	Operating Loss	▲4.5 ~ ▲3.0	▲1.9	—	
	Operating Income (%)	▲16.7% ~ ▲10.0%	▲14.4	—	
Others	Net sales	4.0	1.2	30.2	
	Operating Income (Loss)	0.0	▲0.0	—	
	Operating Income (%)	0.0%	▲1.9	—	
Total	Net sales	115.0 ~ 123.0	52.0	43.7	<ul style="list-style-type: none"> • No anticipation of major re-lockdown or other similar event
	Operating Loss	▲4.0 ~ ▲0.5	▲1.0	—	
	Operating Income (%)	▲3.5 ~ ▲0.4%	▲2.1	—	

* : Including 「Illumination Equipment and others subtracted from Equipment Business」 by FY2019

New Medium-Term Management Plan Progress

Expected operating income decrease/increase scenario



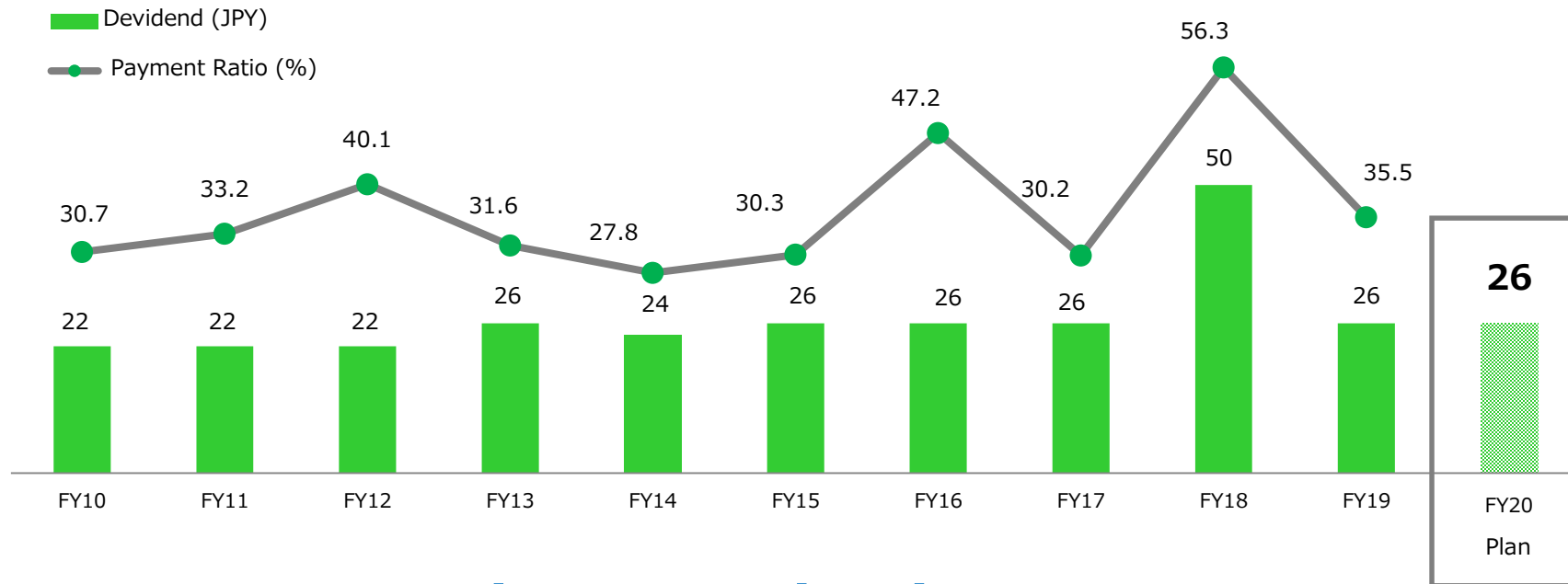
New Medium-Term Management Plan Progress

Operating Income (billion yen)	New Medium-Term Management Plan Scenario	Expectation in FY20	Comment
COVID-19 impact, Effect of income increase, etc.	▲11.6~▲6.1	▲10.6~▲7.1	Operated cost reduction but fell slightly below the expectation
Self-recovery from COVID-19	+4.5~+10.0	-	Will be expected after FY2021
Action Plan			
① Effect of income increase	+11.0	Center Value +1.0 (+1.5~+0.5)	<ul style="list-style-type: none"> • Sales of promising optical equipment products proceeded as planned and is expected to start to contribute to the performance from the 2H • Sales of Care222 has started since September as planned. Production system preparation and business alliance have been progressed as planned.
② Structural reforms	+6.0	+2.0	<ul style="list-style-type: none"> • Structural reforms (headcount reduction) in imaging equipment business and effect is expected from next fiscal year onward (2 billion yen/ year) • Measurements of structural reforms in light source business will be implemented after next fiscal year onward
③ Strategic investment	▲3.0	▲0.5	<ul style="list-style-type: none"> • Performance improvement of EUV light source • Next generation roadmap development of cutting-edge package • Capital investment for Care222 production

Shareholders Return

Dividend per share and payout ratio

FY2020 annual dividend (plan) will **be maintained 26 yen per share** in a stable and consistent manner



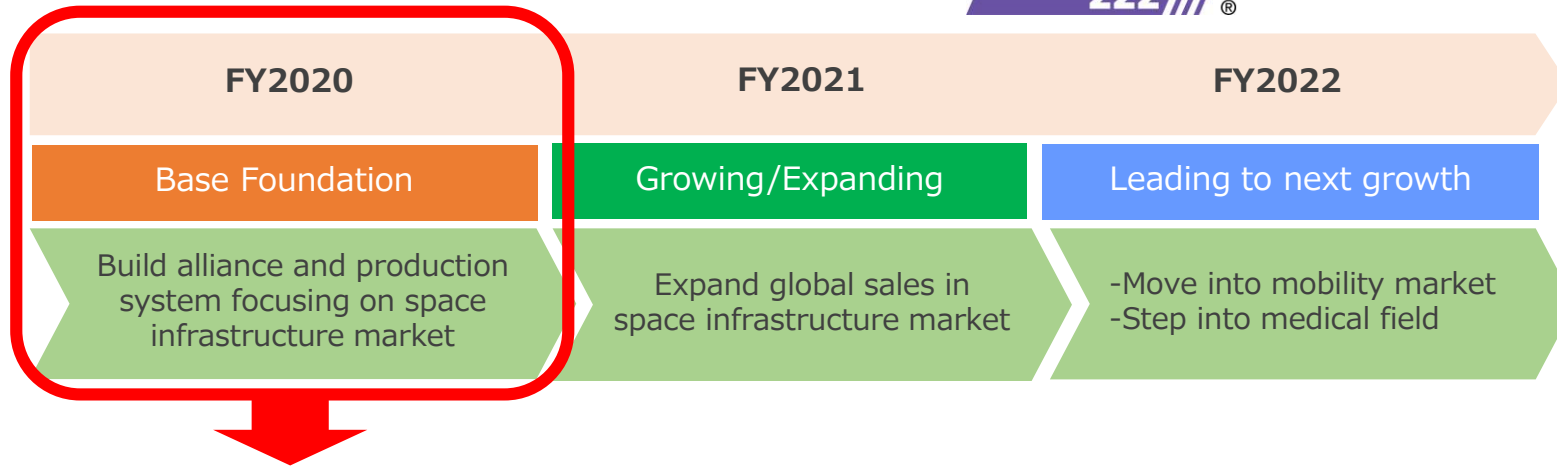
Share Buyback

Ushio purchases own treasury shares, taking flexible approach. We retain our treasury shares of approximately 5% of the total number of issued shares at maximum and cancel the excess portion of the treasury shares in each year.

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Care222 for Disinfection and Virus Inactivation Solution

■ Current progress and business expansion during medium-term management plan



■ Key issues

- Promotion activities to eliminate resistance towards to “UV rays” themselves and realize Care222 is safe and secure under occupied space
- Raising awareness of Care222 as a disinfection and virus inactivation solution
- Accumulate know-how as irradiation process solution to various scenes

- September 2020 Started sales of unit type
- December 2020 Establish module type mass-production line
- End of December 2020 Start supplying modules
- Beginning of 2021 Start sales of products from alliance partners
- Gradually proceed business alliance and establish foundation of product development and sales



■ Care222 Competitive Strength

- Unable to inactivate the virus of “space” and “environmental surface” under occupied space
- Exclusive licensee of Columbia University’s patent which is harmless ultraviolet disinfection process to humans (222nm + specialized filter)
- Production/quality reliability of creating 222nm, eliminating harm wavelength to humans

Care222 related announcements after first quarter financial results briefing (after July 31st, 2020)

Christie introduces far-UVC light fixture (Only in North America)

<https://www.christiedigital.com/commercial-uv-disinfection/> (released on October 29, 2020)



Study Shows Ushio's Care222 Lamps Effectively Inactivate SARS-Cov-2

<https://www.ushio.co.jp/en/news/1002/2020-2020/500671.html> (released on September 5, 2020)



Kobe University-Ushio Inc. Joint Study shows Irradiation of Filtered 222nm UV-C Light on Human Skin Reduces Bacterial Counts While Causing No Skin Damage

<https://www.ushio.co.jp/en/news/1002/2020-2020/500664.html> (released on August 13, 2020)



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Sales Expansion of Exposure Equipment for Latest IC Package Substrates

Large Field Stepper (UX-5) Production and sales

Equipment Sales

Cutting-edge & Next generation package demand expansion

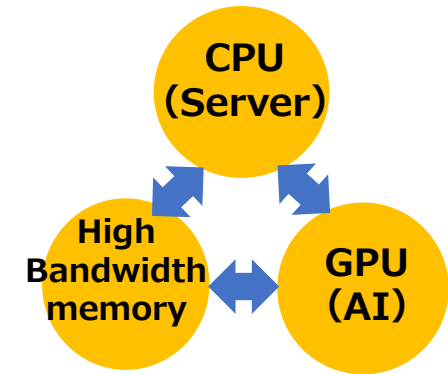
Package substrate manufacturer

Chip Mounting Server Installed

With IoT evolution, demand increased for servers for data centers processing high capacity and high speed data processing

Data center market

>20% growth per year (self-survey)
⇒ Expanding Adoption of next-generation package substrates



● **World wide share:**
Maintain 100%
High-end BGA substrate exposure market (self-survey)



● UX-5 Strength (Feature)

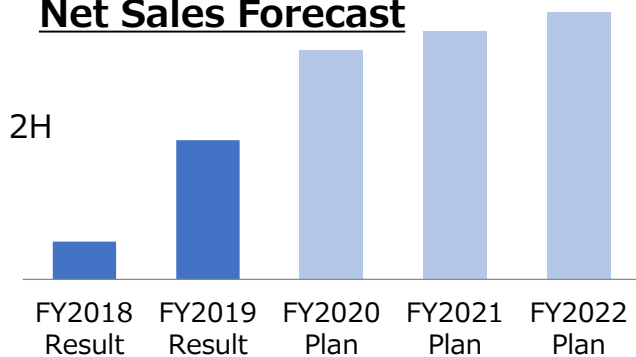
1. Large-area projection
→ High productivity & low CoO
2. Non-contact mask work
→ Yield enhancement
3. Deep focal depth
→ Process margin & substrate warping
4. High Resolution/alignment accuracy
→ Pitch miniaturization & process margin

Large Field Stepper (UX-5) Sales Trend

FY19 (Result)
Contributing to sales from 2H

After FY20 (Plan)
Sales unit expanding

Net Sales Forecast



EUV Light Source for Mask Inspection

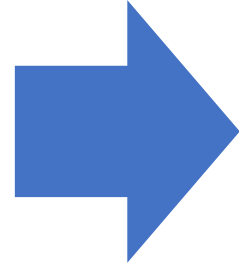


EUV light source for next-generation semiconductor mass-production process
Development, Production, Sales



**Mask Inspection equipment manufacturer/
Research & development institution**

Next-generation semiconductor mass-production needs with EUV lithography technology evolution



Semiconductor device manufacturers

Increase EUV light source needs for inspection and development

Contribution of Ushio's EUV light source

Expect to expand business opportunities of EUV light source for mask inspection

● Ushio EUV Light Source Development History

- 2000 EUV light source development started
- 2001 Established EUVA*
*Extreme Ultraviolet Lithography System Development Association
- 2013 Withdrew from Lithography related development
- 2016 Delivered EUV light source to TNO
- 2018 Delivered first EUV light source for inspection (for test purpose)
- 2019 Delivered and received first acceptance for mass production process

● Ushio Strength

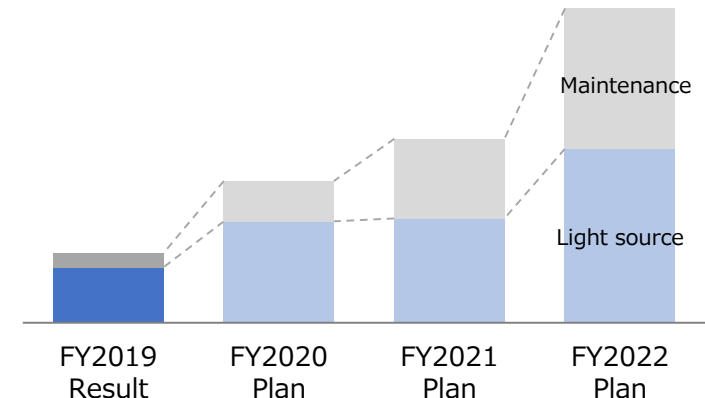
Long business experience in semiconductor industry

+

Many years of experience in EUV technology

(Compact/High-brightness/High Power)

● Sales Forecast



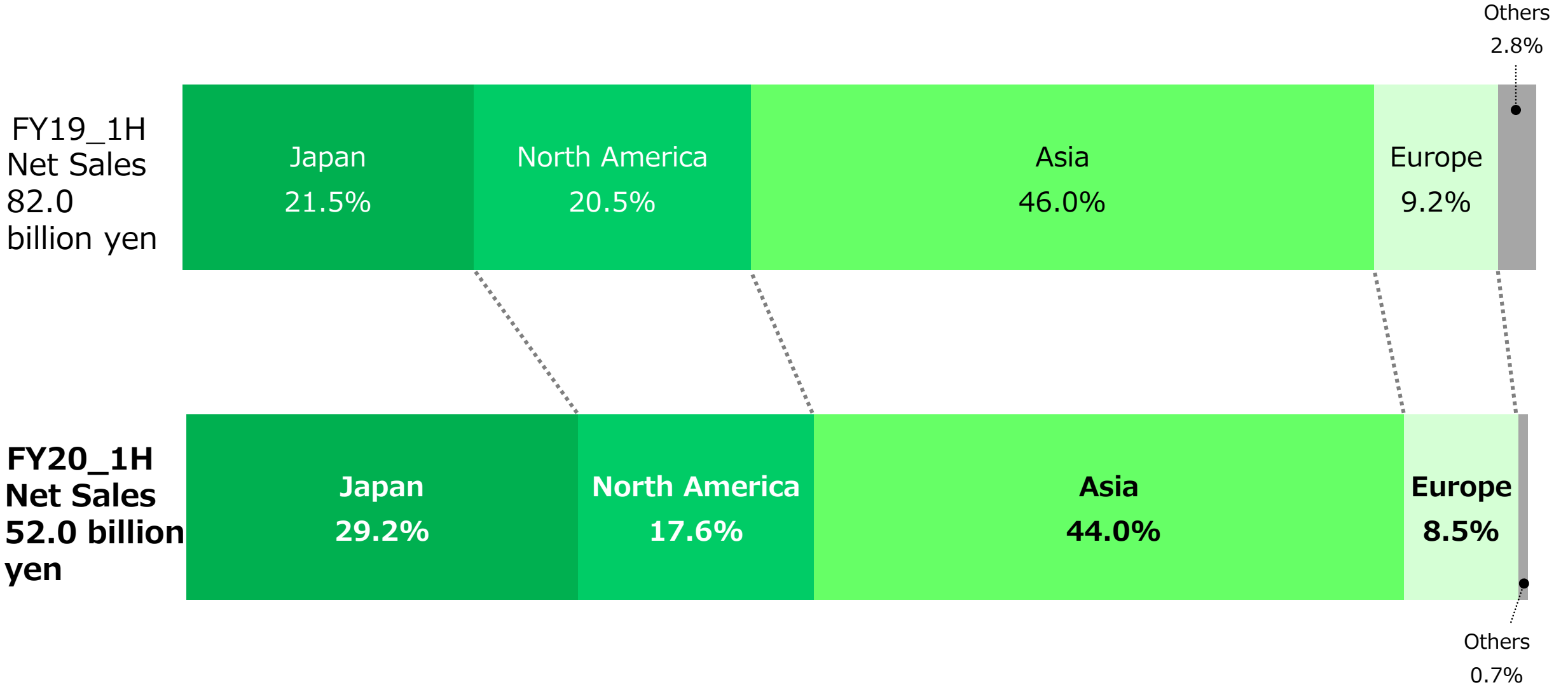
Reference: Summary of Quarterly Financial Results

(billion yen)		FY19				FY20		FY20 2Q - FY19 2Q		FY20 2Q - FY20 1Q	
		1Q	2Q	3Q	4Q	1Q	2Q	Changes	%	Changes	%
Net Sales		38.9	43.0	38.0	38.9	23.6	28.3	▲14.7	▲34.3	4.6	19.6
Operating Income (Loss)		2.1	2.7	1.4	0.3	▲0.7	▲0.3	▲3.0	–	0.4	56.2
Operating Income Ratio (%)		5.5	6.3	3.9	0.8	▲3.1	▲1.1	▲7.4P	–	2.0P	–
Ordinary Income		2.9	2.8	2.5	0.3	0.3	0.0	▲2.8	▲97.3	▲0.2	▲76.1
Profit (Loss) Attributable to Owners of Parent		1.2	1.7	5.7	0.1	▲1.0	▲0.9	▲2.6	–	0.1	13.2
EPS (Yen)		10.02	14.43	47.87	1.22	▲8.76	▲7.60	▲22.03	–	+1.16	13.2
Forex (Yen)	USD	111	108	109	109	108	106	▲2	–	▲2	–
	EUR	124	120	120	121	118	124	4	–	6	–

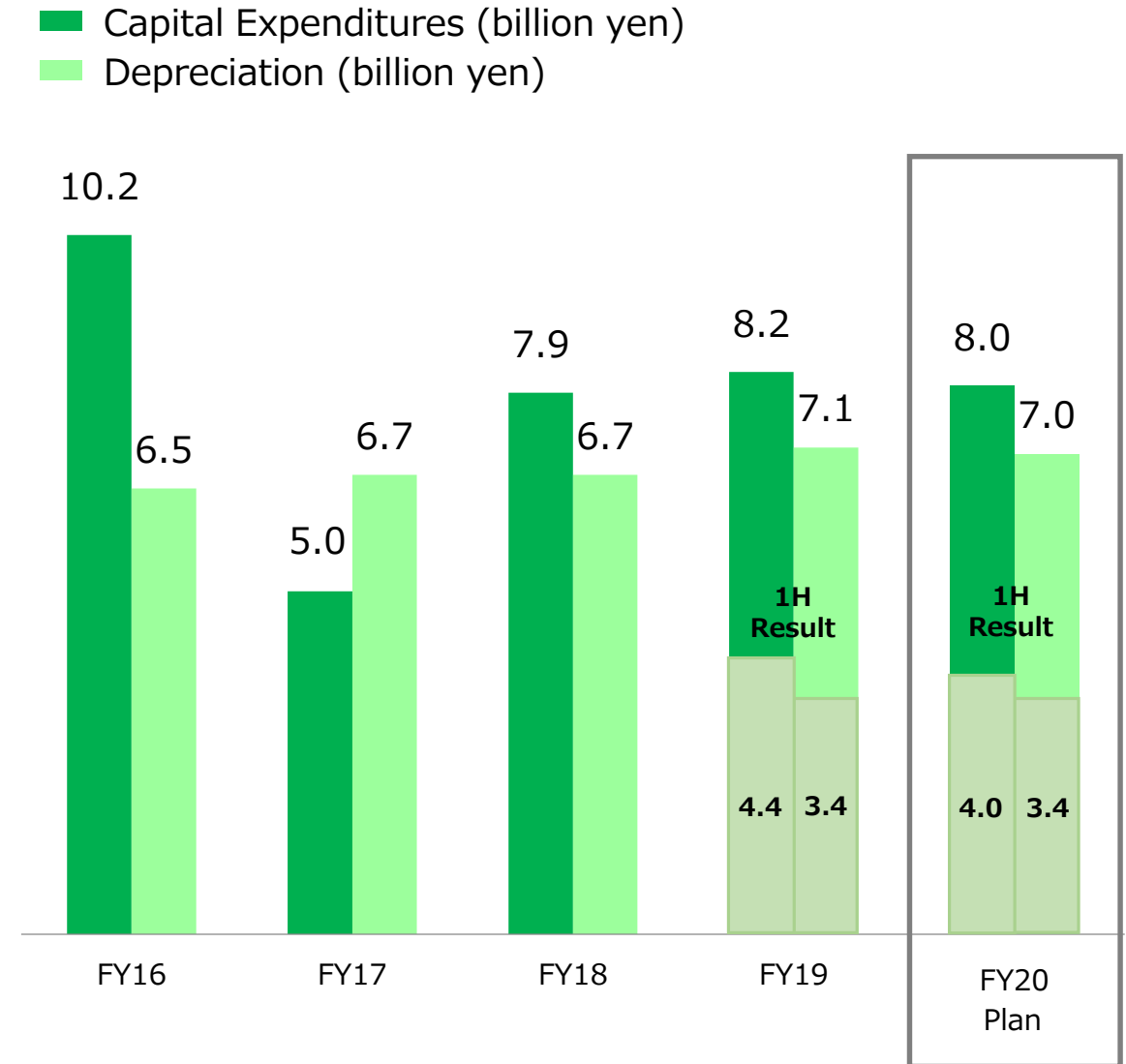
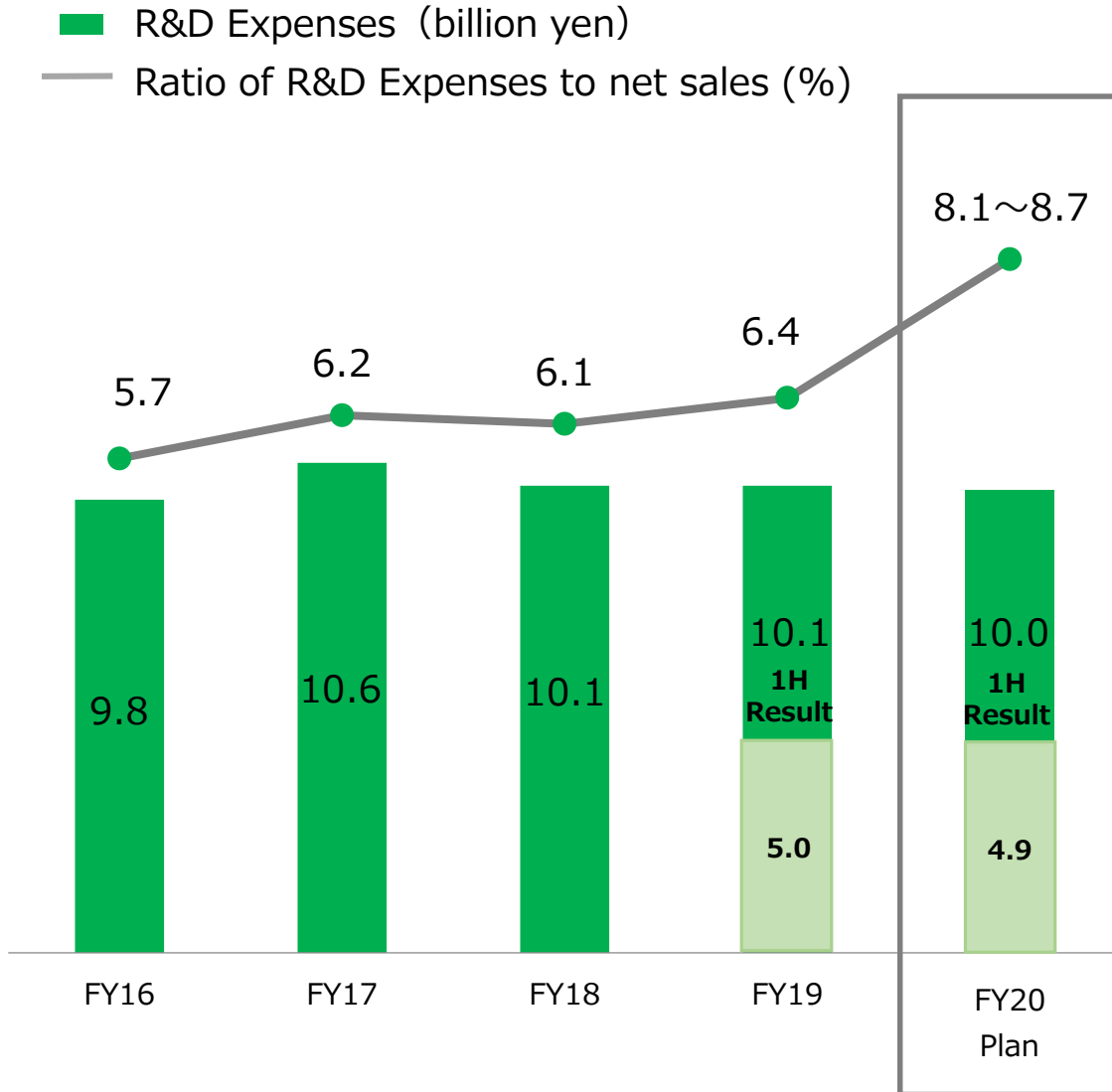
Reference: Summary of Quarterly Financial Results by Business Segments

(billion yen)		FY19					FY20		FY20	FY19	FY20	FY20			
		1Q	2Q	3Q	4Q	Total	1Q	2Q	2Q - 2Q	2Q	2Q - 1Q	2Q - 1Q			
												Changes	%	Changes	%
Light Source Business	Net Sales	15.4	14.9	14.3	13.7	58.5	10.4	10.5	▲4.3	▲29.1	0.1	1.4			
	Operating Income	1.9	1.6	1.0	1.3	6.0	0.4	0.1	▲1.4	▲88.5	▲0.2	▲59.9			
	Operating Income Ratio (%)	12.5	11.2	7.3	10.1	10.3	4.6	1.8	▲9.4P	–	▲2.8P	–			
Optical Equipment Business	Net Sales	8.9	9.1	6.6	11.4	36.1	7.1	9.2	0.1	1.1	2.0	28.9			
	Operating Income (Loss)	0.1	0.2	▲0.1	▲0.7	▲0.5	0.0	0.0	▲0.1	▲62.2	0.0	6.5			
	Operating Income Ratio (%)	1.2	2.4	▲2.0	▲6.8	▲1.6	1.1	0.9	▲1.5P	–	▲0.2P	–			
Imaging Equipment Business	Net Sales	13.7	18.0	16.2	12.7	60.8	5.4	7.9	▲10.0	▲55.8	2.5	47.0			
	Operating Income (Loss)	▲0.0	0.7	0.5	▲0.3	0.9	▲1.2	▲0.6	▲1.3	–	0.6	50.6			
	Operating Income Ratio (%)	▲0.2	4.0	3.4	▲2.7	1.5	▲23.9	▲8.0	▲12.0P	–	15.8P	–			
Others	Net Sales	0.7	0.9	0.7	0.9	3.3	0.6	0.5	▲0.4	▲44.4	▲0.1	▲17.0			
	Operating Income (Loss)	0.0	▲0.0	0.0	▲0.0	0.0	▲0.0	0.0	0.0	–	0.0	–			
	Operating Income Ratio (%)	2.5	▲0.0	3.5	▲1.4	0.9	▲3.6	0.1	0.1P	–	3.7P	–			

Reference: Sales Ratio by Region

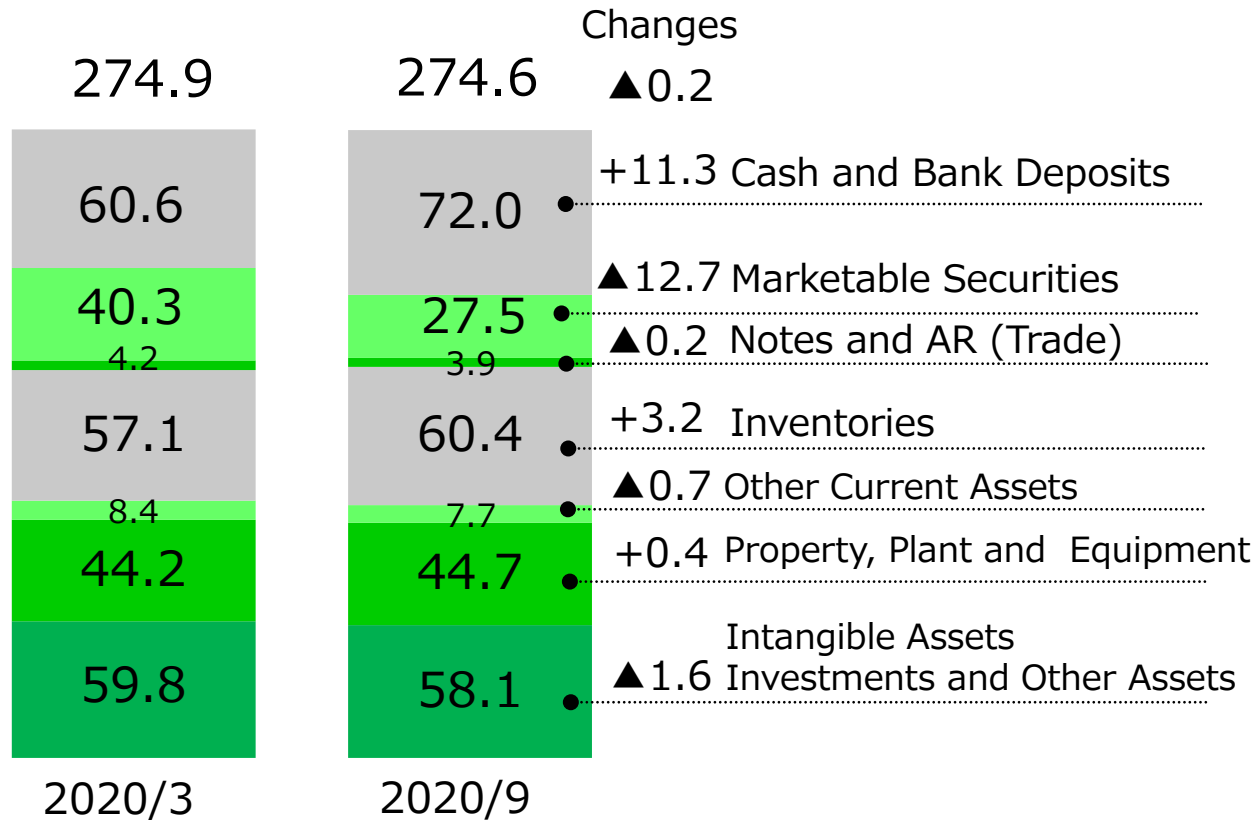


Reference : R&D Expenses/Capital Expenditures and Depreciation

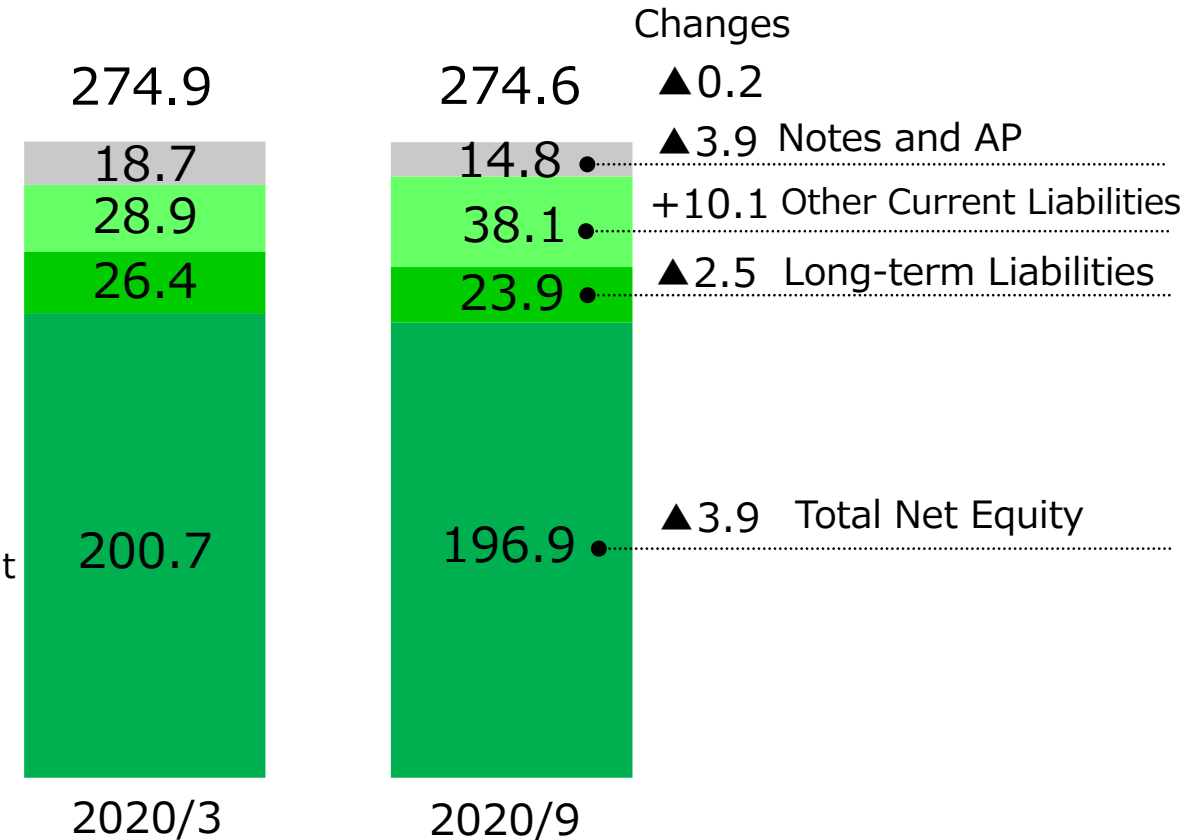


Reference: Balance Sheet

◆ Assets (billion yen)



◆ Liabilities/Total Net Equity (billion yen)



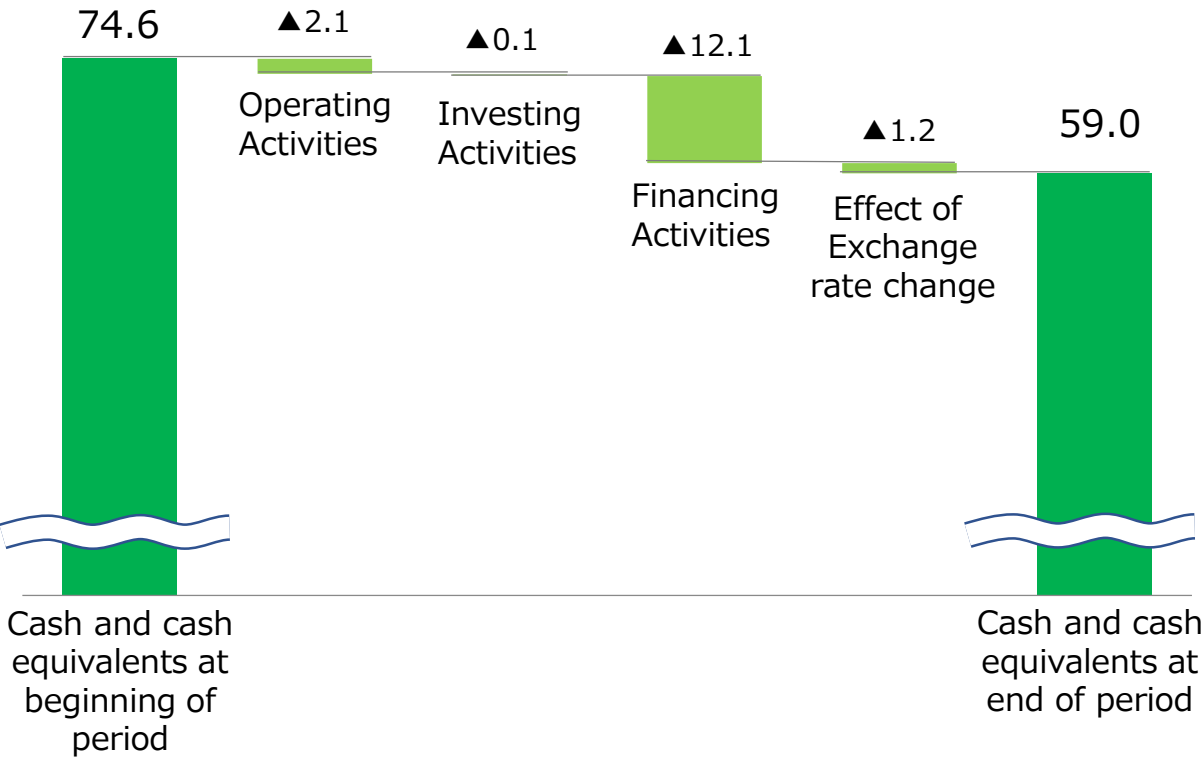
● Turnover (month)	2020/3	2020/9
Receivable-trade	3.0	3.9
Inventories	4.5	6.8

● equity Ratio (%)	2020/3	2020/9
	73.0	71.6

Reference: Cash Flow

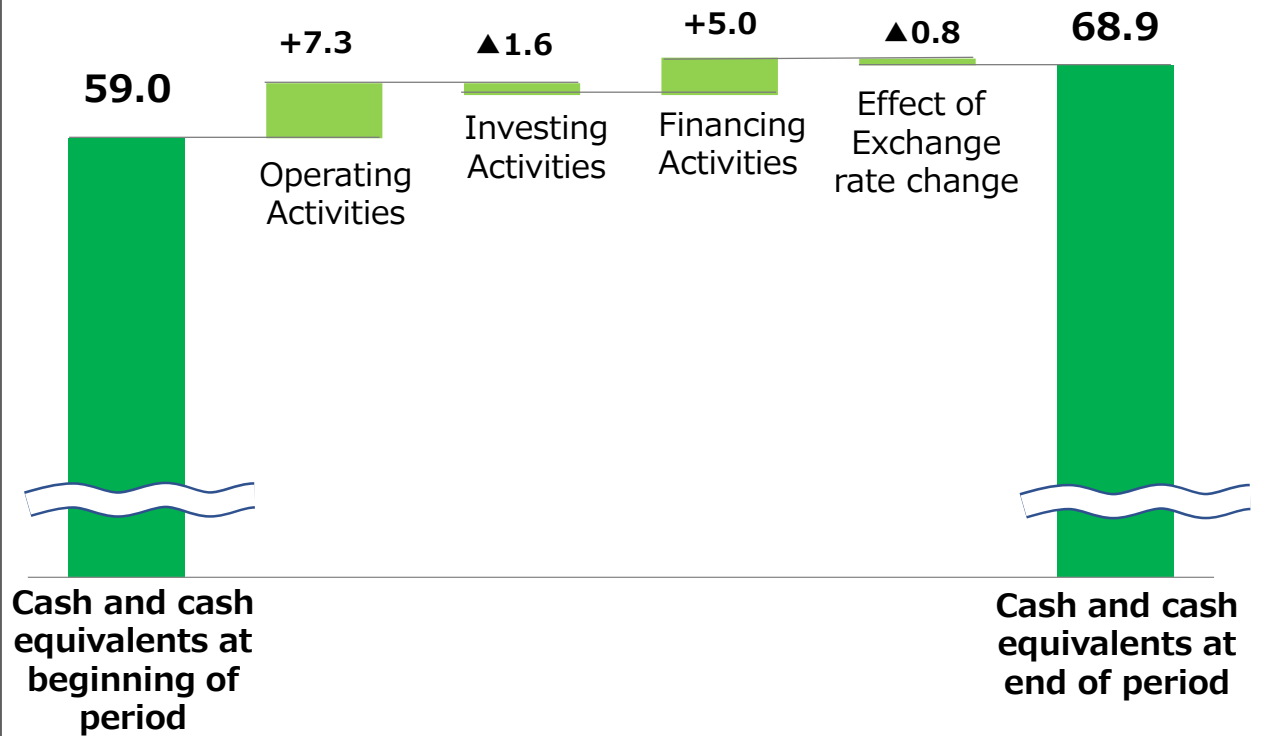
(billion yen)

Operating CF + Investing CF
▲2.2



FY19_1H

Operating CF + Investing CF
+5.7



FY20_1H

AI	Artificial Intelligence
BGA	Ball Grid Array
COF	Chip on Film
CoO	Cost of Ownership
CPU	Central Processing Unite
DI	Direct Imaging
EUV	Extreme Ultraviolet Radiation
FPD	Flat Panel Display
GPU	Graphic Processing Unit
IoT	Internet of Things
LaPH	Laser Phosphor
OA	Office Automation
OLED	Organic Light Emitting Diode
PCB	Printed-Circuit Board
RGB	Red Green Blue
TNO	The Netherlands Organization of Applied Scientific Research
UV	Ultraviolet
5G	5 th Generation Mobile Communication System

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