

FY2019 1st Half Financial Results (Ended August 31, 2019)

FY2019 2nd Half and Full-Year Forecasts (Ending February 29, 2020)

Notes:

- **Starting fiscal 2019, Yaskawa reclassified its business segments through organizational changes designed to optimize Group functions. In addition, we have reviewed the management classification and changed the classification of the destination country/region. Accordingly, the figures for fiscal 2018 have been reclassified into the new segment classification and the country/region of destination. (Please refer to P. 20 and 21)**
- The information within this document is made as of the date of writing. Any forward-looking statements are made according to the assumptions of management and are subject to change as a result of risks and uncertainties. YASKAWA Electric Corporation undertakes no obligation to update or revise these forward-looking statements, whether as a result of new information, future events, or otherwise.
- Figures in this document are rounded off, and may differ from those in other documents such as financial results.

YASKAWA ELECTRIC CORPORATION

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Business Overview

Motion Control

【Core products】

- AC servo motors and controllers
- Linear servo motors
- AC drives



AC servo motor
Σ-7 series



Yaskawa AC drive
new series

GA700

GA500

Matrix
converter
U1000

Robotics

【Core products】

- Industrial robots
 - Arc and spot welding robots, painting robots
 - FPD glass sheet transfer robots, handling robots
- Semiconductor wafer transfer robots
- Biomedical robots
- Collaborative robots



New small robot
MOTOMAN-GP8

7-axis arc-welding
robot

MOTOMAN-AR1440E



Collaborative robot
MOTOMAN-HC10DT
Dust and drip-proof
specification

System Engineering

【Core products】

- Electrical systems for steel plants
- Electrical instrumentation systems for water supply plants and sewage treatment facilities
- Large-scale wind power generator and converter
- PV inverters



Generator and converter for
large-scale wind turbines



Continuous-casting machine



Electrical
instrumentation
systems for water
and sewerage

PV inverter
XGI1000



Other

【Core products】

- Logistics

1. FY2019 1H Financial Results

(Six Months Ended August 31, 2019)

FY2019 1H Financial Results (Highlights)

- Sales and operating income decreased due to the impact of the prolonged trade friction between the United States and China and the postponement of semiconductor-related investments.

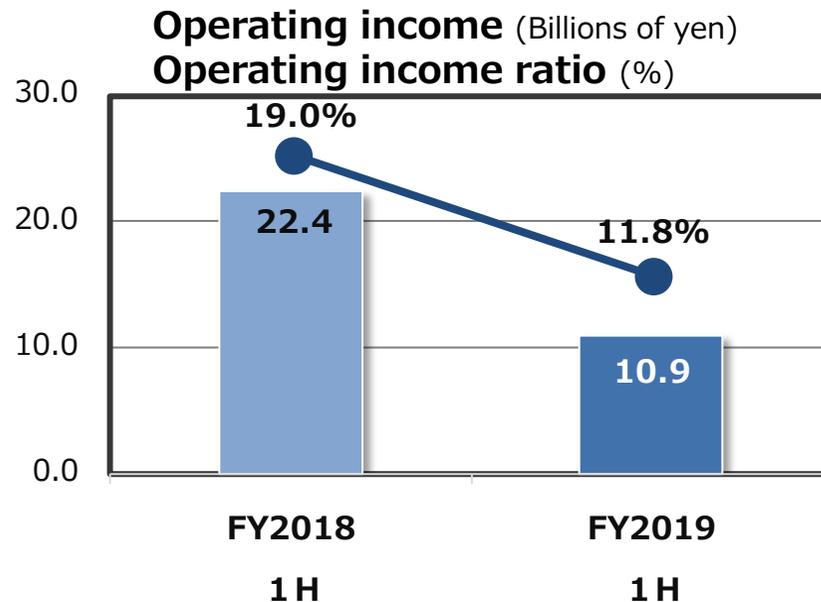
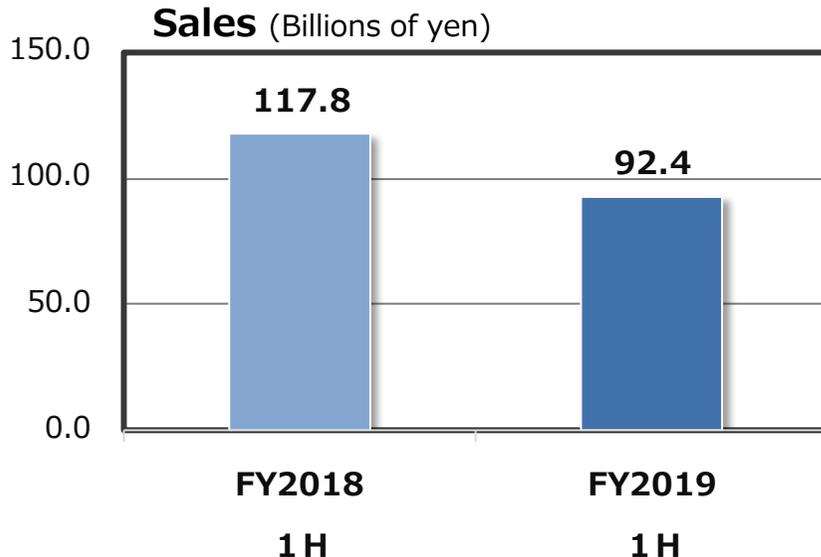
	FY2019	FY2018	Changes	
	1 H	1 H	Amounts	%
Net sales	¥ 211.8bn.	¥ 248.2bn.	-¥ 36.5bn.	-14.7%
Operating income	¥ 12.5bn.	¥ 30.5bn.	-¥ 18.1bn.	-59.2%
Ordinary income	¥ 12.8bn.	¥ 30.6bn.	-¥ 17.8bn.	-58.2%
Profit attributable to owners of parent	¥ 8.8bn.	¥ 26.1bn.	-¥ 17.3bn.	-66.3%

FY2019 1H Financial Results by Business Segment

- Sales and operating income decreased in Motion Control and Robotics
- Sales increased in System Engineering due to new consolidation

	FY2019 1H		FY2018 1H		Changes	
	Results	Income ratio	Results	Income ratio	Amounts	%
(Billions of yen)						
Net sales	211.8		248.2		-36.5	-14.7%
Motion Control	92.4		117.8		-25.4	-21.6%
Robotics	80.6		88.2		-7.6	-8.6%
System Engineering	27.4		23.5		+3.9	+16.6%
Other	11.4		18.8		-7.3	-39.1%
Operating income	12.5	5.9%	30.5	12.3%	-18.1	-59.2%
Motion Control	10.9	11.8%	22.4	19.0%	-11.5	-51.3%
Robotics	3.4	4.2%	9.2	10.5%	-5.9	-63.7%
System Engineering	-0.7	-2.7%	-0.7	-2.9%	-0.0	-
Other	-0.2	-1.6%	0.6	3.1%	-0.8	-
Elimination or Corporate	-0.9	-	-1.0	-	+0.1	-
Ordinary income	12.8	6.0%	30.6	12.3%	-17.8	-58.2%
Profit attributable to owners of parent	8.8	4.2%	26.1	10.5%	-17.3	-66.3%

Business Segment Overview: Motion Control



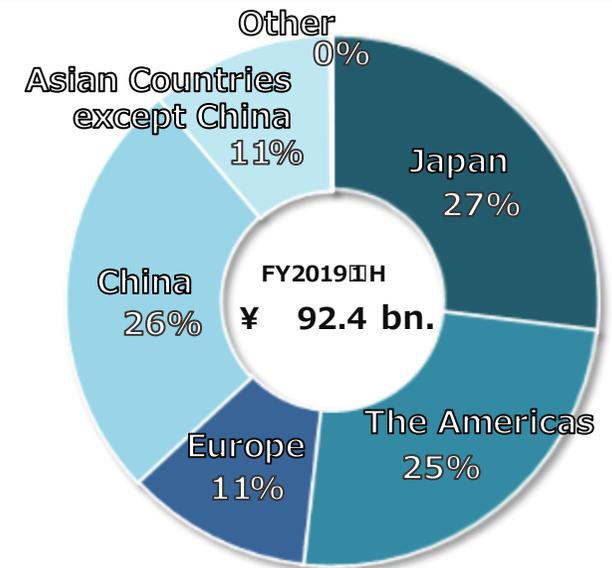
[Sales]

- AC servo & Controller: decreased due to a slump in demand for smartphone-related products, postponement of semiconductor-related investment and an increase in the impact of prolonged trade friction between the United States and China
- Drives: solid performance due to environment and social infrastructure-related capital investments and solid oil and gas-related demand in the United States

[Operating income]

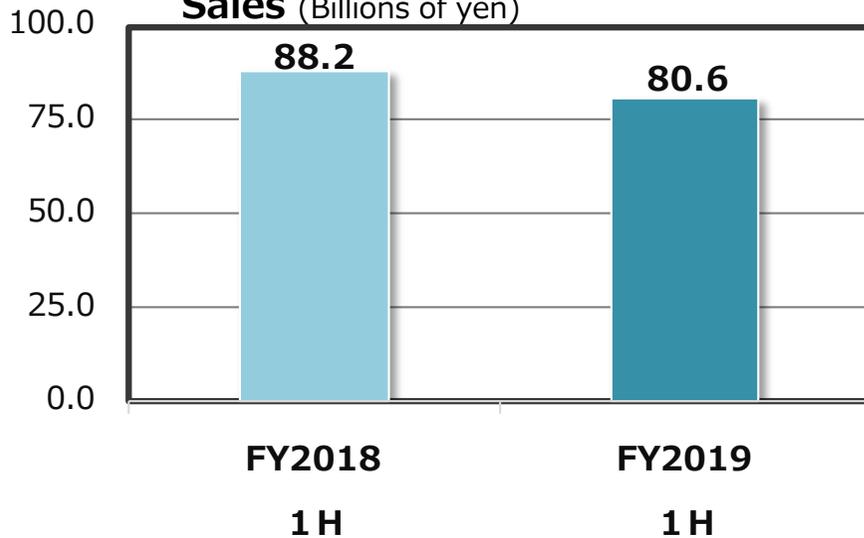
- Decreased due to decline in AC servo sales caused by demand decline as well as the lower operating ratio

Sales breakdown by region



Business Segment Overview: Robotics

Sales (Billions of yen)



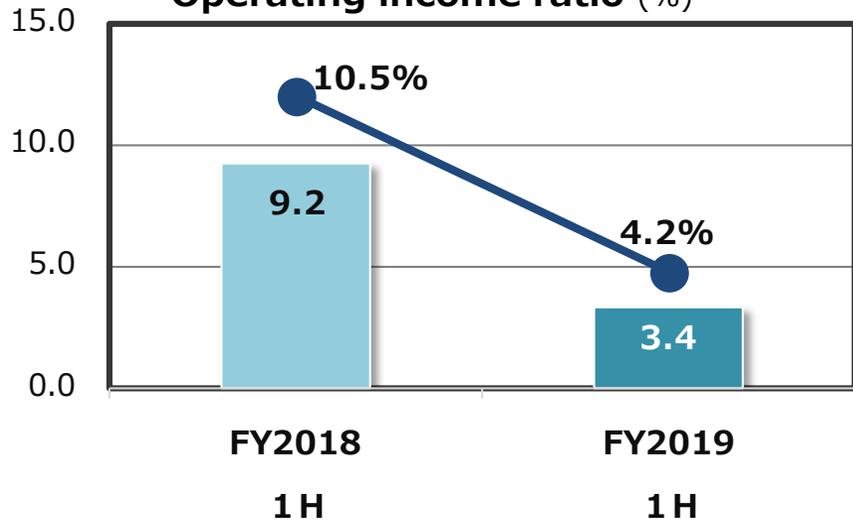
[Sales]

- Decreased due to economic slowdown in regions except Japan, while the automobile-related sales were solid in Japan
- Sales were sluggish especially in China due to the impact of trade friction between the United States and China

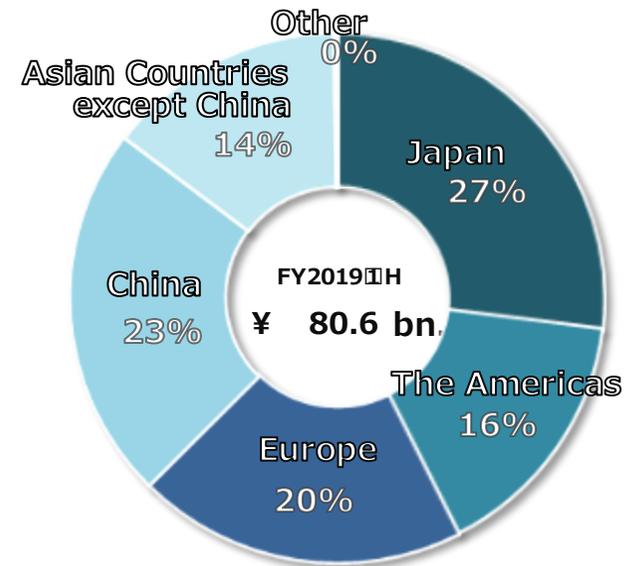
[Operating income]

- Decreased due to a decline in sales and inventory adjustments that led to a deterioration in the operating rate

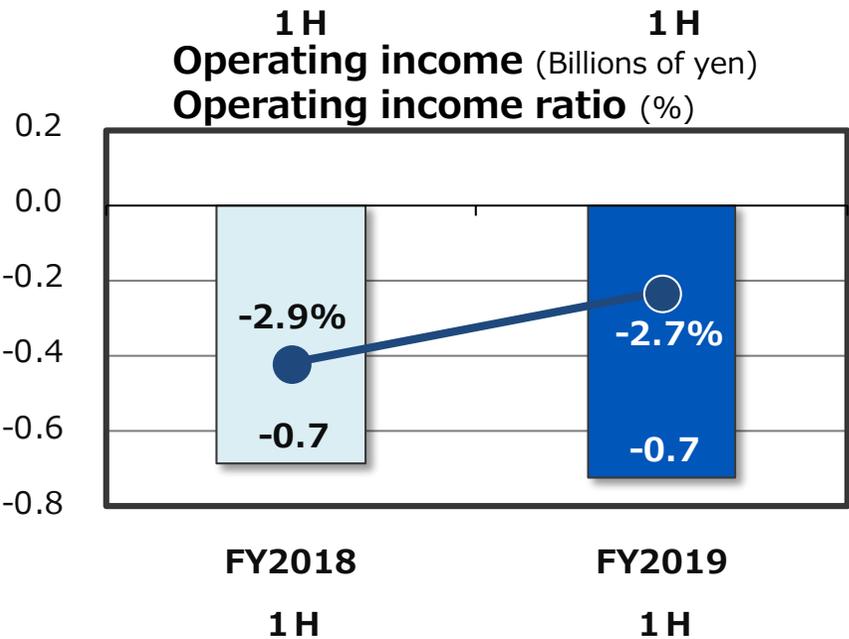
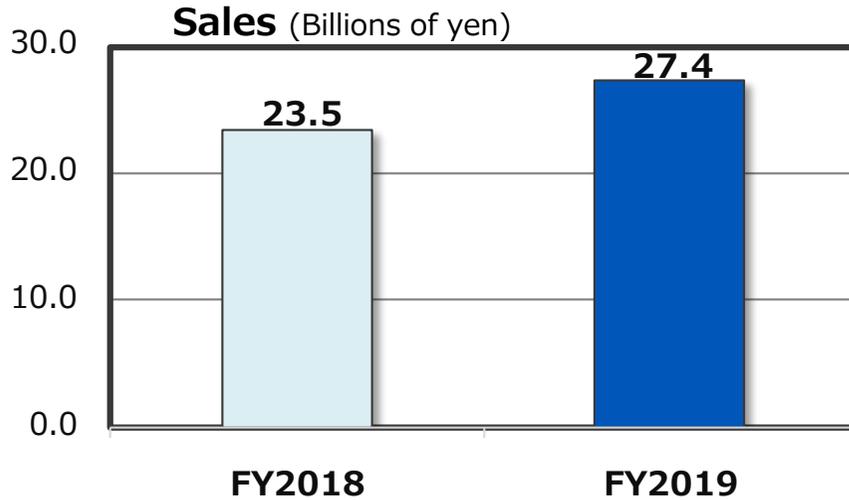
Operating income (Billions of yen)
Operating income ratio (%)



Sales breakdown by region



Business Segment Overview: System Engineering



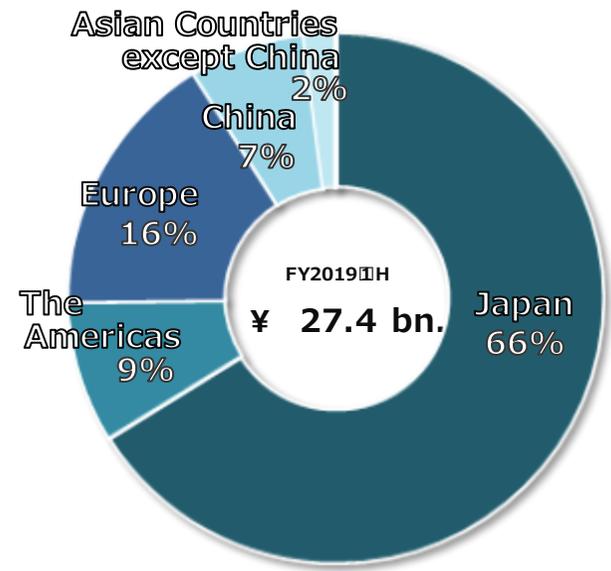
[Sales]

- Solid sales for electrical systems for water and sewage systems in Japan as well as for port cranes
- Sales of PV inverters decreased, and sales for the steel plants also declined due to the postponement of projects

[Operating income]

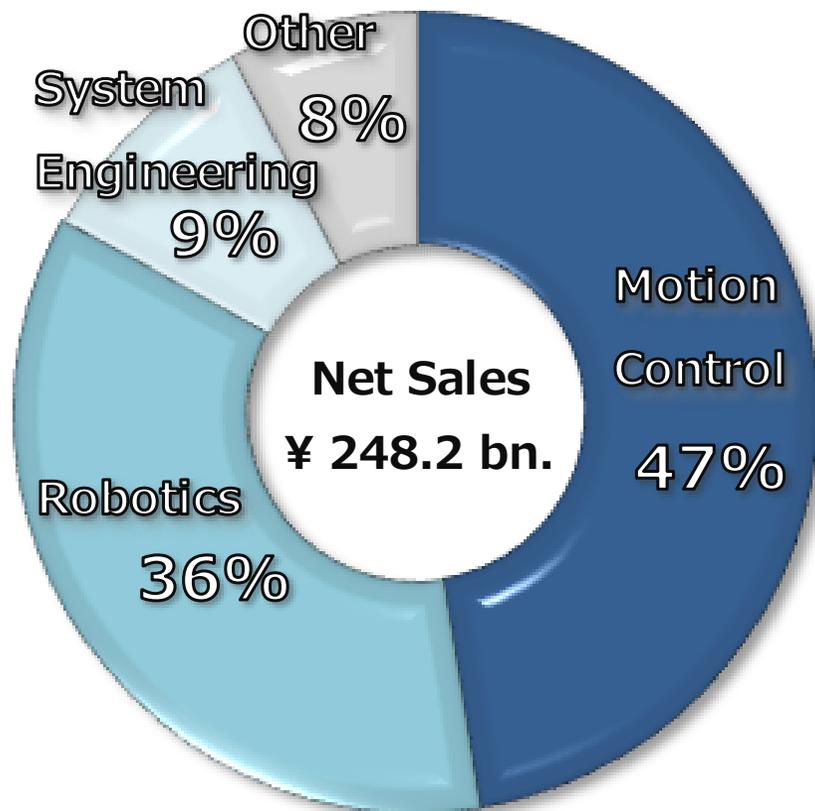
- Operating loss increased slightly

Sales breakdown by region

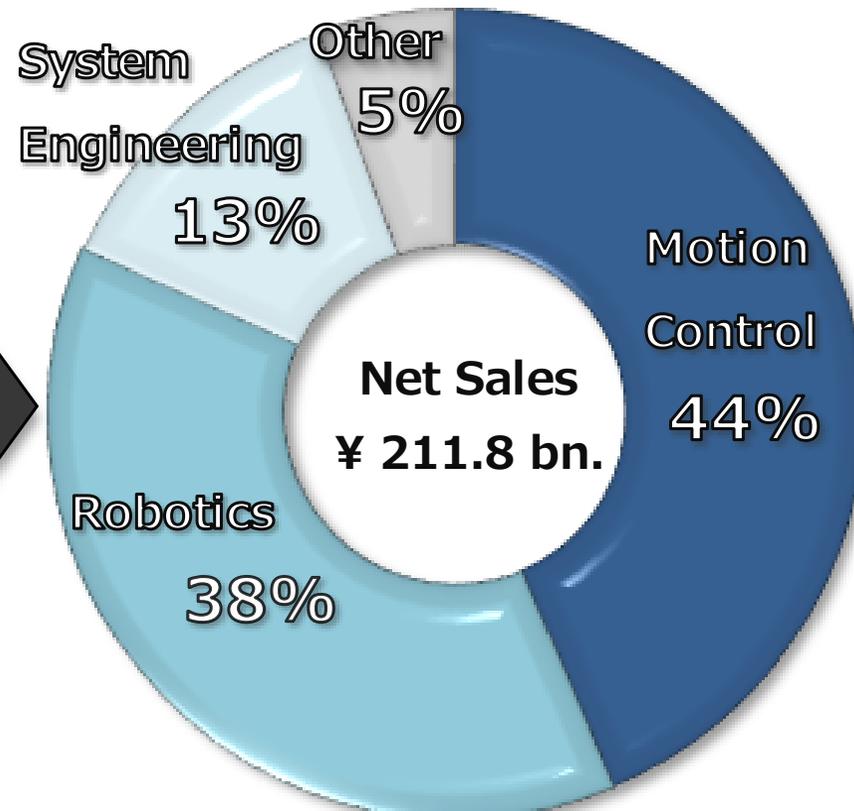


Sales Breakdown by Business Segment

FY2018 1 H



FY2019 1 H



Sales Breakdown by Destination (1)

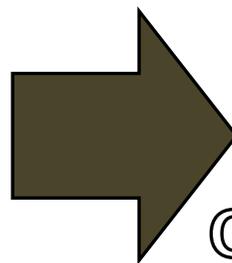
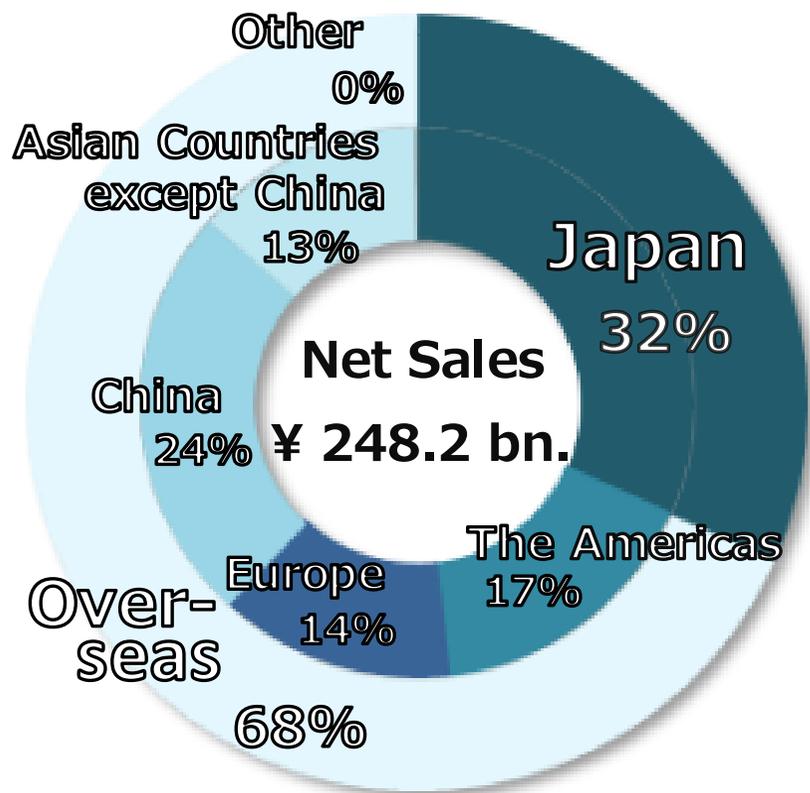
- Sales declined especially in China and other Asian countries

(Billions of yen)	FY2019	FY2018	Changes	
	1H	1H	Amounts	%
Net sales	211.8	248.2	-36.5	-14.7%
Japan	74.8	78.6	-3.7	-4.8%
Overseas	136.9	169.7	-32.7	-19.3%
The Americas	38.0	41.0	-3.0	-7.3%
Europe	30.9	34.3	-3.4	-9.8%
China	45.2	60.8	-15.6	-25.7%
Asian Countries except China	22.5	33.3	-10.7	-32.3%
Other	0.3	0.3	-0.0	-4.4%

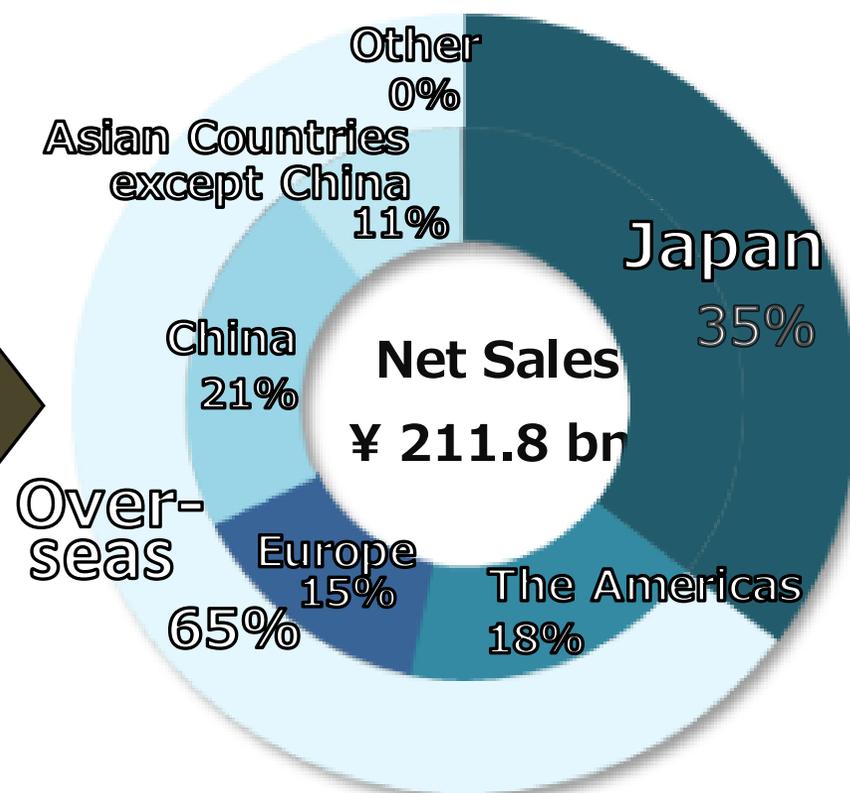
Note: Europe includes Middle East and Africa.

Sales Breakdown by Destination (2)

FY2018 1 H



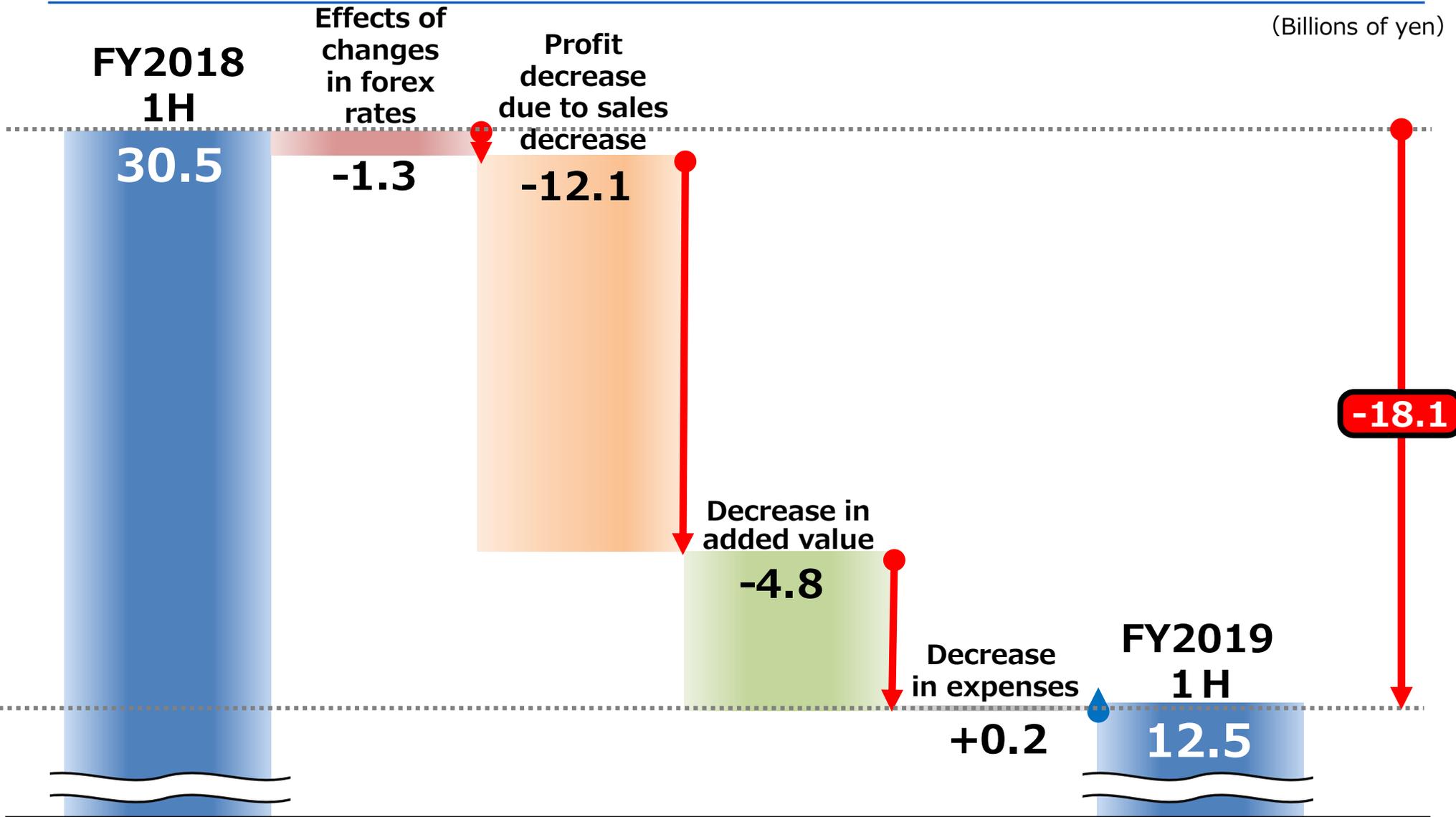
FY2019 1 H



Note: Europe includes Middle East and Africa.

Breakdown of Changes in Operating Income (FY2018 1H → FY2019 1H)

(Billions of yen)



Measures for FY2019 1H

➤ Strengthening the robot lineup to capture new markets

➔ Cobot with dust and drip-proof specification
"MOTOMAN-HC 10 DT" released (July 2019)

➔ New multipurpose robot "MOTOMAN-GP 20 HL"
to promote automation in various fields
released (June 2019)

➔ Cobot to reduce the risk of contamination
"MOTOMAN-HC 10 DTF" exhibited at FOOMA JAPAN (July 2019)

MOTOMAN-HC 10 DT
Dust and drip-proof specification



MOTOMAN-GP 20 HL



At FOOMA JAPAN
cobot demonstrated cake decoration



➤ Enhanced disclosure of ESG information

➔ Set and disclosed activity targets (KPI) for non-financial information
in the integrated report "YASKAWA Report 2019"

<https://www.yaskawa-global.com/ir/materials/annual>

➔ Announced support for The Task Force on Climate-Related
Financial Disclosures

<https://www.yaskawa-global.com/newsrelease/news/24980>

YASKAWA Report
2019



2. FY2019/2H and Full-Year Financial Forecasts

(Year Ending February 29, 2020)

FY2019 Financial Forecasts (Highlight)

- Full-year forecasts were revised down based on recent order trends

	FY2019 Forecasts	FY2018 Results	Changes		FY2019 Previous forecasts*
			Amounts	%	
Net sales	¥ 420.0bn.	¥ 474.6bn.	-¥ 54.7bn.	-11.5%	¥ 465.0bn.
Operating income	¥ 25.0bn.	¥ 49.8bn.	-¥ 24.8bn.	-49.8%	¥ 46.5bn.
Ordinary income	¥ 26.0bn.	¥ 50.8bn.	-¥ 24.8bn.	-48.9%	¥ 48.0bn.
Profit attributable to owners of parent	¥ 19.0bn.	¥ 41.2bn.	-¥ 22.2bn.	-53.8%	¥ 35.0bn.

※ Announced on April 11, 2019

FY2019 Full-Year Financial Forecasts by Business Segment

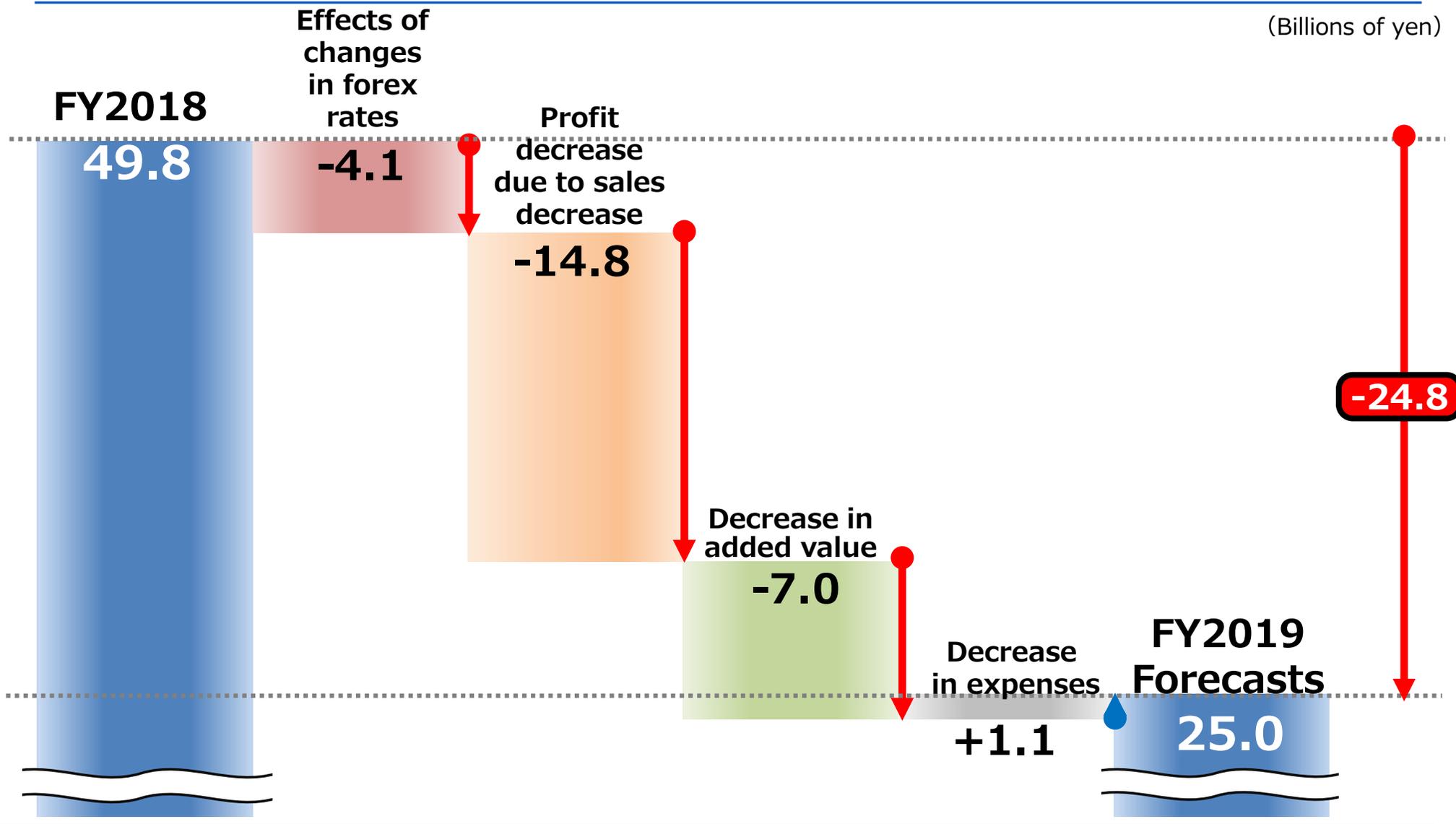
(Billions of yen)	FY2019		FY2018		Changes		FY2019	
	Forecasts	Income ratio	Results After business reclassification*1	Income ratio	Amounts	%	Previous forecasts**2	Income ratio
Net sales	420.0	/	474.6	/	-54.7	-11.5%	465.0	/
Motion Control	181.3	/	213.3	/	-32.0	-15.0%	207.0	/
Robotics	157.5	/	178.0	/	-20.5	-11.5%	175.7	/
System Engineering	56.9	/	51.6	/	+5.2	+10.2%	54.6	/
Other	24.3	/	31.8	/	-7.4	-23.4%	27.6	/
Operating income	25.0	6.0%	49.8	10.5%	-24.8	-49.8%	46.5	10.0%
Motion Control	20.4	11.3%	34.2	16.1%	-13.9	-40.5%	30.6	14.8%
Robotics	6.6	4.2%	17.3	9.7%	-10.7	-61.8%	17.5	10.0%
System Engineering	0.0	0.0%	-0.3	-0.5%	+0.3	-	0.7	1.2%
Other	-0.1	-0.6%	0.4	1.4%	-0.6	-	-0.4	-1.3%
Elimination or Corporate	-1.9	-	-2.0	-	+0.1	-	-2.0	-
Ordinary income	26.0	6.2%	50.8	10.7%	-24.8	-48.9%	48.0	10.3%
Profit attributable to owners of parent	19.0	4.5%	41.2	8.7%	-22.2	-53.8%	35.0	7.5%

*1 Figures for fiscal 2018 have been restated to reflect the impact of revisions to segment classifications that takes effect in fiscal 2019.
Please refer to P.20 for details.

*2 Announced on April 11, 2019

Breakdown of Changes in Operating Income (FY2018 → FY2019 Forecasts)

(Billions of yen)



Measures for FY2019 2H

➤ Establishing a business model for "i³-Mechatronics"

➔ Enhance development capabilities

- Speed up the development of "YRM Controller (tentative name)" to improve the efficiency of cell production, and make reference exhibit at IIFES Exhibition (Nov. 2019) and International Robot Exhibition (Dec. 2019)
- Prepare for the establishment of the Yaskawa Technology Center (tentative name) *Scheduled to open in 2020

➔ Enhance sales capabilities

- Incorporate the service business that a subsidiary* has been in charge of for speedy solution proposals and improved product quality *Yaskawa Electric Engineering Corp.
- Prepare for the launch of new products to respond to the rise in the semiconductor market

➔ Enhance production capabilities

- Deploy the production system of Yaskawa Solution Factory to the AC servo factory in China and to factories of AC drives and robots in Japan



Image of Yaskawa Technology Center (tentative name)

➤ Strengthening the management base through digital management

➔ Establish realtime management and proactive management style

- Promote "visualization" of data using IT, and achieve global centralization of management information

3 . Reference

Retroactive application of business reclassification to the FY2018 results

Reclassified the PM motor business of Yaskawa Motor Co. Ltd., which used to be included in System Engineering, as Motion Control starting FY2019

(Unit: Billions of yen)	FY2018 (After segment revision)							Changes Full-Year
	1Q	2Q	1H	3Q	4Q	2H	Full-Year	
Net sales	128.2	120.0	248.2	113.1	113.3	226.4	474.6	-
Motion Control	61.8	56.0	117.8	50.3	45.2	95.5	213.3	+7.8
Robotics	43.9	44.3	88.2	43.6	46.2	89.8	178.0	-
System Engineering	11.9	11.5	23.5	12.4	15.8	28.2	51.6	-7.8
Other	10.6	8.2	18.8	6.8	6.2	13.0	31.8	-
Operating income	17.2	13.3	30.5	11.1	8.1	19.3	49.8	-
Motion Control	12.4	9.9	22.4	7.3	4.6	11.9	34.2	+0.3
Robotics	5.0	4.2	9.2	4.4	3.7	8.1	17.3	-
System Engineering	-0.4	-0.3	-0.7	0.1	0.3	0.4	-0.3	-0.3
Other	0.6	-0.0	0.6	-0.1	0.0	-0.1	0.4	-
Elimination or Corporate	-0.5	-0.5	-1.0	-0.4	-0.5	-0.9	-2.0	-

Retroactive application of destination change to the FY2018 results

- Beginning in FY 2019, management categories were revised and the classification of destination countries and regions was changed.
- Transferred the results of Middle East and Africa from "Other" to "Europe"
- Transferred the results of Hong Kong from "Asian countries except China" to "China"

FY2018 (After destination change)

Changes

Full-Year

(Unit: Billions of yen)

1Q

2Q

1H

3Q

4Q

2H

Full-Year

Full-Year

	1Q	2Q	1H	3Q	4Q	2H	Full-Year	Changes Full-Year
Net sales	128.2	120.0	248.2	113.1	113.3	226.4	474.6	-
Japan	40.2	38.4	78.6	35.3	40.6	76.0	154.5	-
Overseas	88.0	81.6	169.7	77.8	72.7	150.4	320.1	-
The Americas	19.8	21.2	41.0	22.3	21.6	43.9	84.9	-
Europe	17.2	17.0	34.3	19.5	16.7	36.1	70.4	+3.9
China	34.2	26.6	60.8	23.0	19.7	42.6	103.4	+3.2
Asian Countries except China	16.5	16.7	33.3	12.9	14.7	27.7	60.9	-3.2
Other	0.2	0.1	0.3	0.1	0.1	0.1	0.4	-3.9

Capital Expenditure, R&D Investment, Forex Rates

Capital expenditure, R&D investment

(Unit : Billions of Yen)

	FY 2017	FY 2018	FY 2019 (Plan)
Capital expenditure	19.69	35.65	20.00
Depreciation and Amortization	12.69	14.31	15.00
R&D investment	19.07	20.79	21.00

Forex rates

Note: Average rate during the period

(Unit : Yen)

	FY 2017			FY 2018			FY 2019 (Forecasts)		
	1H	2H	Full-Year	1H	2H	Full-Year	1H (Result)	2H	Full-Year
U.S. dollar	111.5	111.5	111.5	109.3	111.7	110.5	109.2	105.0	107.1
Euro	124.4	133.3	128.8	129.9	127.8	128.9	122.6	120.0	121.3
Yuan	16.35	17.08	16.71	16.81	16.28	16.56	15.91	15.00	15.46
Won	0.099	0.101	0.099	0.100	0.099	0.100	0.093	0.090	0.092

Forex sensitivity

(Unit : Billions of Yen)

	Impact of 1% fluctuation (FY2019, full-year)	
	Net sales	Operating income
U.S. dollar	approx. 0.86	approx. 0.17
Euro	approx. 0.67	approx. 0.13
Yuan	approx. 0.88	approx. 0.21
Won	approx. 0.23	approx. 0.13

Financial Indices

As of February 28, 2019

➤ Shareholders' equity ratio	54.1%
➤ Shareholders' equity	246.7 billion yen
➤ Interest-bearing debt	48.7 billion yen
➤ D/E ratio	0.20
(Net D/E ratio)	0.04
➤ Inventory	111.5 billion yen
Turnover	2.8 months
➤ ROE	17.1%
➤ ROIC	17.2%

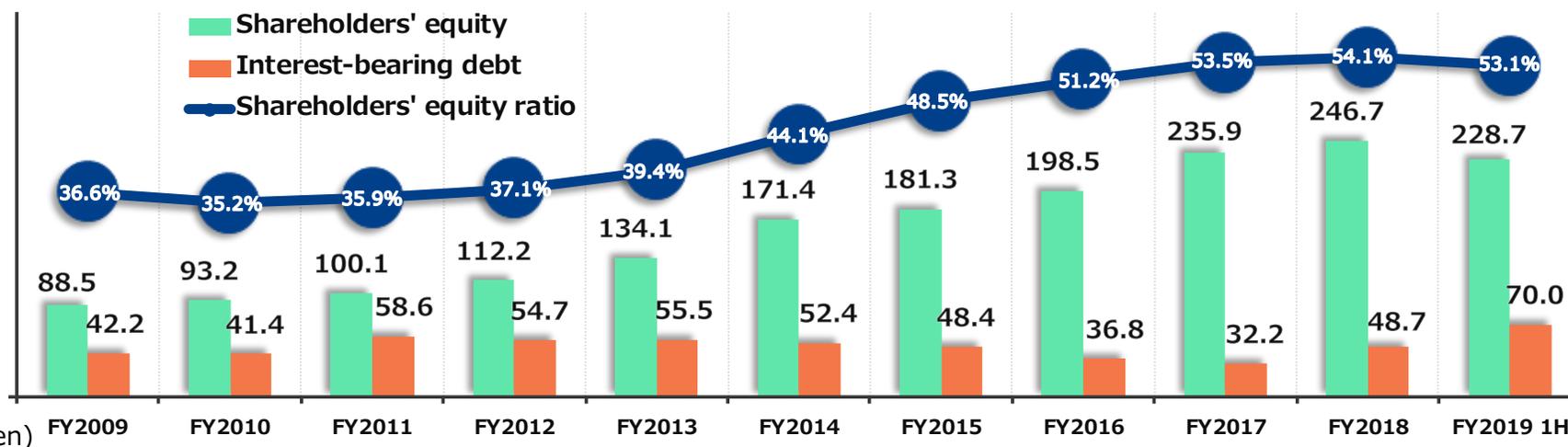
As of August 31, 2019

➤ Shareholders' equity ratio	53.1%
➤ Shareholders' equity	228.7 billion yen
➤ Interest-bearing debt	70.0 billion yen
➤ D/E ratio	0.31
(Net D/E ratio)	0.15
➤ Inventory	101.5 billion yen
Turnover	2.9 months



*Interest-bearing debt includes lease obligations.
 *Inventory at the end of the period is used for calculating turnover months.
 *ROE= Net income attributable to owners of parent / Shareholders' equity (average of beginning and end of fiscal year)
 *ROIC= Net income attributable to owners of parent / Invested capital

(Billions of yen)

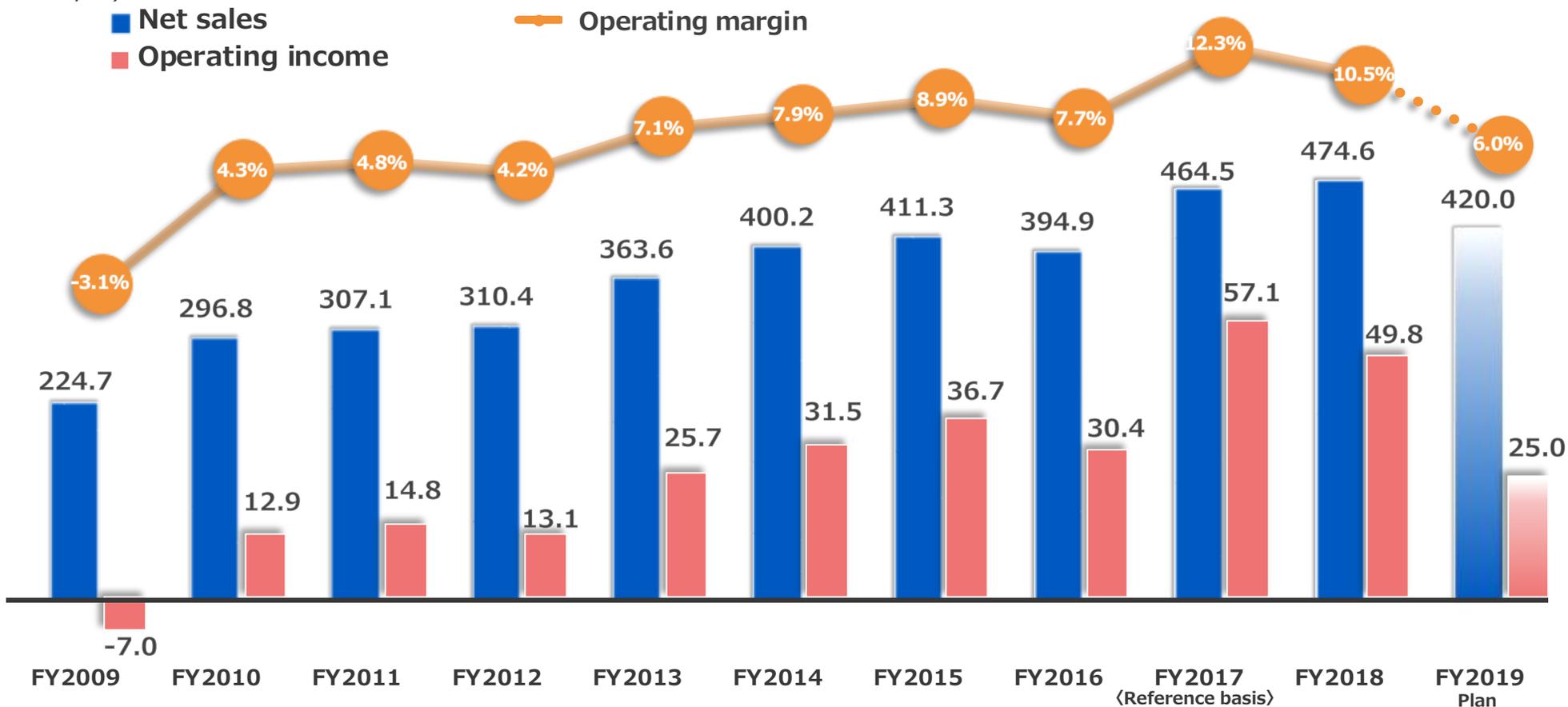


(Billions of yen)

	FY2009	FY2010	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019 1H
Operating CF	4.0	2.5	6.4	24.6	24.0	29.0	32.0	33.8	46.1	32.8	6.9
Investment CF	- 6.5	- 6.7	- 11.9	- 18.1	- 16.9	- 27.9	- 22.4	- 18.9	- 18.9	- 27.1	- 10.5
Free CF	- 2.4	- 4.3	- 5.5	6.6	7.0	1.1	9.5	14.8	27.2	5.7	- 3.6

Net Sales/Operating Income (FY2009 - FY2019 Forecasts)

(Billions of yen)



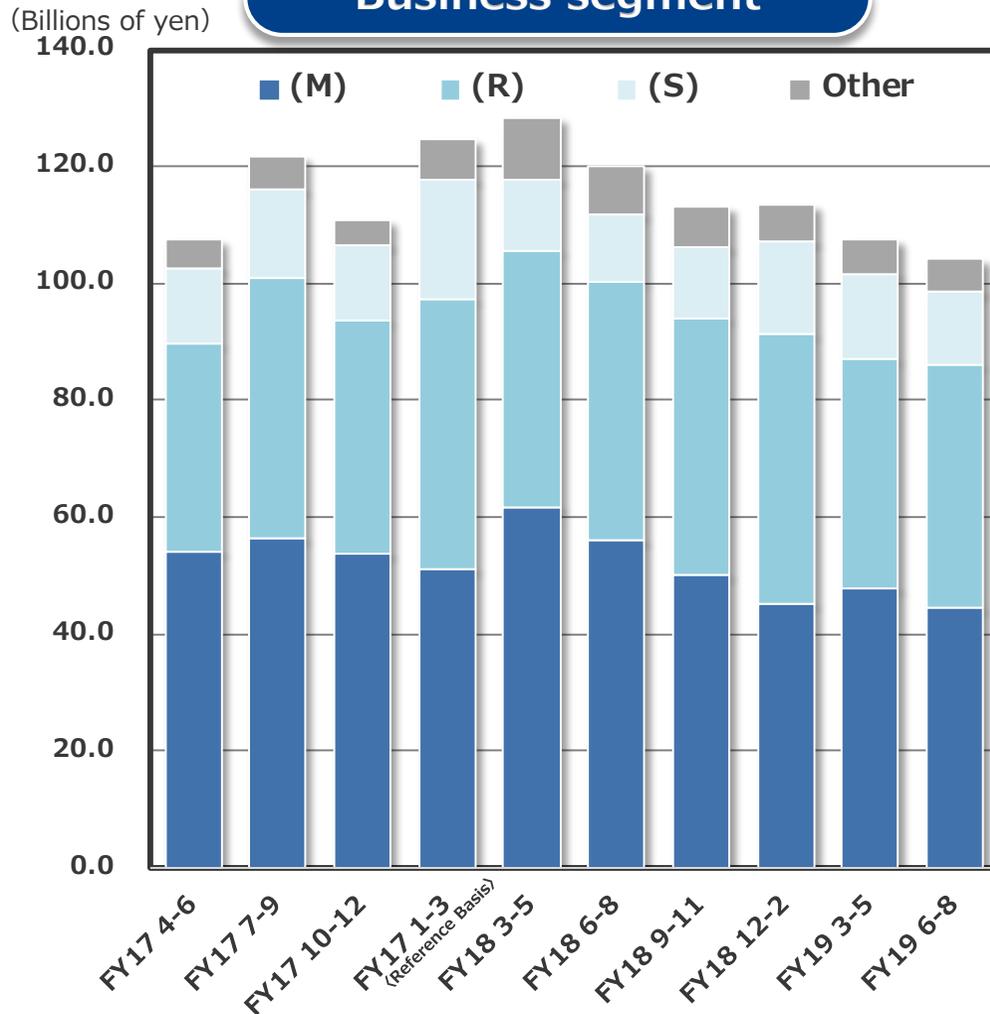
Challenge 100 **Realize 100** **Dash 25** **Challenge 25**

Mid-term business plans

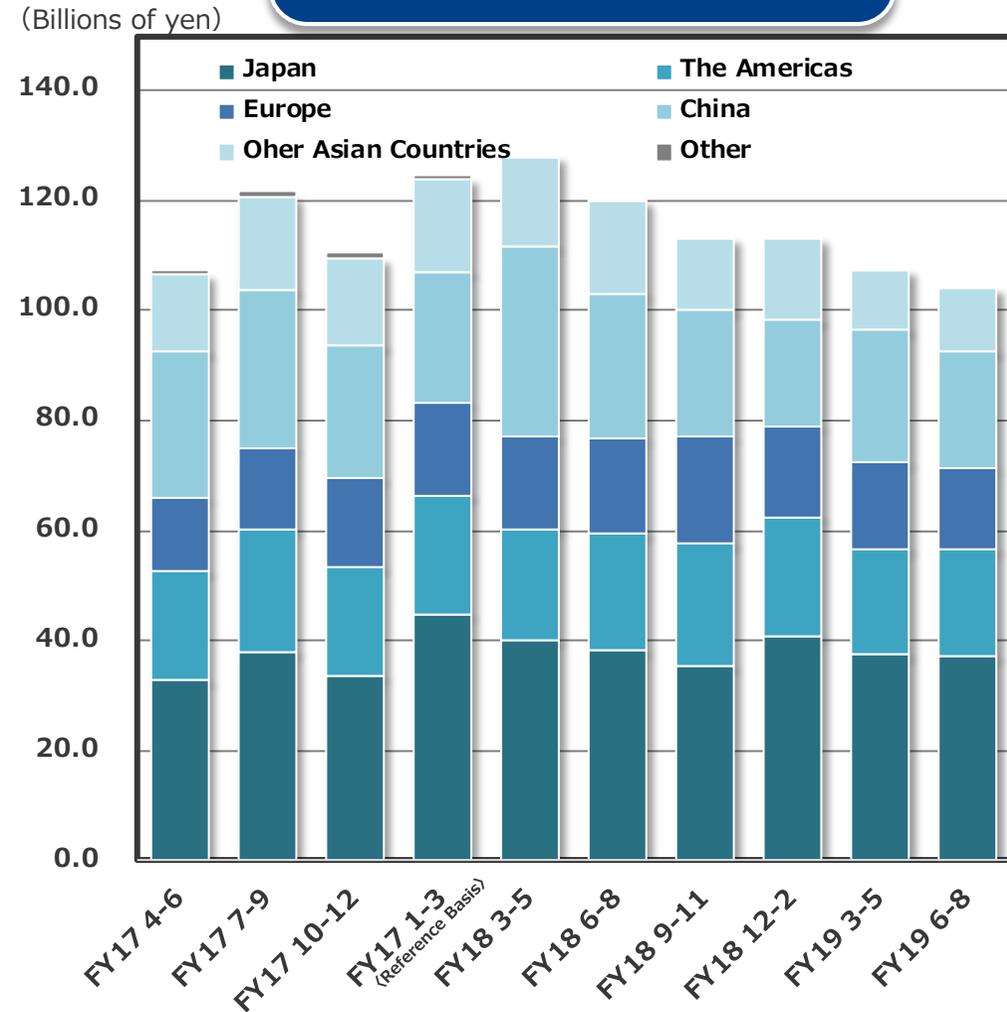
Note: The data for FY2017 are made on a reference basis. (March 21, 2017 - March 20, 2018)

Quarterly Sales Trends (1)

Business segment



Destination



Note1: The data for FY2017 4Q(1-3) are made on a reference basis. (December 21, 2017 – March 20, 2018)

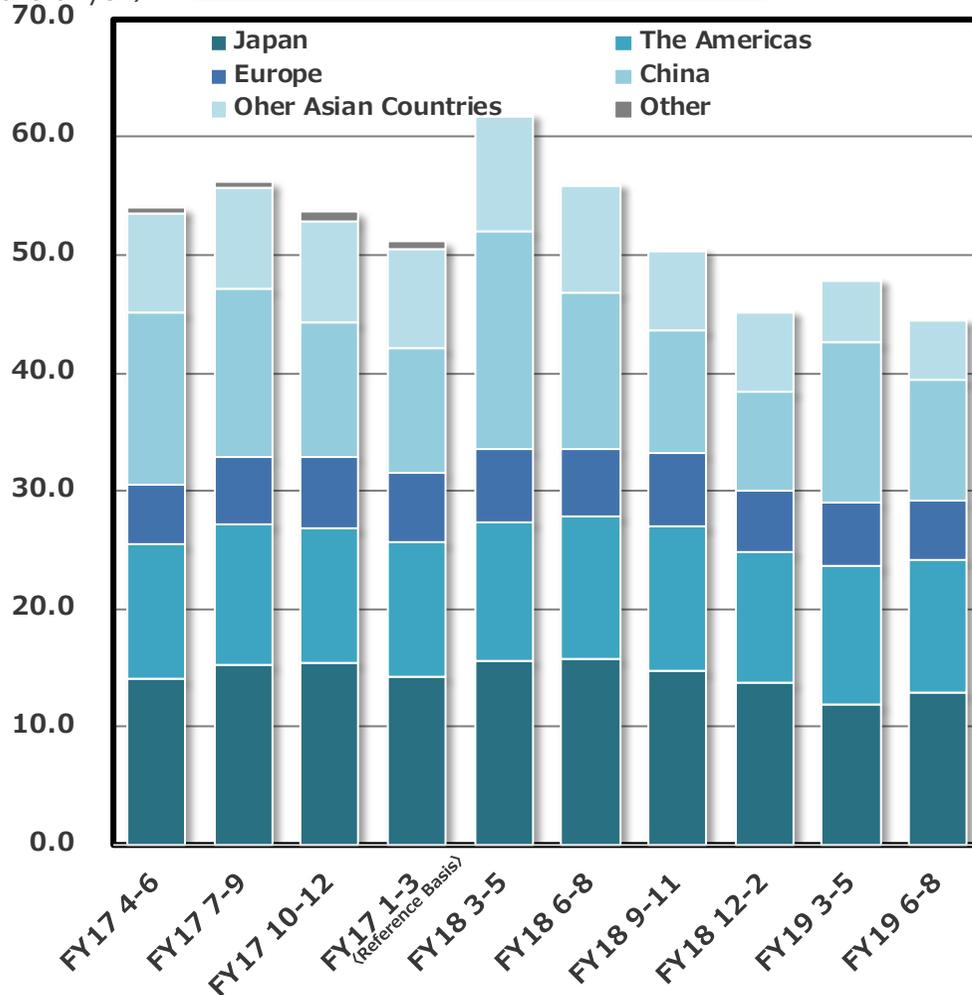
Note2: The FY2017 data are based on the previous segment classification and management classification (destination classification) before revision.

Note3: (M) = Motion Control (R) = Robotics (S) = System Engineering

Quarterly Sales Trends (2)

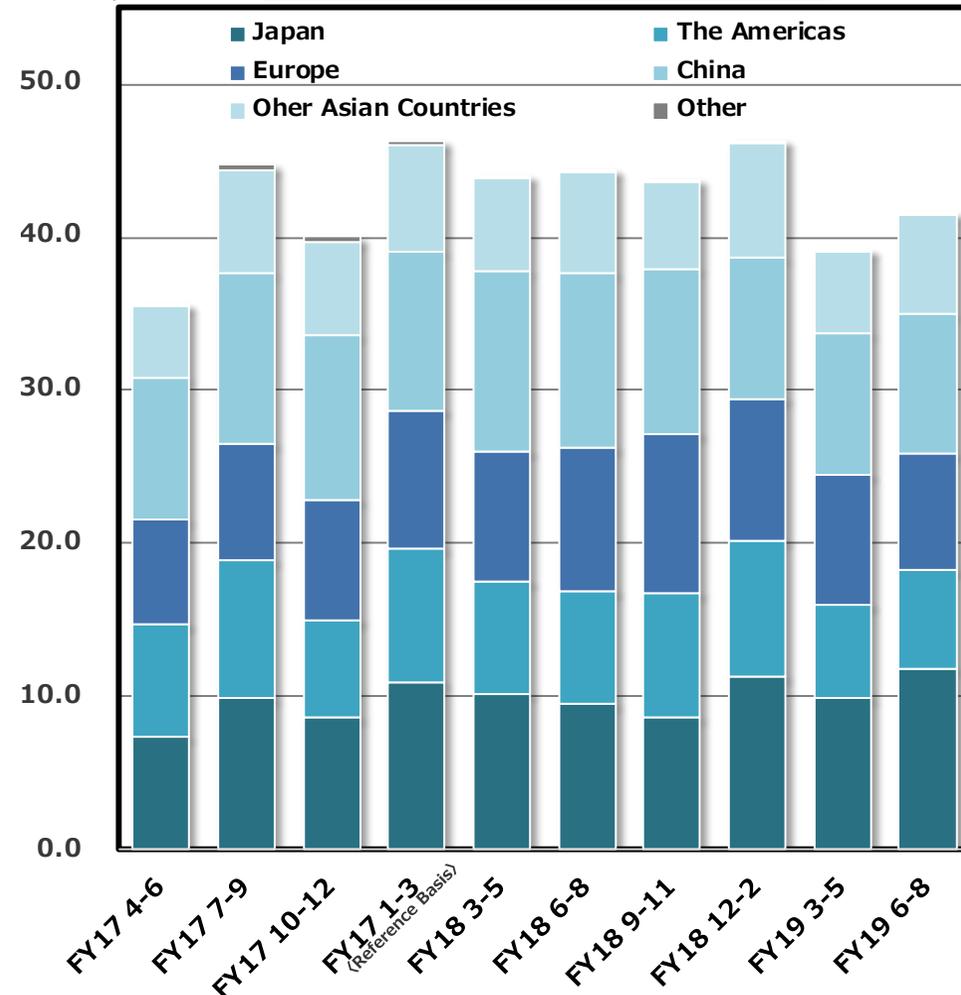
Motion Control

(Billions of yen)



Robotics

(Billions of yen)

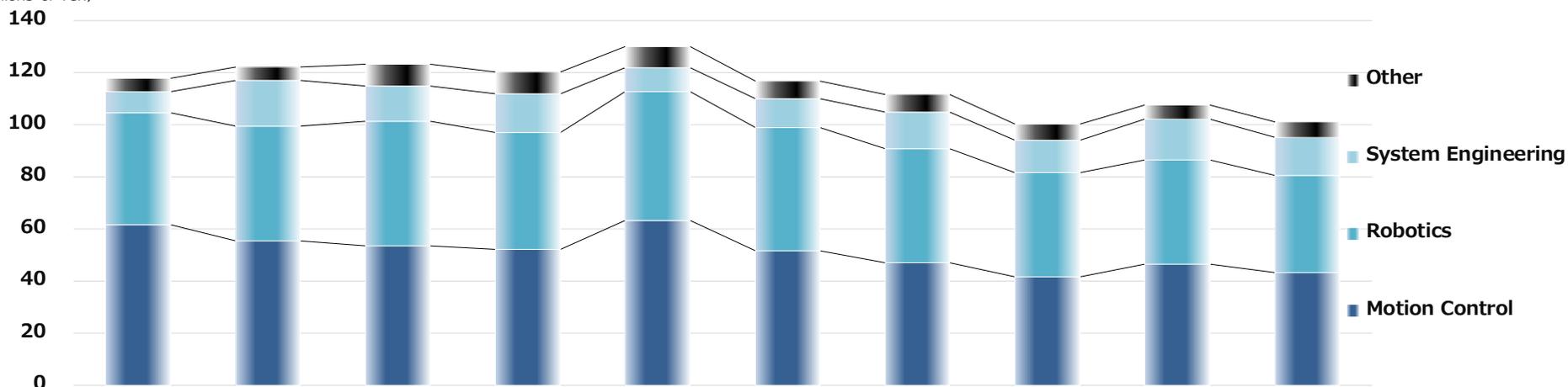


Note1: The data for FY2017 4Q(1-3) are made on a reference basis. (December 21, 2017 – March 20, 2018)

Note2: The FY2017 data are based on the previous segment classification and management classification (destination classification) before revision.

Quarterly Order Trends by Business Segment *Average forex rates during period used

(Billions of Yen)



		FY2017				FY2018				FY2019	
		Apr.-Jun.	Jul.-Sep.	Oct.-Dec.	Jan.-Mar. (Reference basis)	Mar.-May	Jun.-Aug.	Sep.-Nov.	Dec.-Feb.	Mar.-May	Jun.-Aug.
Total	YoY	+8%	+29%	+18%	+16%	+10%	-4%	-9%	-17%	-17%	-13%
	QoQ	+13%	+4%	+1%	-2%	+8%	-10%	-4%	-10%	+7%	-6%
YoY	(M)	+39%	+31%	+17%	+5%	+3%	-7%	-12%	-20%	-26%	-16%
	(R)	+14%	+31%	+25%	+24%	+15%	+7%	-8%	-10%	-19%	-22%
	(S)	-59%	+33%	-10%	+24%	+14%	-37%	+4%	-17%	+70%	+34%
QoQ	(M)	+23%	-10%	-3%	-2%	+21%	-19%	-9%	-11%	+12%	-7%
	(R)	+19%	+2%	+8%	-6%	+11%	-4%	-7%	-9%	-0%	-7%
	(S)	-33%	+118%	-23%	+11%	-39%	+20%	+27%	-11%	+26%	-6%
Forex rates	U.S. dollar	111.9	111.1	112.2	110.7	107.8	110.8	112.7	110.6	111.0	107.6
	Euro	120.9	127.9	132.4	134.2	130.9	128.9	129.6	125.9	124.7	120.6

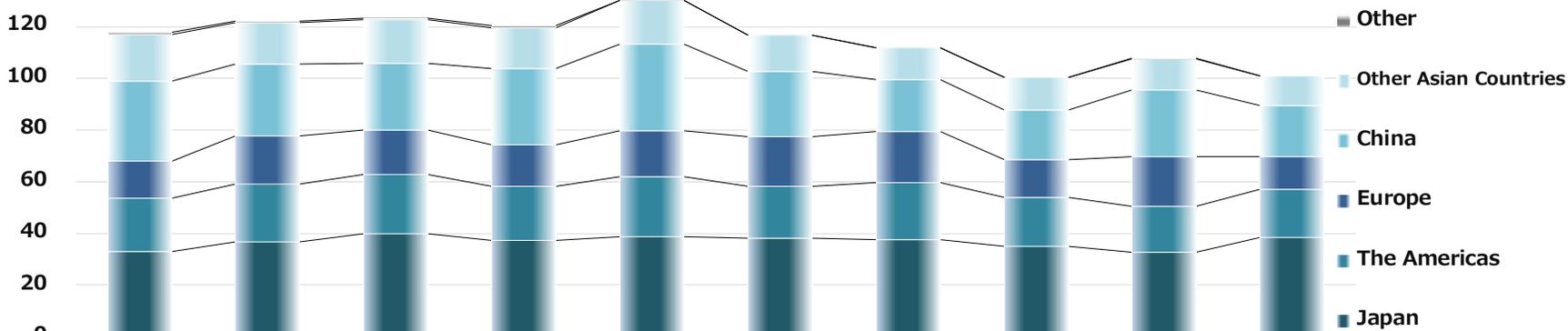
Note1: The data for FY2017 4Q(1-3) are made on a reference basis. (December 21, 2017 – March 20, 2018)

Note2: The FY2017 data are based on the previous segment classification and management classification (destination classification) before revision.

Note3: (M) = Motion Control (R) = Robotics (S) = System Engineering

Quarterly Order Trends by Destination *Average forex rates during period used

(Billions of Yen)
140



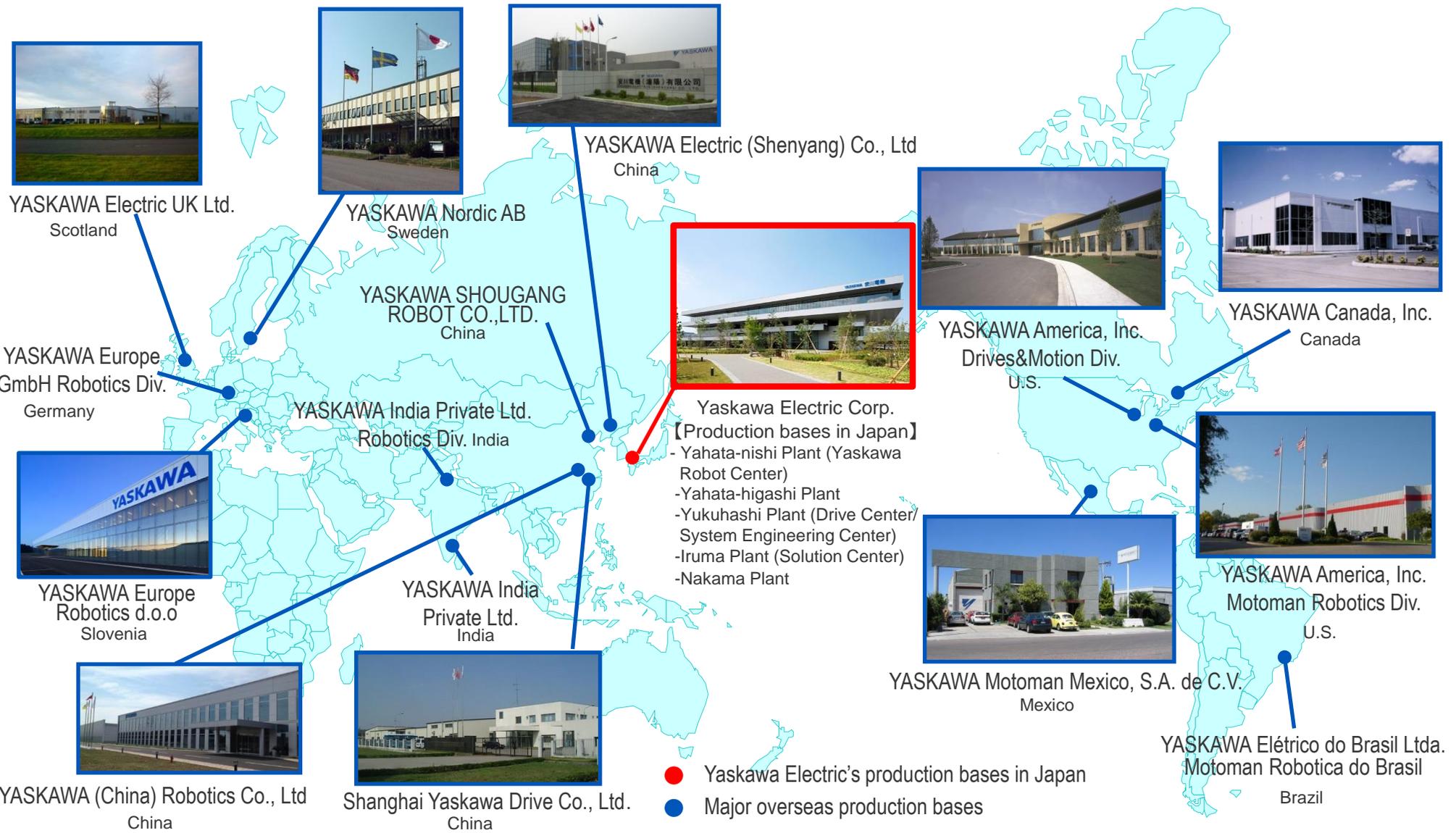
		FY2017				FY2018				FY2019	
		Apr.-Jun.	Jul.-Sep.	Oct.-Dec.	Jan.-Mar. <small>(Reference basis)</small>	Mar.-May	Jun.-Aug.	Sep.-Nov.	Dec.-Feb.	Mar.-May	Jun.-Aug.
Total	YoY	+8%	+29%	+18%	+16%	+10%	-4%	-9%	-17%	-17%	-13%
	QoQ	+13%	+4%	+1%	-2%	+8%	-10%	-4%	-10%	+7%	-6%
YoY	Japan	-15%	+23%	+18%	+12%	+18%	+4%	-6%	-6%	-15%	+1%
	The Americas	+15%	+9%	+17%	+0%	+11%	-10%	-5%	-10%	-23%	-8%
	Europe	+2%	+73%	-0%	+25%	+16%	-6%	+11%	-15%	+6% ^{<Note1>}	-33%
	China	+36%	+34%	+38%	+47%	+8%	-8%	-23%	-35%	-22%	-21%
	Other Asian Countries	+27%	+40%	+20%	+1%	-6%	-13%	-28%	-21%	-30%	-19%
QoQ	Japan	-1%	+12%	+9%	-7%	+4%	-2%	-1%	-7%	-7%	+17%
	The Americas	-1%	+8%	+2%	-8%	+10%	-12%	+8%	-14%	-6%	+5%
	Europe	+13%	+30%	-9%	-6%	+5%	+5%	+8%	-28%	+30% ^{<Note1>}	-34%
	China	+53%	-11%	-6%	+15%	+12%	-24%	-21%	-4%	+35%	-23%
	Other Asian Countries	+15%	-10%	+5%	-7%	+7%	-17%	-13%	+3%	-5%	-4%

Note1: The data for the FY2019 Mar.-May period have been corrected. YoY: +14%(wrong)→+6%(correct) QoQ: +39%(wrong)→+30%(correct)

Note2: The data for FY2017 4Q(Jan.-Mar.) are made on a reference basis. (December 21, 2017 – March 20, 2018)

Note3: The FY2017 data are based on the previous segment classification and management classification (destination classification) before revision.

Major Production Bases



YASKAWA