NTN

Consolidated
Financial Results
for the First Half
of FY2019

November 6, 2019

NTN Corporation

Contents



I . Outline and Initiatives of "DRIVE NTN100"

II. Financial Results for First Half and Forecast for FY2019

- This presentation and comments made in this conference or during the following Q&A session include forward-looking statements about future performance and future business strategies, all of which are based on decisions of the management of the Company currently available.
- These statements represent the best judgment of the management of the Company based on the information currently
 available. However, there can be no assurance that future results will meet any expectation, estimate or projection conveyed
 by these statements or comments. Actual results may differ materially from Management projections depending on various
 factors such as changes in product demand, exchange rates and interest rates, and contingent liabilities.

Trends in consolidated financial results: Results of 1H and Full year Forecast (1)

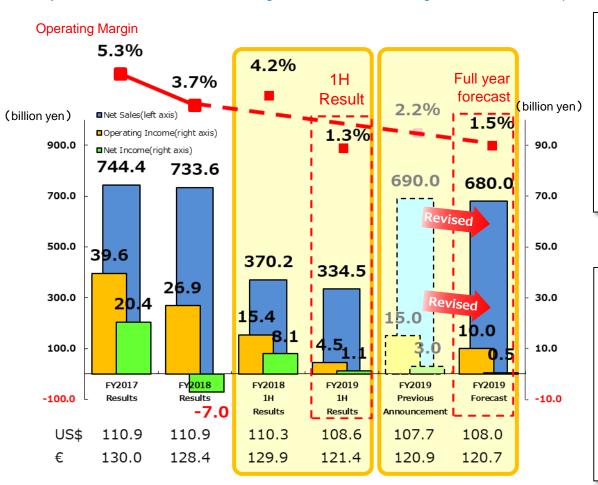


1H Sales: Demand decreased in aftermarket, industrial machinery, automotive business and in nearly all regions.

Decreased in sales a year-on-year.

Incomes: Decreased due to the impact of a large decline in volume, despite cost reductions mainly in fixed cost.

Full-year forecast: Revised the earnings downward considering current demand. Improve profitability and cash flow. Dividends decreased.



FY2019 1H Result

in brackets are FY2018 1H results

Net Sales: <u>¥334.5 billion</u> (¥370.2 billion) YoY-9.6%, Excl. exchange rate effect -7.1%

Operating Income: ¥4.5 billion (¥15.4 billion) YoY-70.8%, Excl. exchange rate effect -64.4%

Net Income: ¥1.1 billion (¥8.1 billion)

YoY-86.1%

Interim dividend: ¥5

FY2019 Full year Forecast

in brackets are FY2018 full year results

Net Sales: <u>¥680.0 billion</u> (¥733.6 billion) YoY-7.3%, Excl. exchange rate effect -4.7%

Operating Income: ¥10.0 billion (¥26.9 billion) YoY-62.9%, Excl. Exchange rate effect -53.5%

Net Income: ¥0.5 billion

Incl. extraordinary loss ¥4.5 billion

(No revise from the previous announcement)

Annual dividend: ¥10 * year-end ¥5(forecast)

Trends in consolidated financial results: Results of 1H and Full year Forecast (2)



1st Half Result (compared with forecast at 1Q)

FY2019 1H Result ():Previous Forecast

Net Sales: 334.5 billion yen

(340.0 billion yen)

Operating income: 4.5 billion yen

(6.0 billion yen)

Net income: 1.1 billion yen (1.0 billion yen)

Interim dividend : <u>5 yen</u> (7.5yen)

1 Demand decreased more than expected at 1Q

Economic conditions deteriorated due to trade friction and the uncertainires in Europe

- · Aftermarket: Economic conditions deteriorated. Distributors adjusted inventories
- •Industrial machinery: Demand declined mainly for construction machinery, agricultural machinery, and gearboxes.
- Automobile: Demand and production volume decreased in Japan, U.S, Europe, Asia and China
- ② Reduced inventory assets compared to the end of June, but FCF decreased due to decrease of sales and volume Inventory cuts progressed compared to the end of June, but sales and volume declined significantly. FCF decreased more than expected at initial forecast to negative. (FCF 1H:-4.6 billion yen)

2nd Half Focus Points

FY2019 full year forecast ():Previous Forecast

Net Sales: 680.0 billion yen

(690.0 billion yen)

Operating Income: 10.0 billion yen

(15.0 billion yen)

Net income: **0.5 billion yen** (3.0 billion yen)

year-end dividend: <u>5 yen</u> (7.5yen)

- Short-term: Continue urgent measures to improve profitability
 Continue to reduce fixed cost of expenses and personnel expenses.

 Further pricing policy and profit improvement through resource redistribution
- 2 Short-and medium-term: Promote major theme to generate FCFs Variable Cost Reformation: Reduce procurement costs globally.

Utilizing overseas OEM products

Production reforms: Implementation of production reforms from Japan,

significant reduction in inventory assets

Business reorganization: Accelerate domestic manufacturing reorganization,

concentrate on high value-added products.

Review of unprofitable businesses in Japan and

overseas.

Assets sales: Promote sales of strategic shareholdings

Improve the management base to prepare for next recovery in demand

Financial Summary of Aftermarket Business



1st Half: Sales decreased due to global economic slowdown, inventory adjustments by distributor, lower sales in regions other than China. Income decreased due to decline of volume

FY2019 1H Result (): FY2018 1H results

Net Sales: 56.0 billion yen

(61.1 billion yen)

Operating income: 6.7 billion yen

(7.8 billion yen)

Operating margin: **11.9%** (12.8%)

FY2019 full year forecast (): FY2018 results

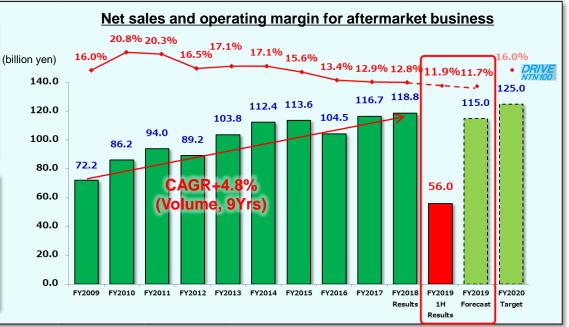
Net Sales: 115.0 billion yen

(118.8 billion yen)

Operating income: 13.5 billion yen

(15.2 billion yen)

Operating margin: <u>11.7%</u> (12.8%)



Point: Implement initiatives to expand sales globally

1 Supply and Demand : Improve capacity to provide high profitable & representative products

Expand OEM supply by utilizing more suppliers overseas Supply products from plants overseas globally

⇒Establish stable supply system and prevent opportunity loss

2 Profit: Promote pricing policy

Reflect increased cost of material and logistic in price.

Improve profitability

3 Improve branding

Continue to enhance service
Strengthen brand value by conducting measures
against counterfeit products



Financial Summary of Industrial Machinery Business NTN



1st Half: Sales decreased in almost all of sectors, including construction machinery, agricultural machinery, gearboxes, and machine tool. Income decreased due to decline in volume

FY2019 1H Result (): FY2018 1H results

Net Sales: 53.9 billion yen

(62.0 billion yen)

Operating income: -1.1 billion yen

(1.6 billion yen)

Operating margin: **-2.1%** (2.6%)

FY2019 full year forecast (): FY2018 results

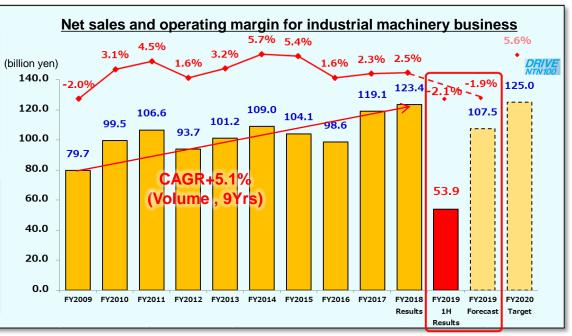
Net Sales: 107.5 billion ven

(123.4 billion yen)

Operating income: -2.0 billion yen

(3.1 billion yen)

Operating margin: **-1.9%** (2.5%)



Points: Short term initiatives to improve profit in core products, medium and long term initiatives to strengthen competitiveness

1 Short term: Profit improvement by pricing policies

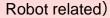
Reflect increased cost of material and logistic in price.

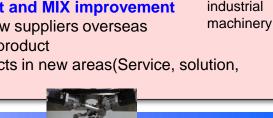
Stop selling unprofitable products and redistribution of resources to profitable customers

2 Medium term: Strengthen competitiveness by improving in cost and MIX improvement

Improve valuable cost by using new suppliers overseas Expand sales of high-competitive product

In addition, expand sales of products in new areas(Service, solution,





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2019/11/6 CMS CVJ for

Financial Summary of Automotive Business



1st Half: Sales decreased as automobile production decreased due to trade friction and uncertainties in policies. Income decreased due to decline in volume

FY2019 1H Result ():FY2018 1H results

Net Sales: 224.6 billion yen

(247.2 billion yen)

Operating income: -1.0 billion yen

(5.9 billion yen)

Operating margin: <u>-0.5%</u> (2.4%)

FY2019 full year forecast (): FY2018 results

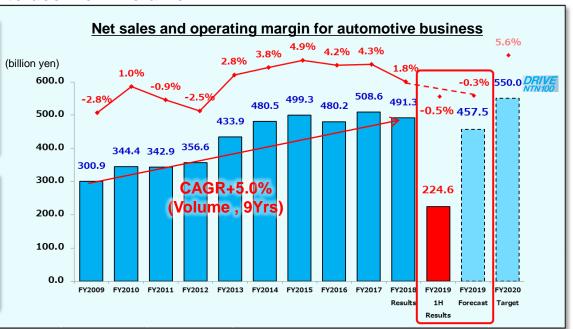
Net Sales: 457.5 billion yen

(491.3 billion yen)

Operating income: -1.5 billion yen

(8.7 billion yen)

Operating margin: <u>-0.3%</u> (1.8%)



Point: Short term initiatives to improve profitability and medium to long term initiatives for structural reform of profit

- 1 Short term: Pricing policy & cost reduction
 Reflect cost of steel material and custom and
 duties of U.S in price
 Stop selling or cost improvement of unprofitable
 product and change prices
 Improve logistics between business sites and
 cost reduction in back-office department
- 2 Medium to long term: Improve earning power in business areas we focus on

Conduct sales and investment initiatives areas from the point of business type

Expand volume to increase income

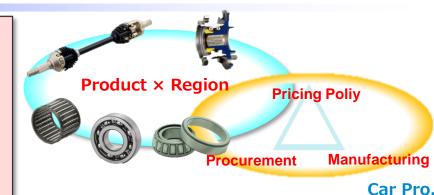
Enhance earning power which does not depend on the volume by procurement and production reform

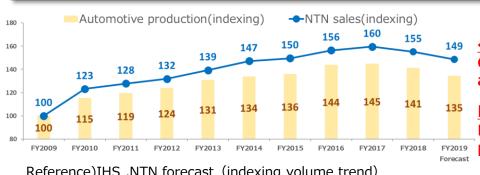
Automotive Business: Medium to Long Term Initiatives for Structural Reform of Profitability



Medium to Long term Initiatives for Structural Reform of Profitability

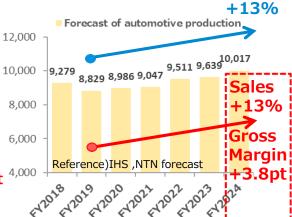
- 1. Make profit in main business area Select expanding target and centralize resource by considering business type and region
- 2. Expand sales of high-value added products preparing for electrification and EV shift
- 3. Re-strengthen the core function which make profit Price X Sales(Price) X Procurement(valuable cost)X Manufacturing (Process)





←Until today Grow up more than automotive production

From now→ **Expand volume to gain** profit and improvement



Target

Reference)IHS ,NTN forecast (indexing volume trend)



CVJ/Driveshafts

Profit: Meet demand for EV and SUVs expanding sales Volume: Gain volume in ASEAN and other developing countries



Hub bearing

Profit: Large size vehicle in U.S, EV in Europe, procurement and production reform Volume: Break out from certain customer, improve profitability for low share customer



Bearing

Profit: Focus on high functional application related to electrification Volume: Gain volume effect by reforming and centralize production







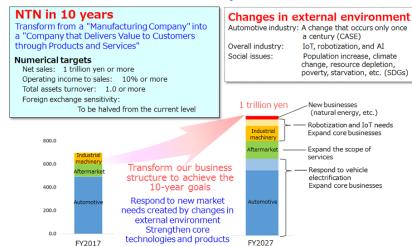
Outline of Medium-term Management Plan "DRIVE NTN100"



Initiatives for Realizing Our Vision



NTN in 10 years



"DRIVE NTN100" (April, 2018-March, 2021)

Accelerating Initiatives in the Next 3 Years towards target 10 years later



Points

- 1. Develop in new areas and grow up sustainably by core technology and product
- 2. Focus on strengthening management base which support business within 3 years
- ①Valuable cost reformation
- 2 Structural reform for man-hour and resource Smart manufacturing, (utilize IoT, AI and Robot) Robotization in back office dept. (introduce RPA)
- ③Enhance SCM and concentrated investment Use new core IT system, efficient stock management and shortening LT, intensively invest high value added products

"DRIVE NTN100" Industrial Machinery Business

Progress of Strengthen Core Technology & Products/Develop Business in New Areas



Ongoing Initiatives for "DRIVE NTN100"

- 1. Develop Core Technology and Highperformance Product
- 2. New Business Area: Robot Related & **Service, Solution Business**
- 1. Develop Core Technology and Highperformance Product Develop unique technology and products



Preventing seizing with advanced condition monitoring of machine tool Adopting heat flow sensor which has 40 times rate of increase compared to temperature and vibration sensor and realize advanced monitoring ⇒Contribute to productibility and cost

"Sensor Integrated Bearing Unit" for Machine Tool Spindles

2-a. New business area: Robot-related Business

Develop automation system using Wrist Joint Module

Use CVJ technology, operating angle 90°

Labor saving and quality improvement in production line when applied in appearance inspection

→Strengthening collaboration with Sler in the future

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Example of Appearance Inspection system

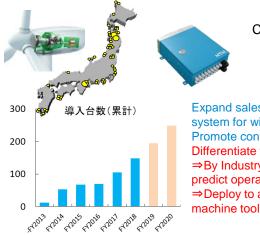
Target: become a company that customers rely on most Response to changes in environment



- Utilization of IoT and AI in industry
- · Demand increased in robot related **business**
- · Prevention by monitoring



2-b. New business area: Service, Solution Business **Business of monitoring service**



CMS for wind turbine

Expand sales od condition monitoring system for wind turbine Promote contract of monitoring service Differentiate with CMS technology ⇒By Industry-academia collaboration, predict operating life wih AI ⇒Deploy to automobile(CASE) and

Portable Vibroscope

Vibroscope for bearings utilizing bearing diagnosis and vibration analysis

Provide diagnosis service utilizing analysis technology for bearings

"DRIVE NTN100" Automotive Business Strengthen Core Technology & Products/Progress in New Areas



Ongoing Initiatives for "DRIVE NTN100"

- Strengthen core technologies and products:
 Become the world's top maker of drive-train systems (including EVs)
- 2. Develop businesses in new areas: Respond to electrification and EVs



Target: become a essential company to provide products and service in the global market Response to changes in environment

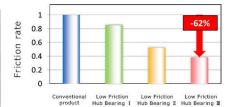
- CASE(electrification, EVs etc.)
- Increase of production number of new vehicle(increase of population)



1.Strengthen Core Technology & product

Realize Super Low friction in drive-train system





Low Friction Hub Bearing III

Develop grease pursuing low friction Reduce rotational friction by 62% keeping its durability Contribute to improved fuel efficiency by 0.53%

Receive production order of ULTAGE Tapered Roller Bearing

Received 2017 "CHO" MONODZUKURI Innovative Parts and Component Award, Automotive Components Award

World's highest standard high-load capacity and rotation speed

- 1.3-times basic dynamic load rating
- 2.5-times or more bearing rated life



2. Develop businesses in new areas: Respond to electrification and EVs

Respond to electrification



Start mass production of Electric Motors and Actuators

For electrification of pump and accessory

Promote the business for massproduction Module product for next generation vehicle



eHUB: HUB Bearing with Motor Generator Function



sHUB: HUB with steering assist function. Propose it for front but also rear steering

Received 2019 "CHO" MONODZUKURI Innovative Parts and Component Award, Nippon Brand Award

Supply samples to customer and promote initiatives to make them practical

Expand core products for EV

Low friction & torque, high rigidity & efficiency products Current & New EV maker adopt the products





Initiatives for ESG



NTN is working on ESG issues through the implementation of its corporate philosophy, contributing to the realization of a sustainable society

Environmental

- ✓ Develop innovative technologies, products, and services
- ✓ Reduce environmental burdens
- ✓ Prevent global warming

Quantify "eco-friendly product index"



S-eco makes highest contribution to environment

Visualizing environmental value of products

⇒ today's products reduce annual CO2 emissions by approximately 1,400,000 tons compared to the products in 20 years ago



Social

- ✓ Social contribution activities
- ✓ Coexistence with local communities
- ✓ Work style reform



"NTN Rotating School" held in Japan and overseas

Supporting activity in disaster area utilizing natural energy products

"N3 N-CUBE," Container Type Transportable Independent Power Supply, provide electricity





Promote workstyle with diversity

Promote telework system
Participated in Telework days 2019
Gain "Kurumin" mark as a child care
support company



Governance

- ✓ Strengthen and enhance corporate governance
- √ Risk management
- ✓ Promote compliance



ESG meeting for investors (in Oct. 2019)

Change of company system transition to company with nominating comitee, etc from June 2019

Responding to social issues

UN Global Compact -

Ten principles in four areas: human rights, labor, environment, and anti-corruption

Sustainable Development Goals (SDGs) - Business activities in consideration of SDGs



Adopted in the SRI indices

Promote the disclosure of ESG information







NTN is selected in the ESG indices adopted by the GPIF

Key Management Indicators of "DRIVE NTN100"



				DRIVE NTN100	
		FY2017	FY2018	FY2019	FY2020
		Results	Results	Forecast	Target
Net Sales		¥744.4 billion	¥733.6 billion	¥680.0 billion	¥800.0 billion
Operating Income		¥39.6 billion	¥26.9 billion	¥10.0 billion	¥57.0 billion
Operating Margin		5.3%	3.7%	1.5%	7.1%
Net Income		¥20.4 billion	-¥7.0 billion	¥0.5 billion	¥30.0 billion
Capital expenditure	2	¥37.6 billion	¥45.2 billion	¥50.0 billion	¥170.0 billion/3 years
					(incl. intangible ¥20.0 billion)
FCF		¥13.4 billion	-¥22.4 billion	¥0.0 billion	¥45.0 billion/3 years
Inventory turnover	Inventory turnover ratio		3.8	4.0	4.5 times
Net D/E ratio		0.9	1.2	1.3	1.0 or less
Equity to capital rat	tio	30.2%	27.4%	25.9%	30% or more
ROE	ROE		-2.9%	0.2%	10.0% or more
NTN-ROI*		5.7%	3.8%	1.4%	7.5% or more
Dividends	Dividends		¥15.0	¥10.0	¥15.0 or more
Exchange rates	USD	¥110.8	¥110.9	¥108.0	¥110
Lacitatinge rates	Euro	¥129.6	¥128.4	¥120.7	¥115

^{*}NTN-ROI = Net operating income after tax / (Inventories + tangible fixed assets)

^{**}Exchange rates: Figures described in FY2019 Forecast is average (2H: USD=¥107、Euro=¥120)

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 - 9. Interest-Bearing Debt
 - 10. Cash Flows

Financial Results for the First Half of FY2019: Key Factors



Results of FY2019 Second Quarter(April, 2019-September, 2019)

- ♦ Net Sales: ¥334.5 billion
 - Decrease of ¥35.7 billion, year-on-year
 (Excluding exchange rates: Decrease of ¥26.4 billion)
- ♦ Operating Income: ¥4.5 billion
 - Decrease of ¥10.9 billion, year-on-year
 (Excluding exchange rates : Decrease of ¥9.9 billion)
- ♦ Ordinary Income: ¥2.8 billion
 - Decrease of ¥9.7 billion year-on-year (Excluding exchange rates: Decrease of ¥8.7 billion)
- ♦ Net income attributable to shareholder(parent company): ¥1.1 billion
 - Decrease of ¥7.0 billion, year-on-year
 (Excluding exchange rates: Decrease of ¥6.2 billion)
- ♦Free Cash Flow: -¥4.6 billion, Increase of ¥4.7 billion, year-on-year

Full Year Forecast for FY2019



Revised FY2019 Full year forecast

- ♦ Net Sales: ¥680.0 billion

 Decrease of ¥10.0 billion compared with previous announcement (¥690.0 billion)
- ♦ Operating income: ¥10.0 billion
 Decrease of ¥5.0 billion compared with previous announcement (¥15.0 billion)
- ♦ Extraordinary losses: ¥4.5 billion
 No revise from the previous announcement
- ♦ Net income attributable to Shareholder (parent company): ¥0.5 billion

 Decrease of ¥2.5 billion compared with previous announcement (¥3.0 billion)
- ♦In regards to dividends, the Company plans ¥10 for this fiscal year Decrease of ¥5 from the previous announcement (¥5 of both an interim dividend and year-end dividend)
- ♦Exchange-rate form the third quarter:
 1USD = ¥107 (previous announcement, ¥107)
 1EURO = ¥120 (previous announcement, ¥120)

1. Consolidated Statements of Operation



(billion yen)

			FY2018		FY2	2019	Year on year			
		1H Results	2H Results	Full year Results		Full year Forecast	ı	FY2019 1H ②-①		
		1			2		Total	Excl.Forex	Forex	
Net s	sales	370.2	363.4	733.6	334.5	680.0	-35.7	-26.4	-9.3	
Opera inco	ating ome	15.4	11.6	26.9	4.5	10.0	-10.9	-9.9	-1.0	
Opera mar	ating gin	(4.2%)	(3.2%)	(3.7%)	(1.3%)	(1.5%)	(-2.8%)			
Ordinary	income	12.6	9.7	22.2	2.8	6.0	-9.7	-8.7	-1.0	
Extraor incom	e/loss	-	-19.3	-19.3	-0.7	-4.5	-0.7	-	-	
Net in attribut shareh	able to	8.1	-15.1	-7.0	1.1	0.5	-7.0	-6.2	-0.8	
Exchange	US\$	110.3	111.5	110.9	108.6	107.8	-1.6			
rate	EURO	129.9	126.9	128.4	121.4	120.7	-8.4			

2. Net Sales by Region



(billion yen)

(billion yen)									
		FY2018		FY2	2019		Year on year		
	1H	2H	Full year	1H	Full year		FY2019 1H		
	Results	Results	Results	Results	Forecast		2-1		
	1			2		Total	Excl.Forex	Forex	
Japan	102.3	105.0	207.2	100.1	204.0	-2.2	-2.2	-	
Americas	100.4	101.1	201.5	90.6	182.5	-9.8	-8.0	-1.7	
Europe	85.5	82.3	167.8	72.2	147.0	-13.3	-8.3	-5.0	
Asia and others	82.0	75.0	157.0	71.5	146.5	-10.5	-7.9	-2.5	
Total	370.2	363.4	733.6	334.5	680.0	-35.7	-26.4	-9.3	

3. Net Sales and Operating Income by Business Sector



<Net Sales by Business Sector>

(billion yen)

	FY2018			FY2019		
	1H	2H	Full Year	1H	Full year	
	Results	Results	Results	Results	Forecast	
	1			2		
Aftermarket	61.1	57.8	118.8	56.0	115.0	
Industrial machinery	62.0	61.4	123.4	53.9	107.5	
Automotive	247.2	244.2	491.3	224.6	457.5	
Total	370.2	363.4	733.6	334.5	680.0	

Year on year			
FY2019 1H ②-①			
Total	Excl.Forex	Forex	
-5.1	-3.2	-1.8	
-8.1	-6.6	-1.4	
-22.5	-16.5	-6.0	
-35.7	-26.4	-9.3	

<Operating Income by Business Sector >

	FY2018			FY2019		
	1H 2H Full Year			1H	Full year	
	Results	Results	Results	Results	Forecast	
	1			2		
Aftermarket	7.8	7.3	15.2	6.7	13.5	
Industrial machinery	1.6	1.5	3.1	-1.1	-2.0	
Automotive	5.9	2.8	8.7	-1.0	-1.5	
Total	15.4	11.6	26.9	4.5	10.0	

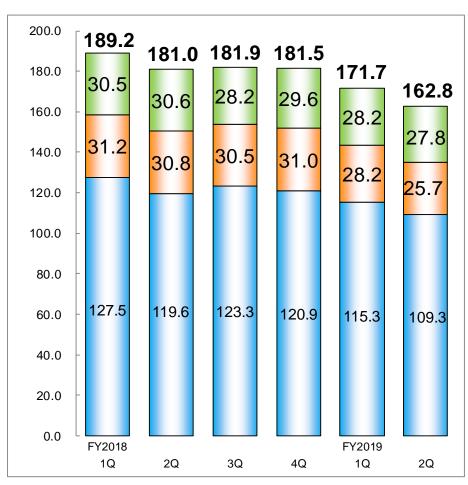
Year on year
FY2019 1H ②-①
-1.2
-2.8
-6.9
-10.9

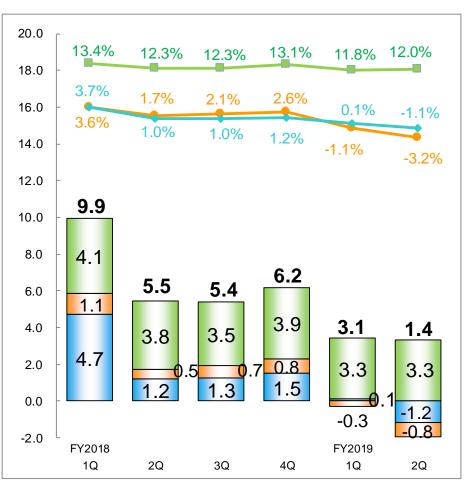
4. Results by Business Sector (Quarterly Trend)



* All figures in billion yen.



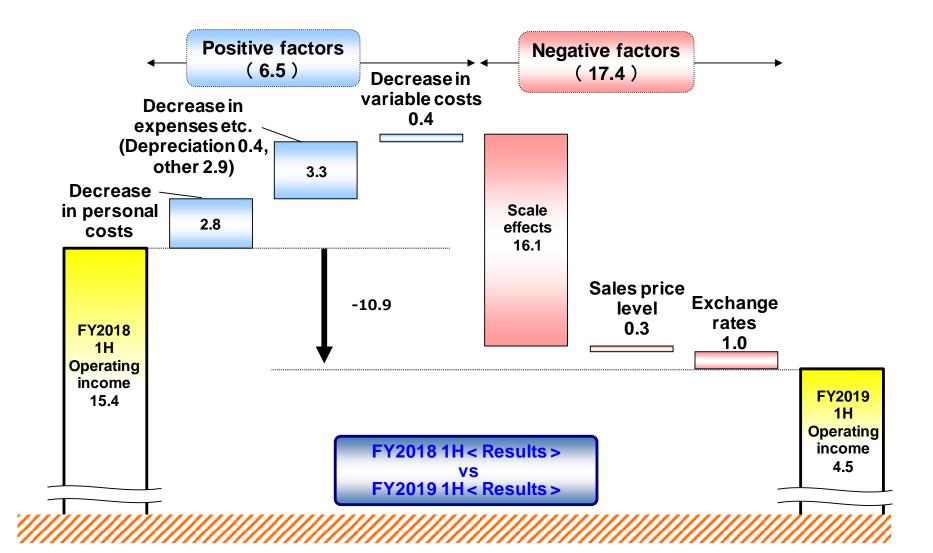




5-1. Analysis of Operating Income (FY2019 1H)

* All figures in billion yen.

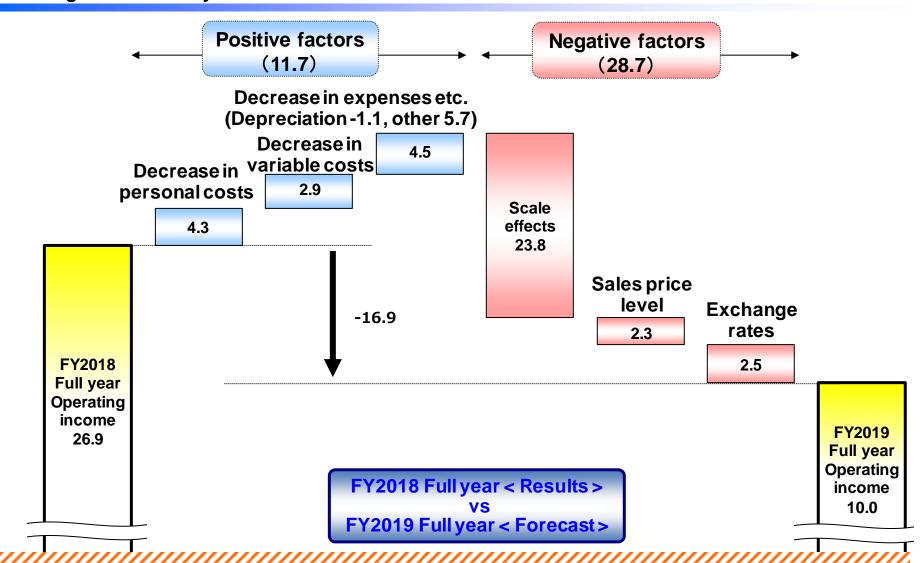




5-2. Analysis of Operating Income (FY2019 Full year)



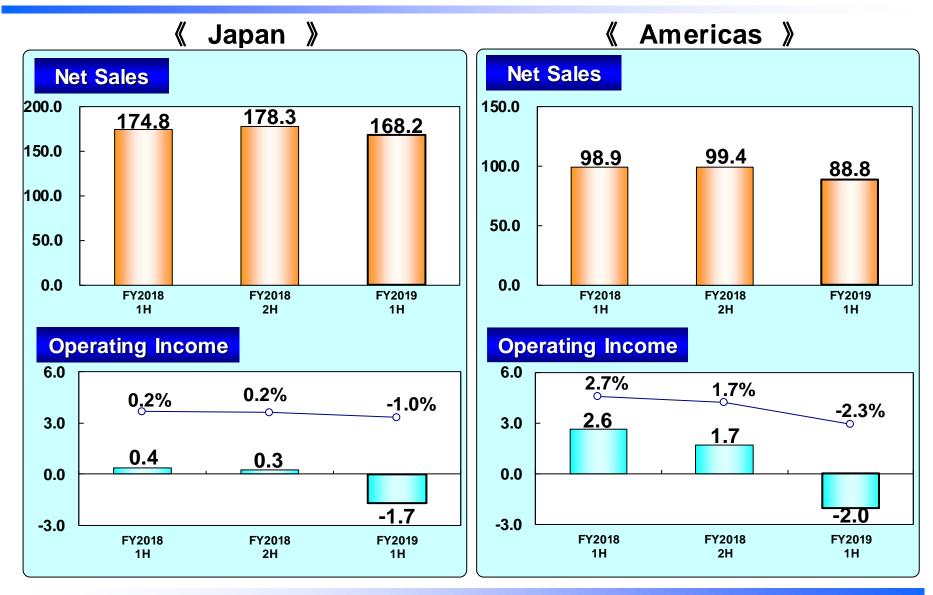
* All figures in billion yen.



6. Net Sales and Operating Income by Company Location



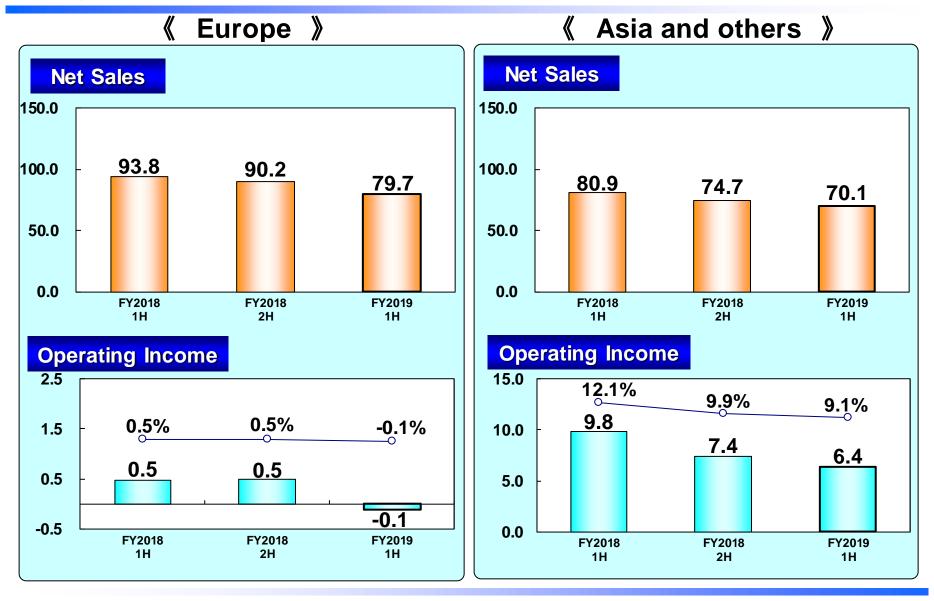
* All figures in billion yen



6. Net Sales and Operating Income by Company Location

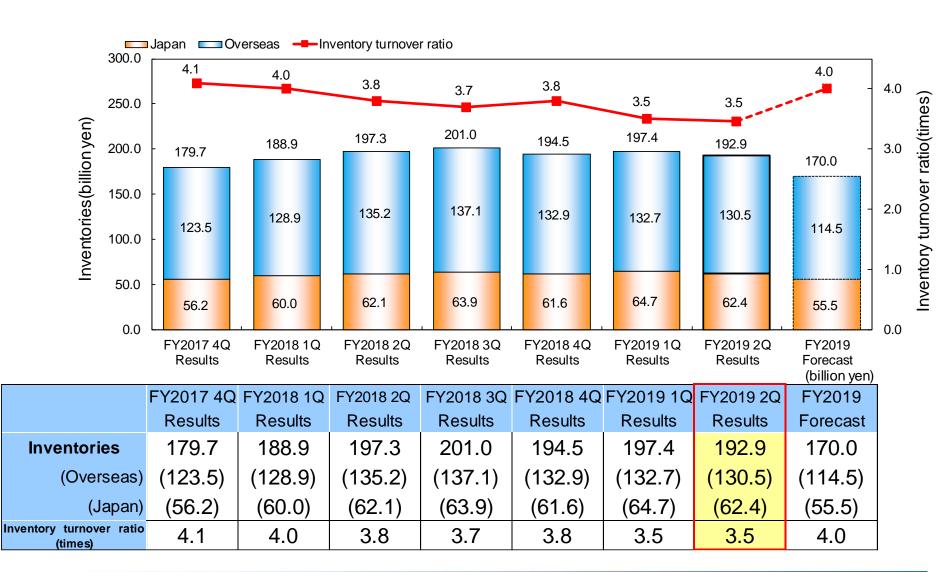


* All figures in billion yen



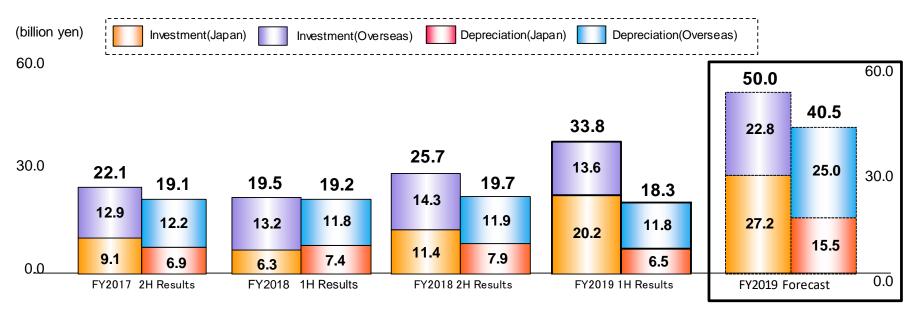
7. Inventories





8. Capital Expenditure and Depreciation





(bil	lion	yen

	FY2017	FY2018		FY2019		F
	2H Results	1H Results 1	2H Results	1H Results②	2 -1	F
Capital expenditure	22.1	19.5	25.7	※ 33.8	14.4	
(Overseas)	(12.9)	(13.2)	(14.3)	(13.6)	(0.4)	
(Japan)	(9.1)	(6.3)	(11.4)	(20.2)	(14.0)	

FY2019	
Forecast	
50.0	
(22.8)	
(27.2)	

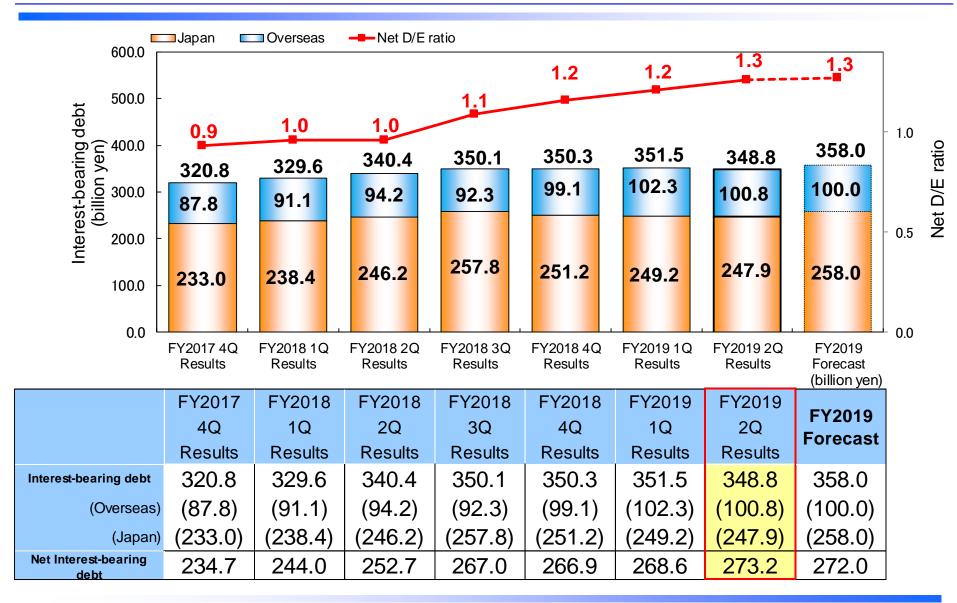
XIn addition, ¥4.7 billion of intangible fixed assets

	FY2017	FY2018		FY2019	
	2H Results	1H Results①	2H Results	1H Results②	2 -1
Depreciation	19.1	19.2	19.7	18.3	-0.9
(Overseas)	(12.2)	(11.8)	(11.9)	(11.8)	(0.0)
(Japan)	(6.9)	(7.4)	(7.9)	(6.5)	(-0.9)

FY2019
Forecast
40.5
(25.0)
(15.5)

9. Interest-Bearing Debt





10. Cash Flows



	FY2017 FY2018		FY2019	FY2019	2-1		
(billion yen)	2H Results	1H Results 1	2H Results	1H Results2	Forecast		
I . Cash flow from operating activities	29.6	17.1	26.1	22.1	53.0	4.9	
II . Cash flow from investing activities	-28.4	-26.4	-39.2	-26.6	-53.0	-0.3	
I + II . Net cash flow	1.2	-9.3	-13.1	-4.6	0.0	4.7	
Ⅲ. Cash flow from financing activities	-2.2	11.8	8.9	-2.3	3.3	-14.1	
IV. Effect of exchanging rate translation on cash and cash equivalents	0.2	-0.9	-0.0	-1.1	-0.8	-0.2	
V . Net increase in cash and cash equivalents	-0.8	1.6	-4.2	-7.9	2.5	-9.5	
80.0 CF from operating activities CF from investing activities Net CF 53.0							
29.6 20.0 0.0 -20.0 -40.0 -28.4	-26.4	-9.3	.1 -13.1 -39.2	-26.6	-4.6	-53.0	
-60.0 -80.0 FY2017	FY201	Ω	FY2018	FY201	<u> </u>	FY2019	
2H Results	1H Res	-	2H Results	1H Resu	•	Forecast	









Digitalization, Resources, Innovation, Variable cost reformation, Efficiency improvement NTN Transformation for New 100years

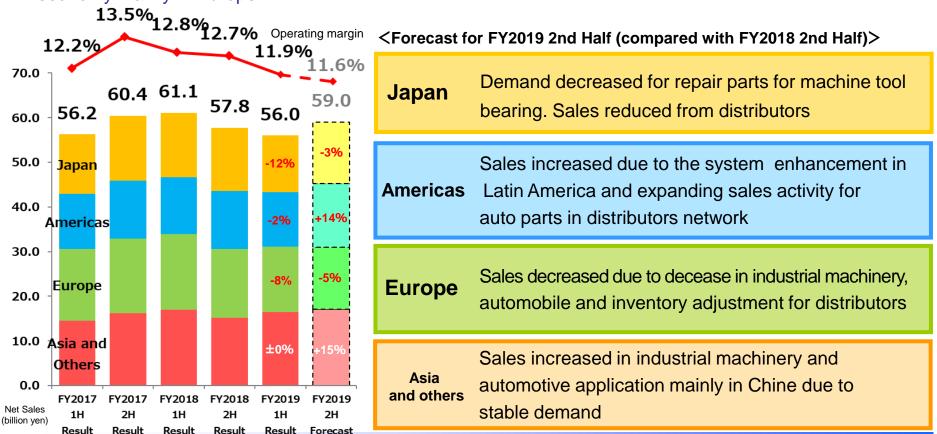
(Reference) Aftermarket Business : Result for the First Half and Forecast for the Second Half



<Results for FY2019 1st Half (compared with FY2018 1st Half)>

Net Sales: 56.0 billion yen(-8.3%), Operating income: 6.7 billion yen(-15.2%)

- ·Sales decreased in industrial aftermarket due to decline in global economy and sales for distributors decreased except Asia and others
- Sales in automotive aftermarket decreased due to the inventory adjustment of distributors and slowdown in economy mainly in Europe



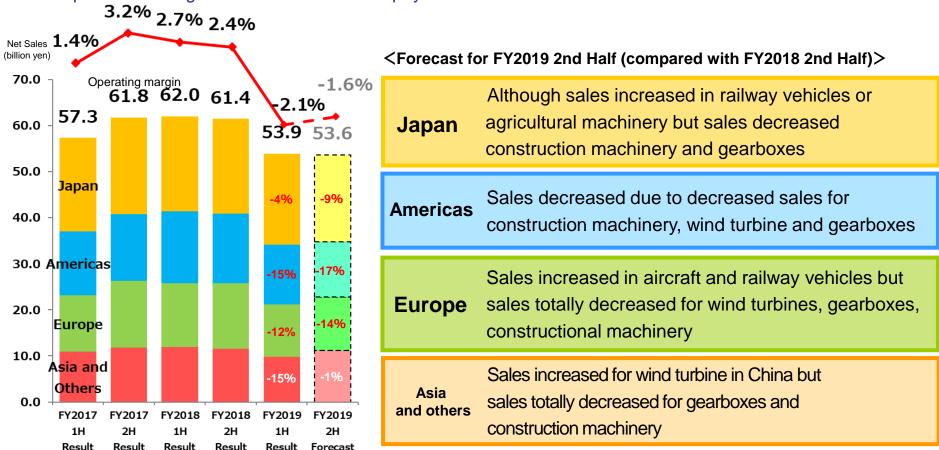
(Reference) Industrial machinery Business : Result for the First Half and Forecast for the Second Half



< Results for FY2019 1st Half (compared with FY2018 1st Half)>

Net Sales:53.9 billion yen(-13.0%), Operating income:-1.1 billion yen

- •Due to U.S-China Trade friction, sales decreased for construction machinery and gear boxes
- •Sales for wind turbines increased in China but sales decreased in Americas which has uncertainty and in Europe where the government reduced the payout



(Reference) Automotive Business : Result for the First Half and Forecast for the Second Half



< Results for FY2019 1st Half (compared with FY2018 1st Half)>

Net Sales:224.6 billion yen(-9.1%), Operating income:-1.0 billion yen

- ·Sales decreased due to the delayed recovery caused by WLTP in Europe and sanctions against Iran
- · Sales decreased in China due to slowdown in economy because of U.S-China trade friction and new emission regulations

