

# **Business Results**

## **Second Quarter of Fiscal Year Ending March 31, 2016**

**November 5, 2015**  
Minebea Co., Ltd.

# 1. Financial Results

# 2. Policy and Strategy

# Financial Results

Hiromi Yoda

Managing Executive Officer

## 1H net sales hit new record high 1H operating income hits new first half record high

(Millions of yen)	FY ended Mar. '15 1H	FY ending Mar. '16 1H	Change YoY	1H of FY ending Mar. '16 July Forecast	Vs. Forecast
Net sales	216,557	295,554	+36%	294,500	100%
Operating income	24,761	27,417	+11%	28,900	95%
Ordinary income	24,635	23,326	-5%	28,400	82%
Net income	17,817	17,758	0%	22,200	80%
Net income per share (yen)	47.69	47.49	0%	59.37	80%

Foreign exchange rates	1H of FY Mar. '15	1H of FY Mar. '16	1H July Assumption
US\$	¥102.53	¥121.77	¥119.49
Euro	¥139.10	¥134.55	¥131.37
Thai Baht	¥3.18	¥3.59	¥3.63
Chinese RMB	¥16.50	¥19.52	¥19.40

## 2Q net sales hit new quarterly record high Highest 2Q operating income ever

(Millions of yen)	FY ended Mar. '15 2Q	FY ending Mar. '16		Change	
		1Q	2Q	YoY	QoQ
Net sales	117,025	127,391	168,162	+44%	+32%
Operating income	14,237	12,512	14,905	+5%	+19%
Ordinary income	14,162	12,872	10,453	-26%	-19%
Net income	10,985	10,058	7,700	-30%	-23%
Net income per share (yen)	29.40	26.90	20.59	-30%	-23%

Foreign exchange rates	2Q of FY Mar. '15	1Q of FY Mar. '16	2Q of FY Mar. '16
US\$	¥102.65	¥120.97	¥122.56
Euro	¥137.62	¥132.74	¥136.35
Thai Baht	¥3.20	¥3.66	¥3.51
Chinese RMB	¥16.60	¥19.49	¥19.55

### Net sales hit new record high

### Net sales up YoY for the last 14 quarters

(Billions of yen)

200.0

160.0

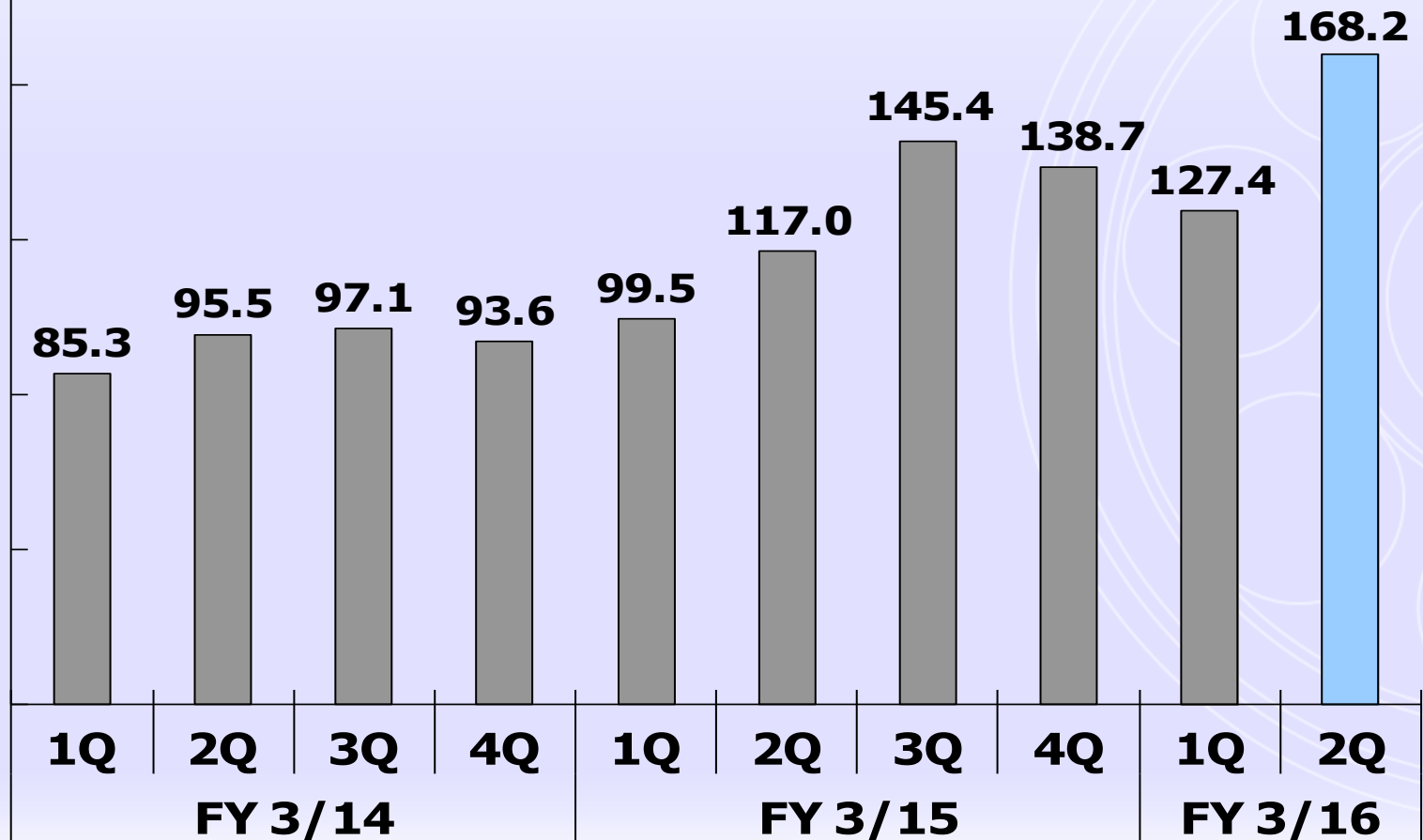
120.0

80.0

40.0

0.0

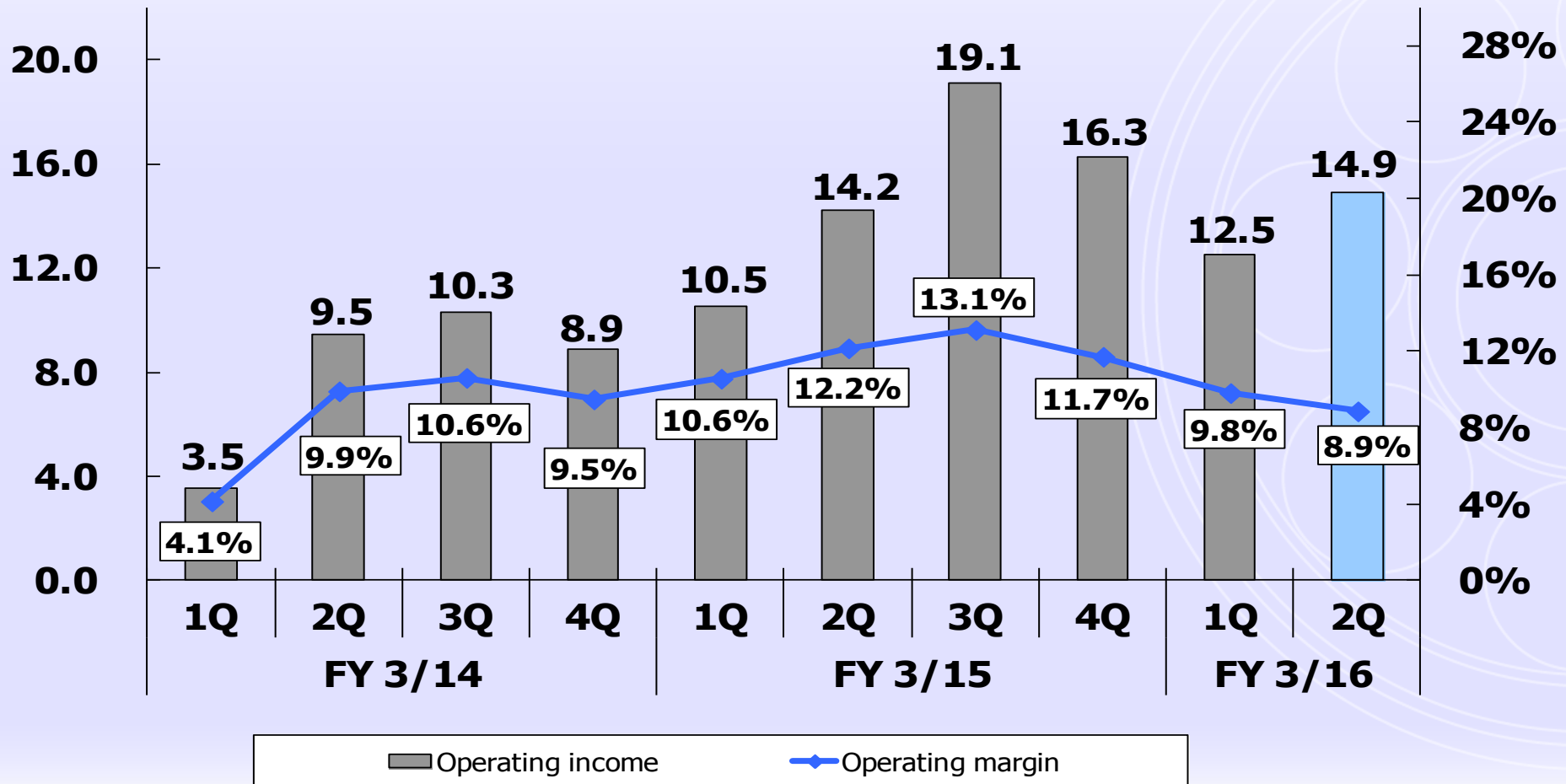
Increased 44% YoY  
Increased 32% QoQ



### Operating income hits new second quarter record high Up YoY for last 9 quarters

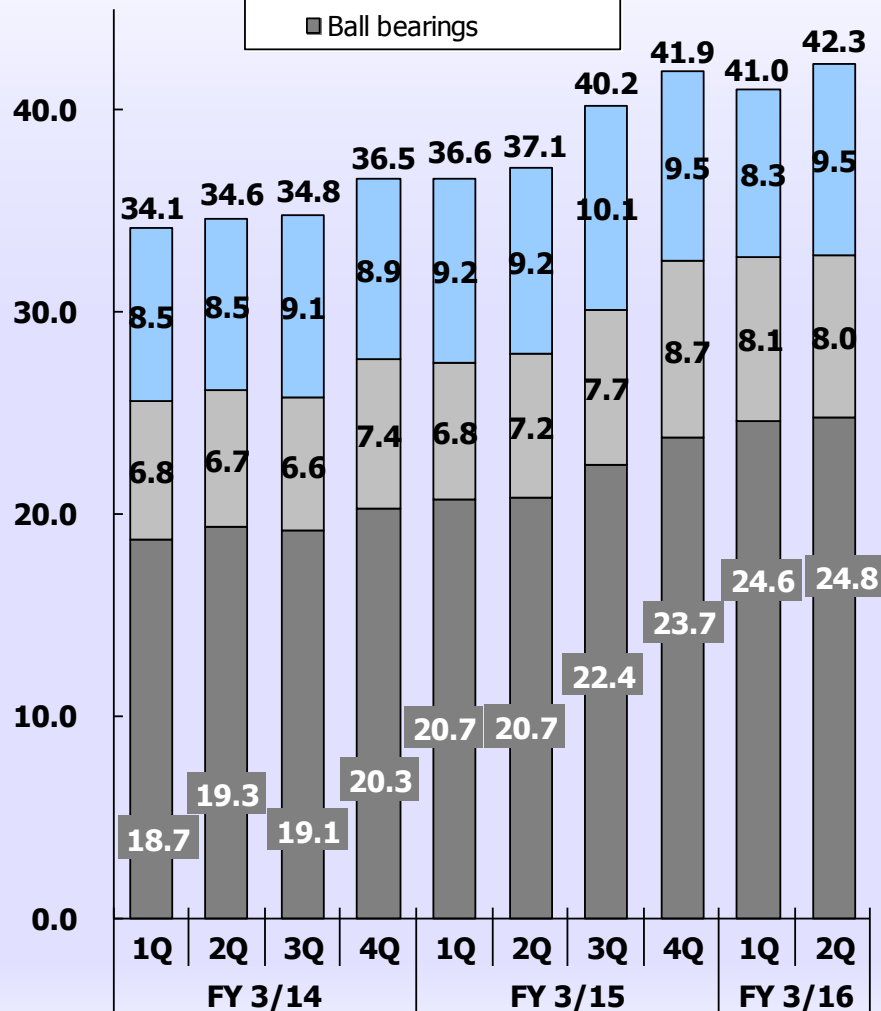
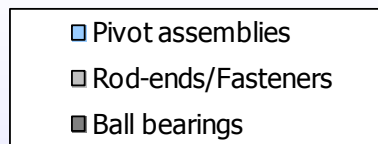
(Billions of yen)

Increased 5% YoY  
Increased 19% QoQ



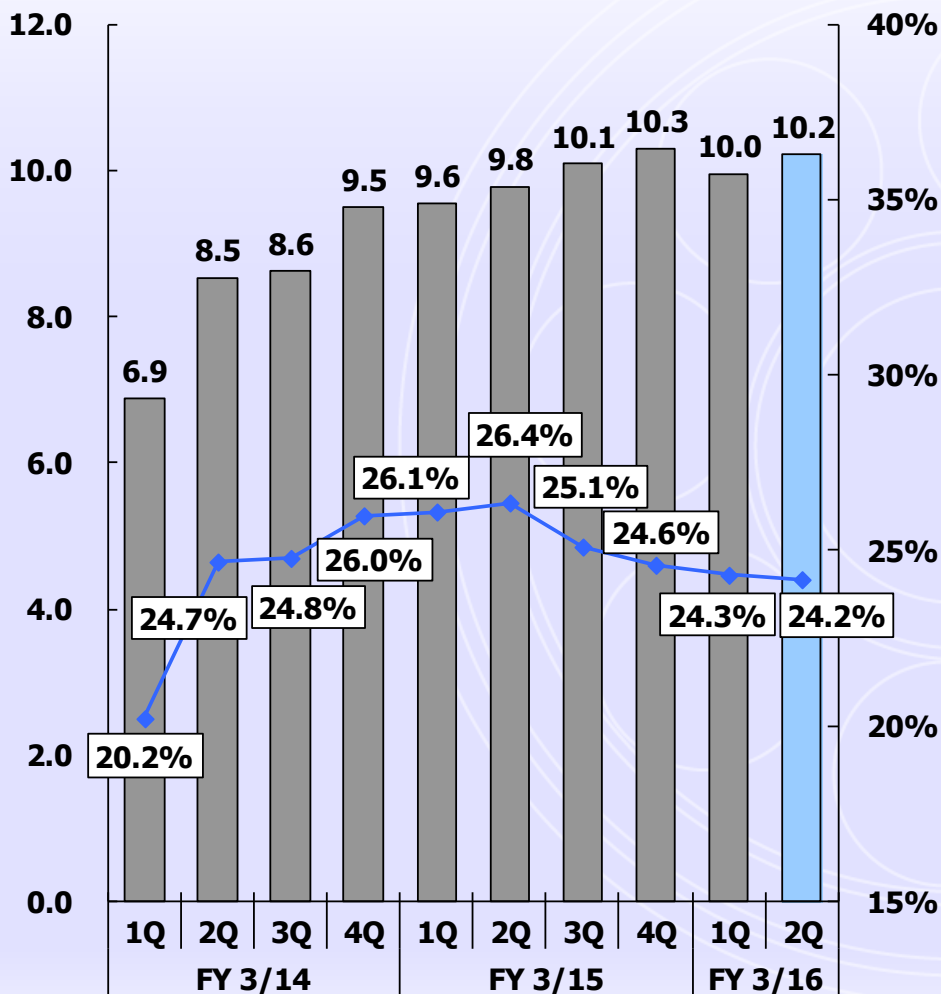
### Net sales

(Billions of yen)



### Operating income

(Billions of yen)

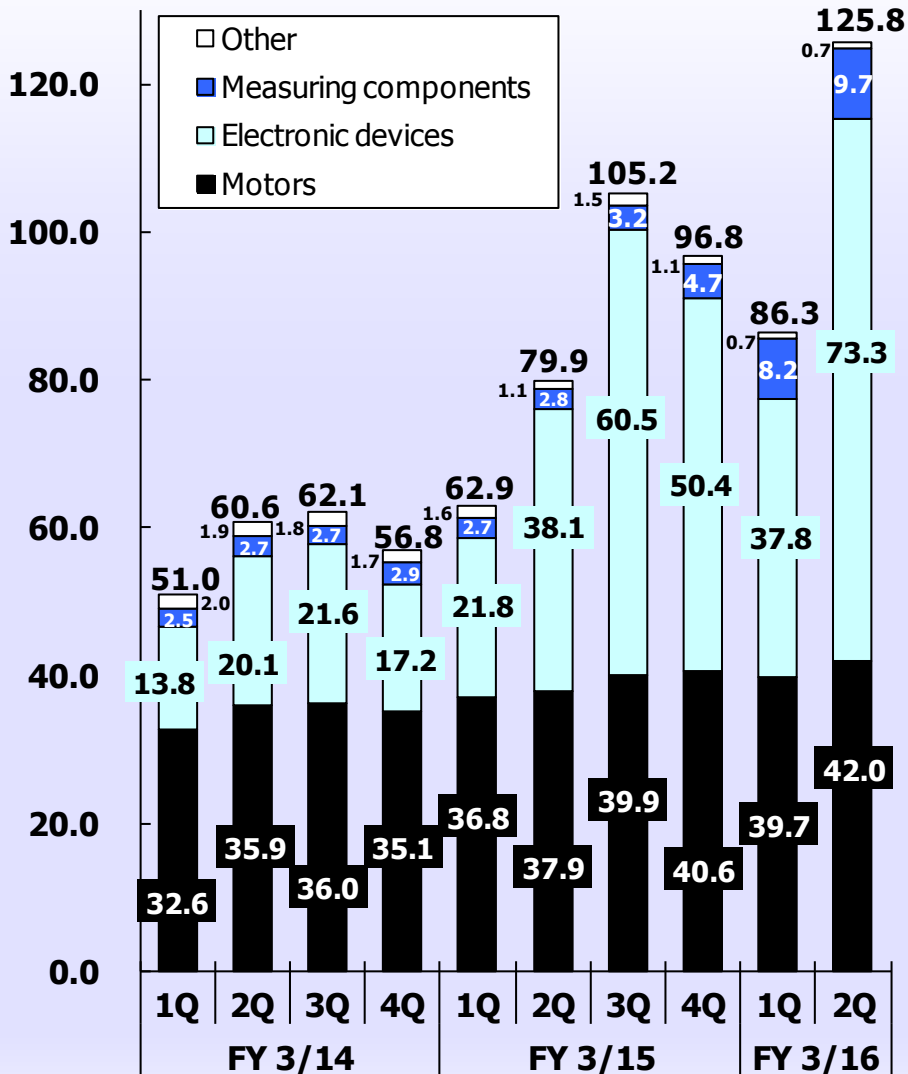


*\*Due to minor changes in segment classification from FY3/16, FY3/15 numbers are also adjusted for comparison.*



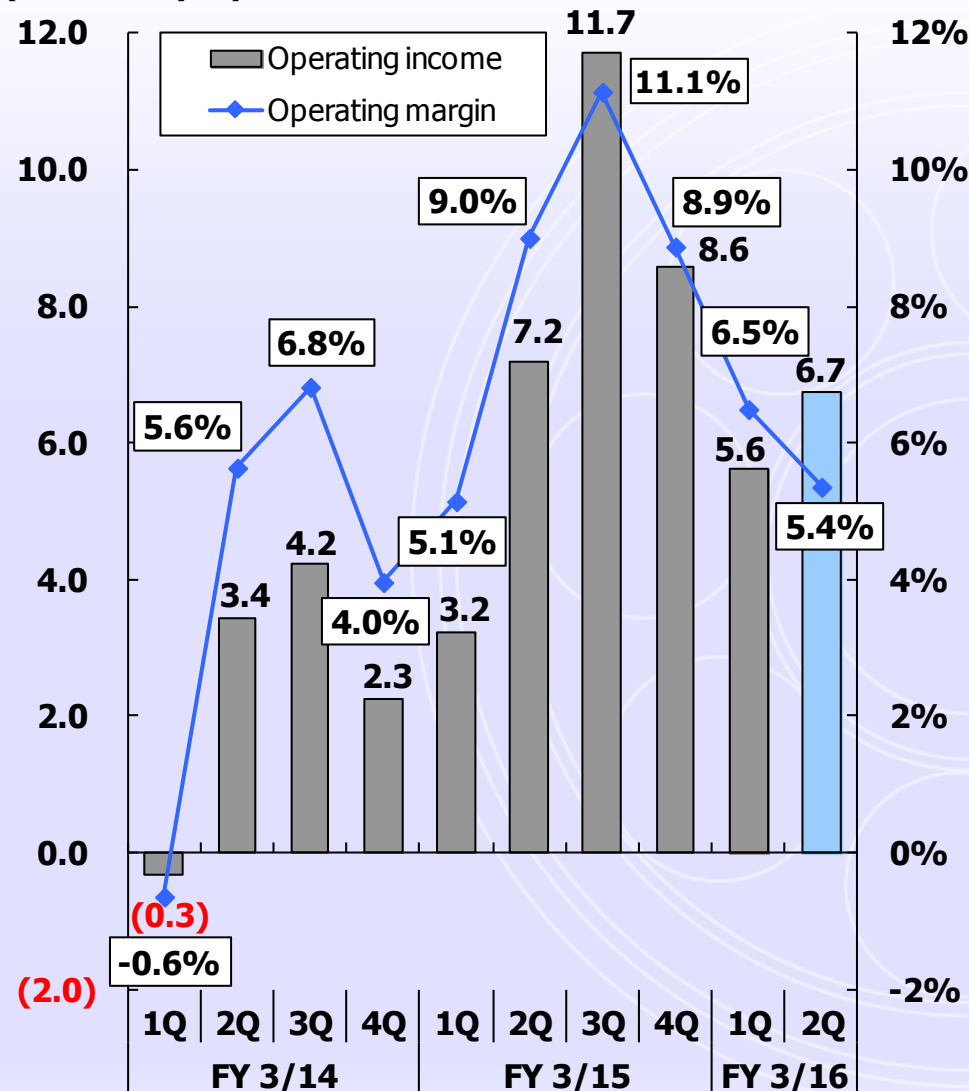
## Net sales

(Billions of yen)



## Operating income

(Billions of yen)



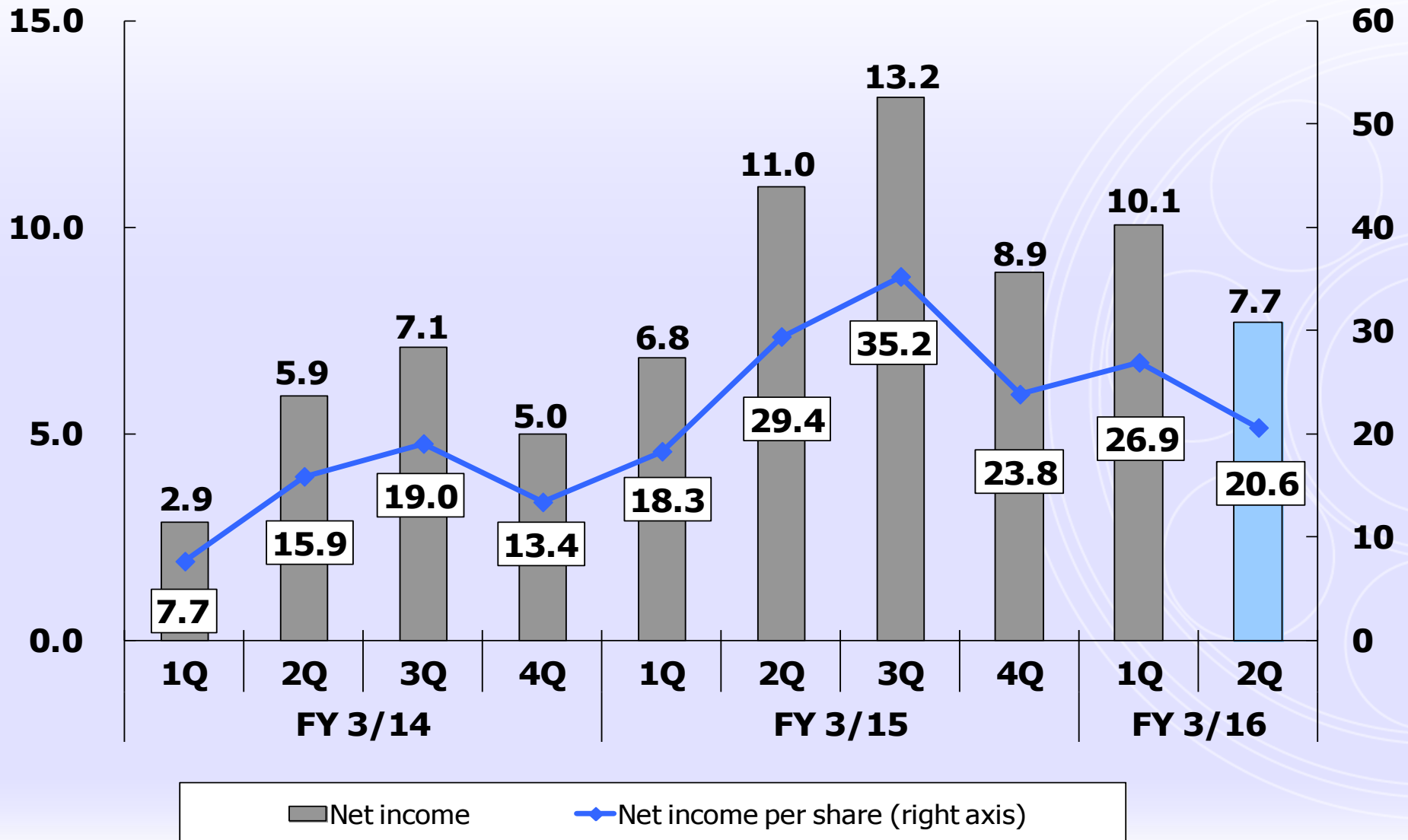
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November 5, 2015

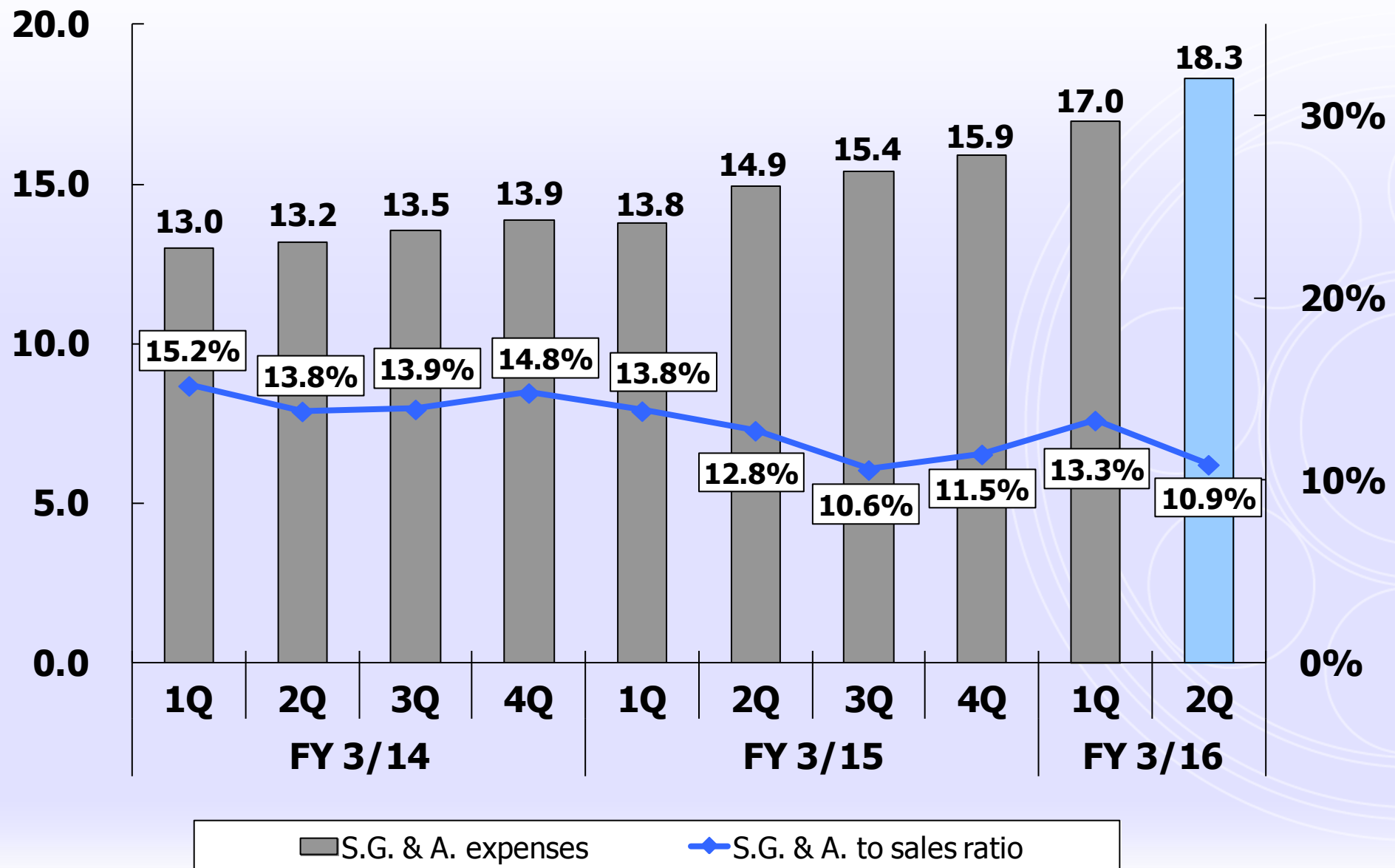
# Net Income

(Billions of yen)

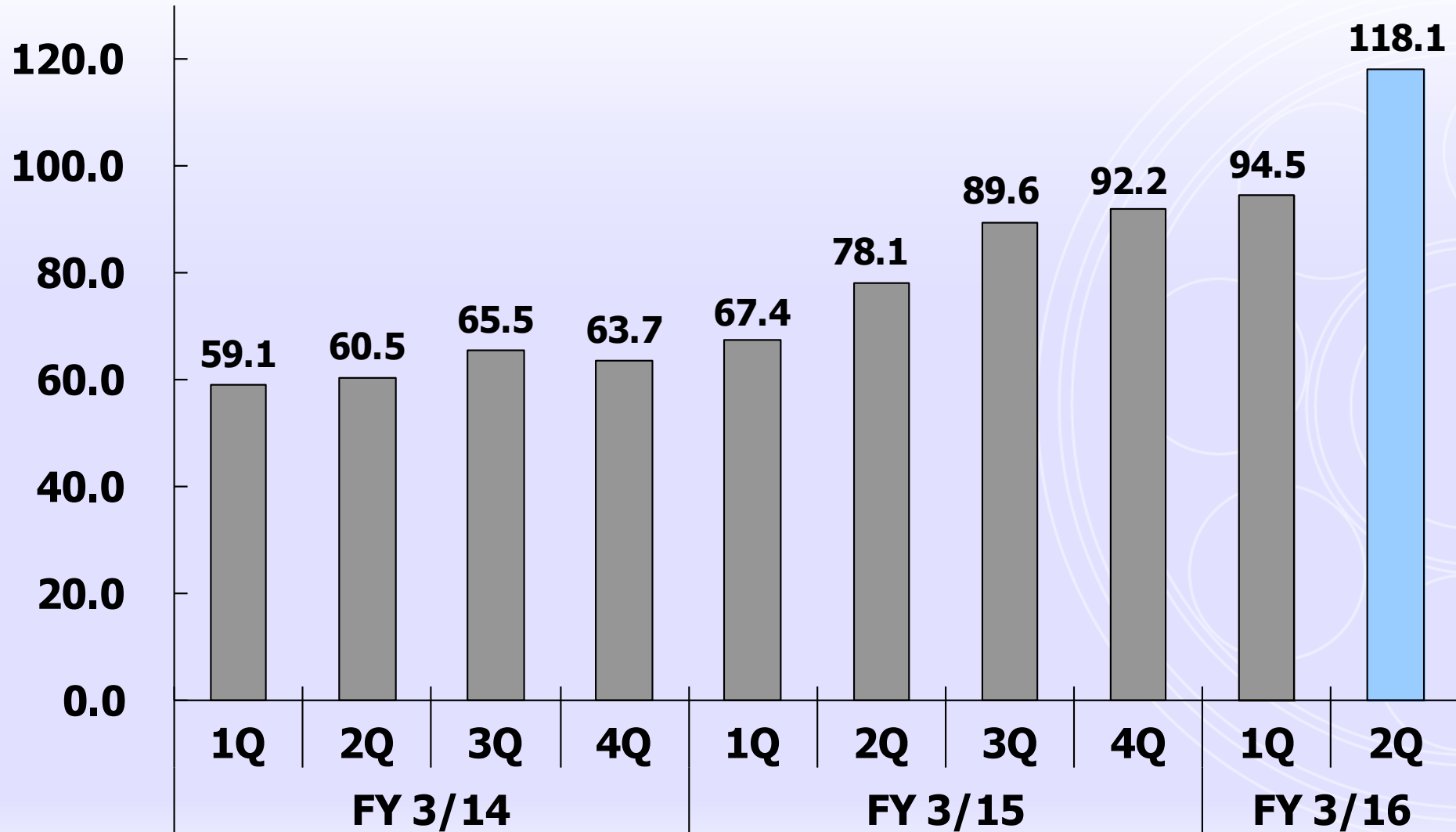
Decreased 30% YoY  
Decreased 23% QoQ (yen)



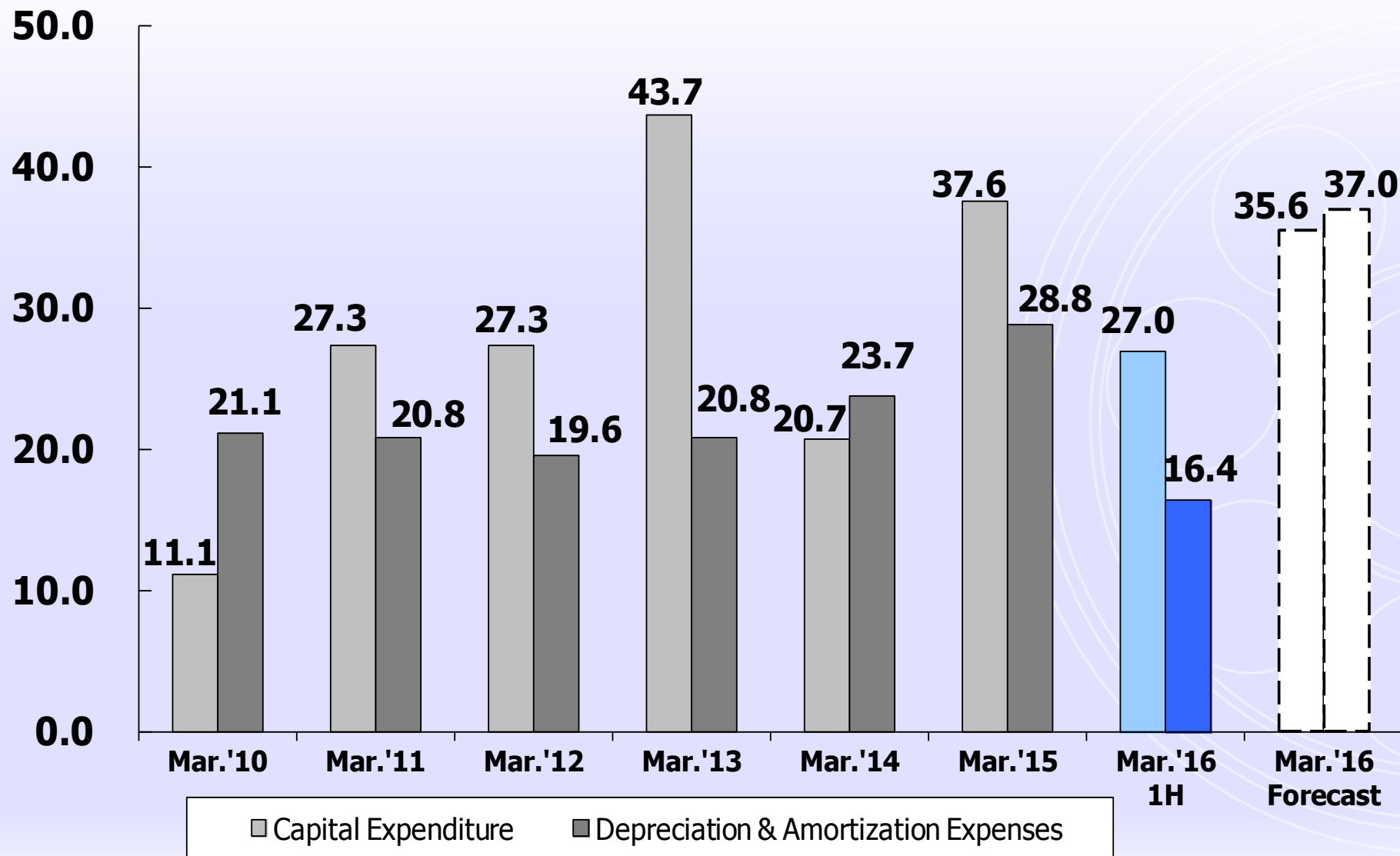
(Billions of yen)



(Billions of yen)



(Billions of yen)



# Net Interest-Bearing Debt

Yearly

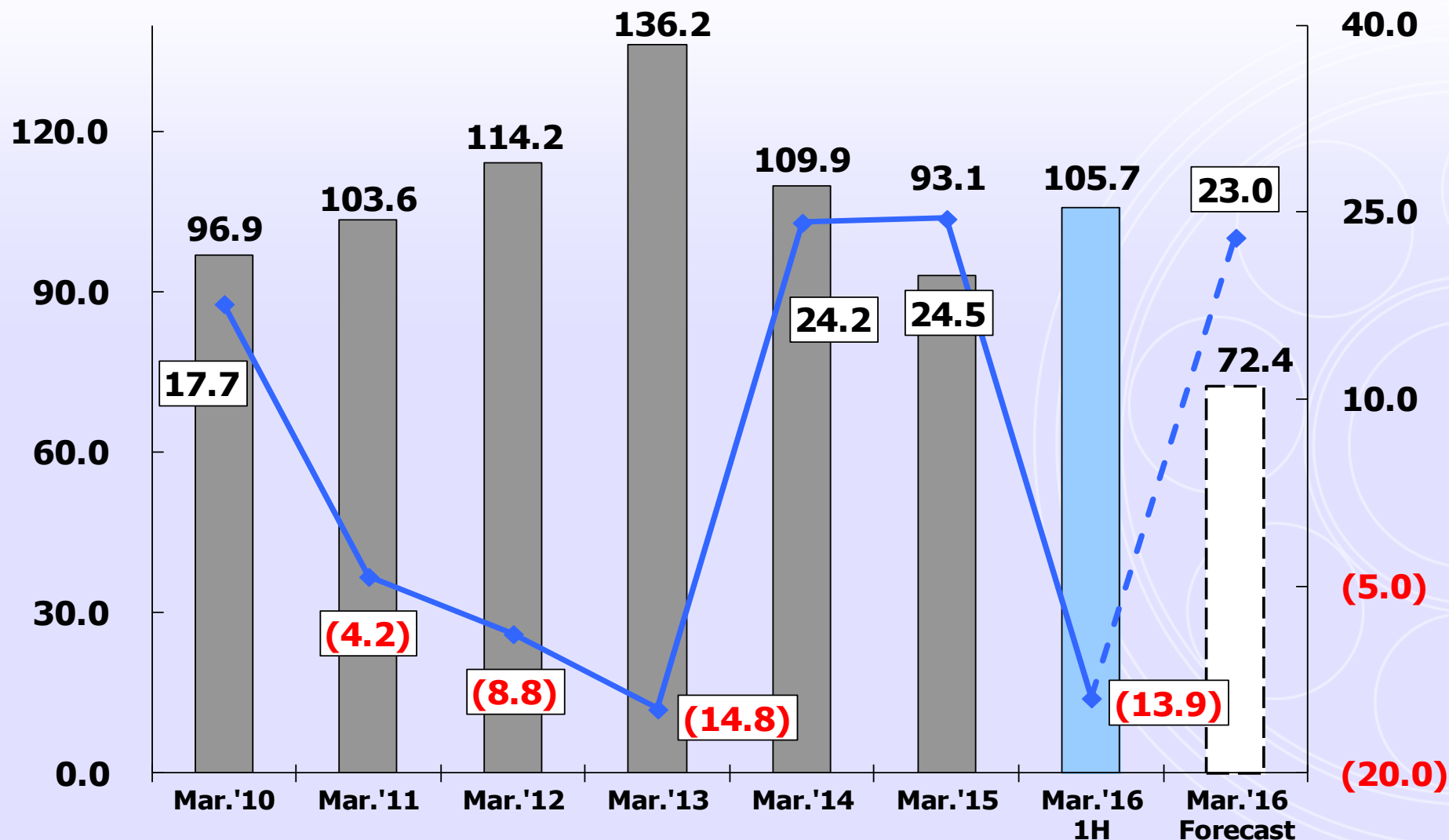
**Minebea**  
Passion to Exceed Precision

(Billions of yen)

Net interest-bearing debt

Free cash flow (right axis)

(Billions of yen)



*Net interest-bearing debt = Interest-bearing debt – Cash and cash equivalents*

*Free Cash Flow = CF from operating activities + CF from investing activities*

## Sales and profits set to reach new record highs

(Millions of yen)	FY ended Mar. '15	Fiscal Year ending Mar. '16					
	Full Year	1H	2H Revised Forecast	Full Year Revised Forecast	YoY	2H July Forecast	Full Year July Forecast
Net sales	500,676	295,554	384,446	680,000	+36%	355,500	650,000
Operating income	60,101	27,417	38,583	66,000	+10%	38,600	67,500
Ordinary income	60,140	23,326	39,174	62,500	+4%	38,100	66,500
Net income	39,887	17,758	30,242	48,000	+20%	27,800	50,000
Net income per share (yen)	106.73	47.49	80.85	128.34	+20%	74.35	133.72

Foreign exchange rates	Mar. '15 Full Year	1H	2H Assumption	Full Year Assumption
US\$	¥109.19	¥121.77	¥121.00	¥121.39
Euro	¥139.38	¥134.55	¥136.00	¥135.28
Thai Baht	¥3.37	¥3.59	¥3.38	¥3.49
Chinese RMB	¥17.60	¥19.52	¥19.00	¥19.26

2H July Assumption	Full Year July Assumption
¥118.00	¥118.74
¥130.00	¥130.69
¥3.60	¥3.62
¥19.30	¥19.35

# Forecast for Business Segment

(Millions of yen)	FY ended Mar. '15	FY ending Mar. '16					
	Full Year	1H	2H Revised Forecast	Full Year Revised Forecast	YoY	2H July Forecast	Full Year July Forecast
Net sales	500,676	295,554	384,446	680,000	+36%	355,500	650,000
Machined components	155,785	83,247	84,753	168,000	+8%	86,000	170,000
Electronic devices and components	344,724	212,064	299,236	511,300	+48%	269,100	479,300
Other	166	242	458	700	X 4.2	400	700
Operating income	60,101	27,417	38,583	66,000	+10%	38,600	67,500
Machined components	39,722	20,175	21,825	42,000	+6%	21,300	42,600
Electronic devices and components	30,747	12,349	22,651	35,000	+14%	23,050	36,600
Other	-28	24	-224	-200	X 7.1	-150	-500
Adjustment	-10,340	-5,130	-5,670	-10,800	+4%	-5,600	-11,200

*\*Due to minor changes in segment classification from FY3/16, FY3/15 and initial forecast numbers are also adjusted for comparison.*





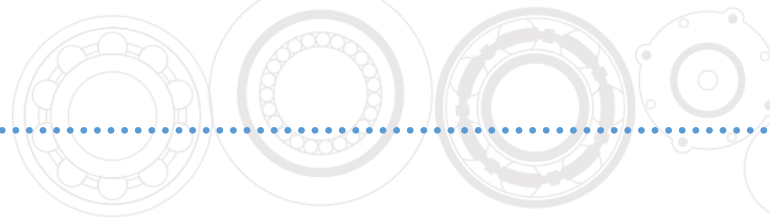
# Policy and Strategy

November 5, 2015

**Yoshihisa Kainuma**

**Representative Director,  
President and Chief Executive Officer**

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- | Current Performance and Minebea Share Price
- | Our View on Current Market Conditions
- | Our View on Future Business Risks
- | Unforeseen Factors behind First Half Performance
- | Outlook for this Fiscal Year
- | Future Developments (New Products)

Net sales and operating income  
continues to hit first half record highs!

(Millions of yen)	FY ended Mar. '15	FY ending Mar. '16	Change YoY	1H of FY ending Mar. '16	
	1H	1H		July Forecast	Vs. Forecast
Net sales	216,557	295,554	+36%	294,500	100%
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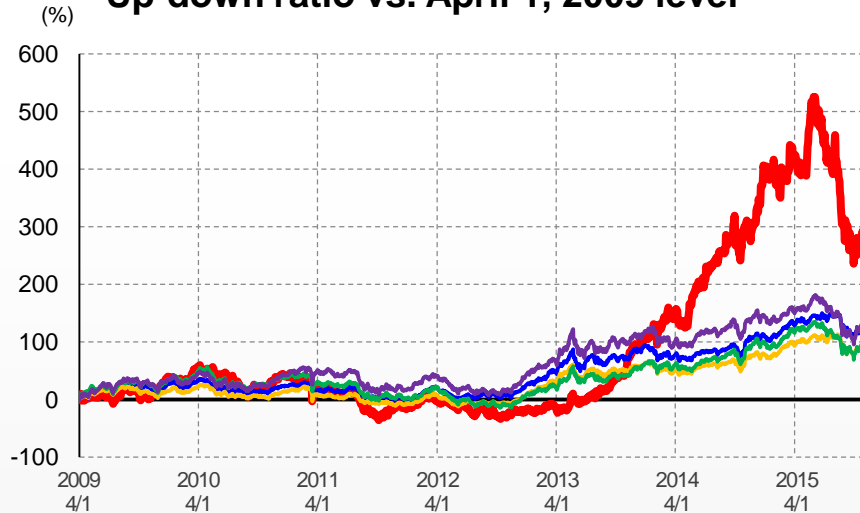
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# Current Performance and Minebea Share Price - 2

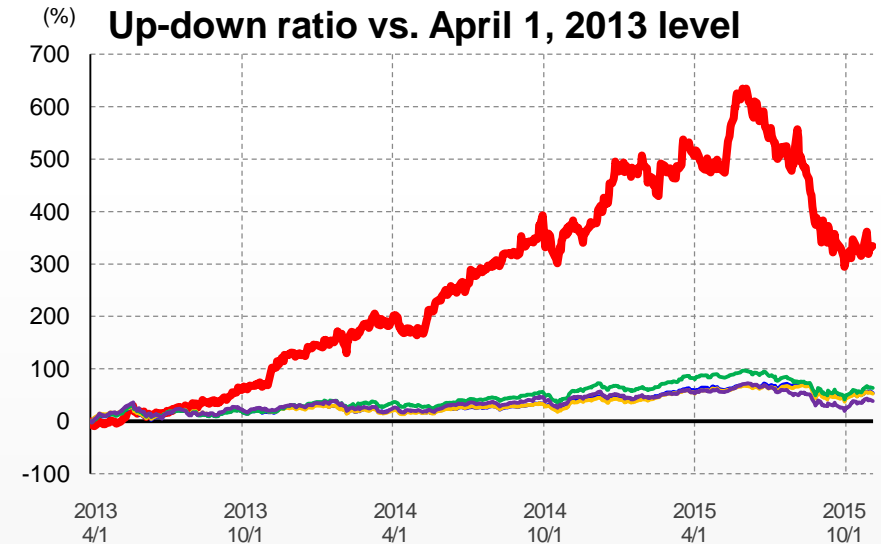
— Minebea — Nikkei 225 — TOPIX

— TOPIX Electric Appliances — TOPIX Machinery

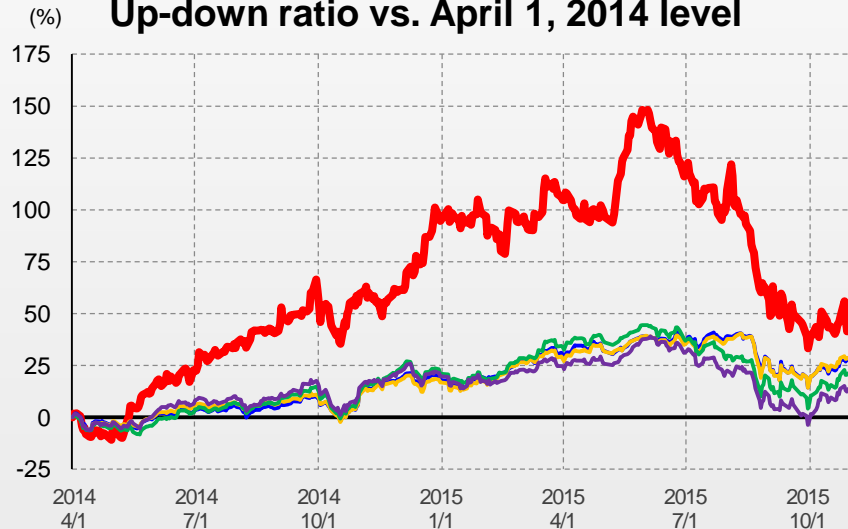
**Up-down ratio vs. April 1, 2009 level**



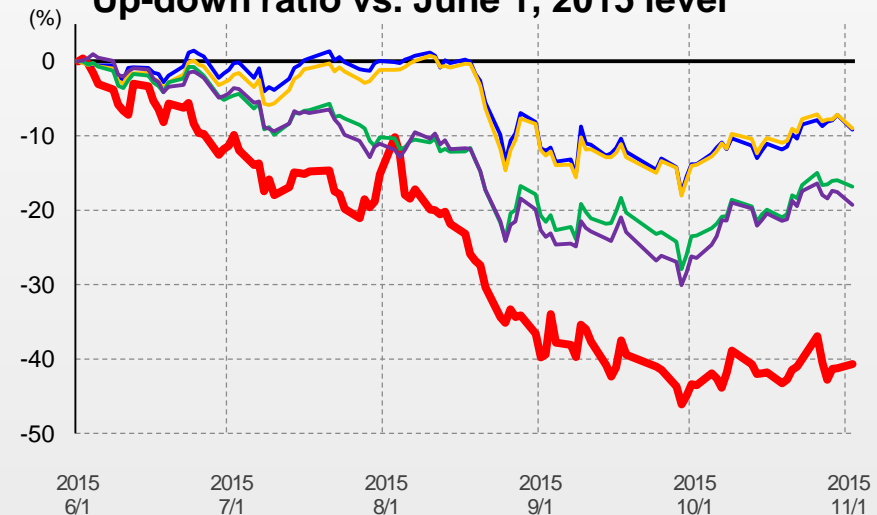
**Up-down ratio vs. April 1, 2013 level**



**Up-down ratio vs. April 1, 2014 level**



**Up-down ratio vs. June 1, 2015 level**



# Our View on Current Market Conditions

1

## Current Chinese economy and automobile/smartphone markets

- Although the second half might see some uncertainty, high-end smartphone and luxury car sales to grow next year and one after next.
- Minebea sales keep pace with booming sales of high-end consumer products.

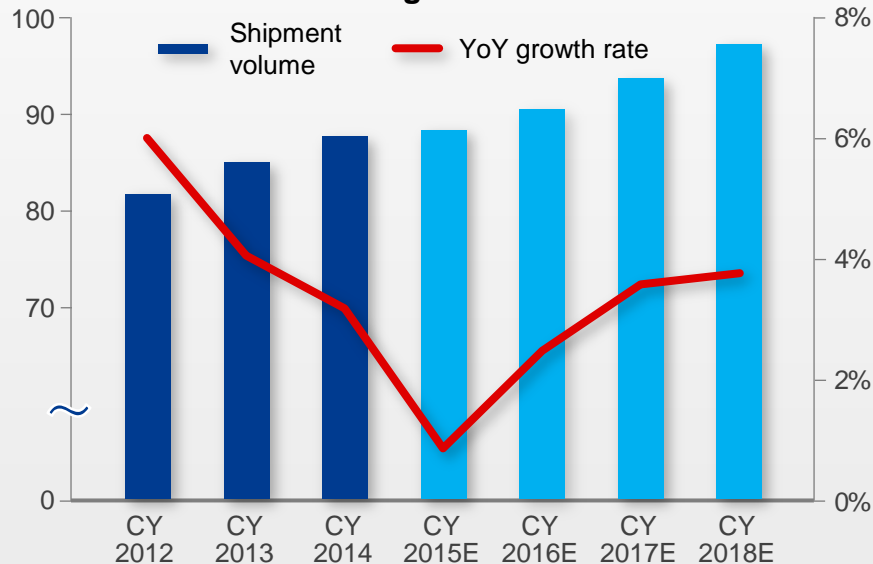
2

## Competition for LED Backlights

- Production is in full swing with a focus on quality (a high market share).
- Chinese high-end Android model launched in October.
- Applications other than smartphones are steadily increasing.

(Millions of units)

### Global Passenger Vehicle Sales Forecast

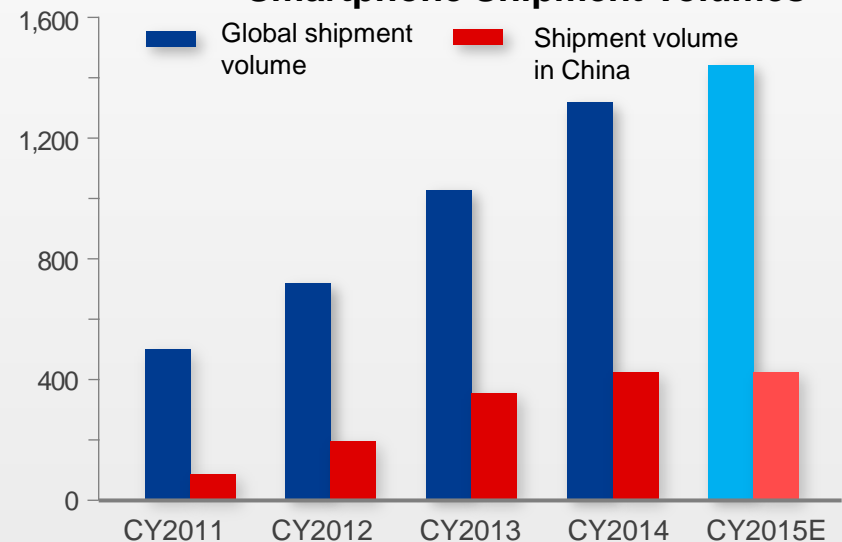


November 5, 2015

Source: IHS 20

(Millions of units)

### Smartphone Shipment Volumes



Source: IDC

# Our View on Future Business Risks

1

Will market share for LED backlights decline next year?

2

Will OLED displays replace LCDs in 3 years?

3

Will diminishing HDD sales volume drive profits down?

4

Which Minebea products other than bearings and LED backlights are growth drivers this year, next and one after next?

# 1. Efforts to keep next year's market share for LED backlights

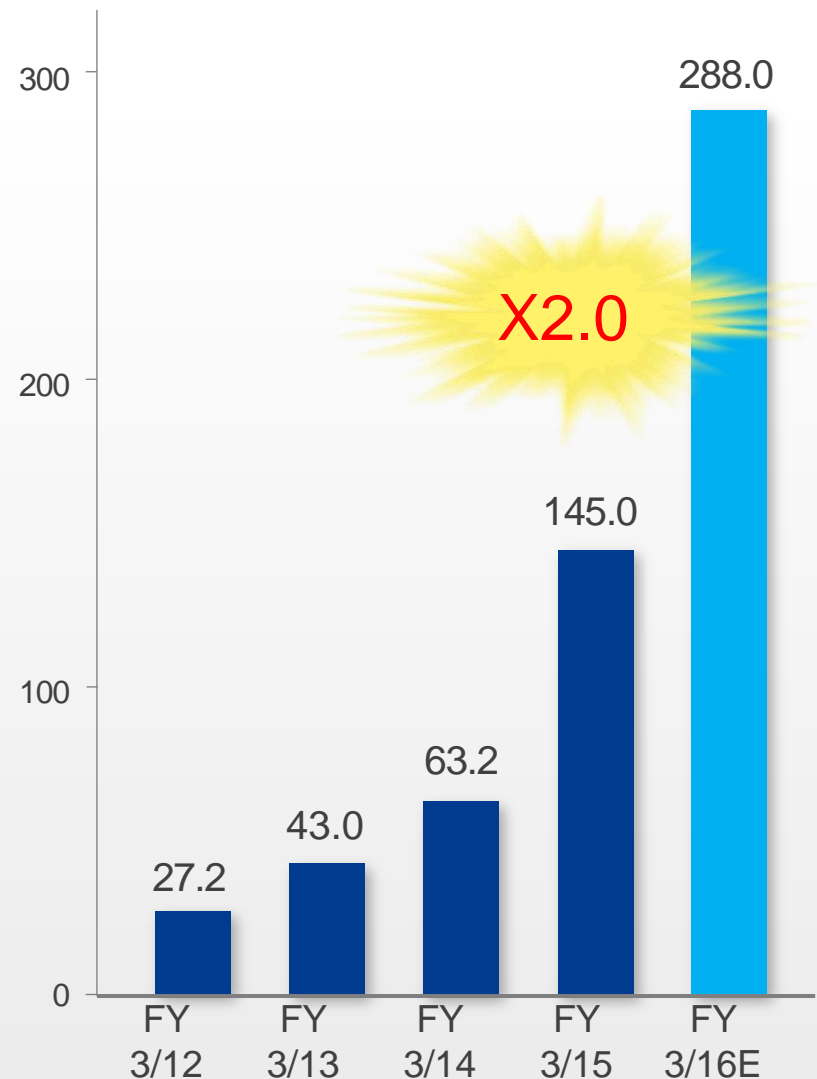
Minebea has confidence in quality and supply capability (Minebea aims to keep its prime vender status next year, too)

## Sharpen competitive edge to increase market share

- Introduce automated machines and increase production in Cambodia to reduce labor costs while cutting fixed costs for FYE 3/2017 and onward via the shortened depreciation period (declining balance method) effective FYE 3/2015, all with an eye to bolstering our competitive edge in manufacturing costs and increasing revenue and profits
- Increase automobile application sales next year
- Increase market share further by promoting our high performance (thin, energy-saving) components for use in mid-range smartphones while maintaining the lion's share of the high-end smartphone market
- Tough manufacturing challenges continue

## LED Backlight Sales

(Billions of yen)



## 2. OLED displays will not replace all high-end smartphone LCDs in 3 years

We think threat of OLED is unlikely for a while

### Small and medium-sized LCD sales will steadily grow

- Mobile phone applications (smartphones and feature phones combined) accounted for over 85% of all applications (in 2014).
- Sales will keep growing mainly for smartphone and in-vehicle display applications.

### LCD will continue to reign

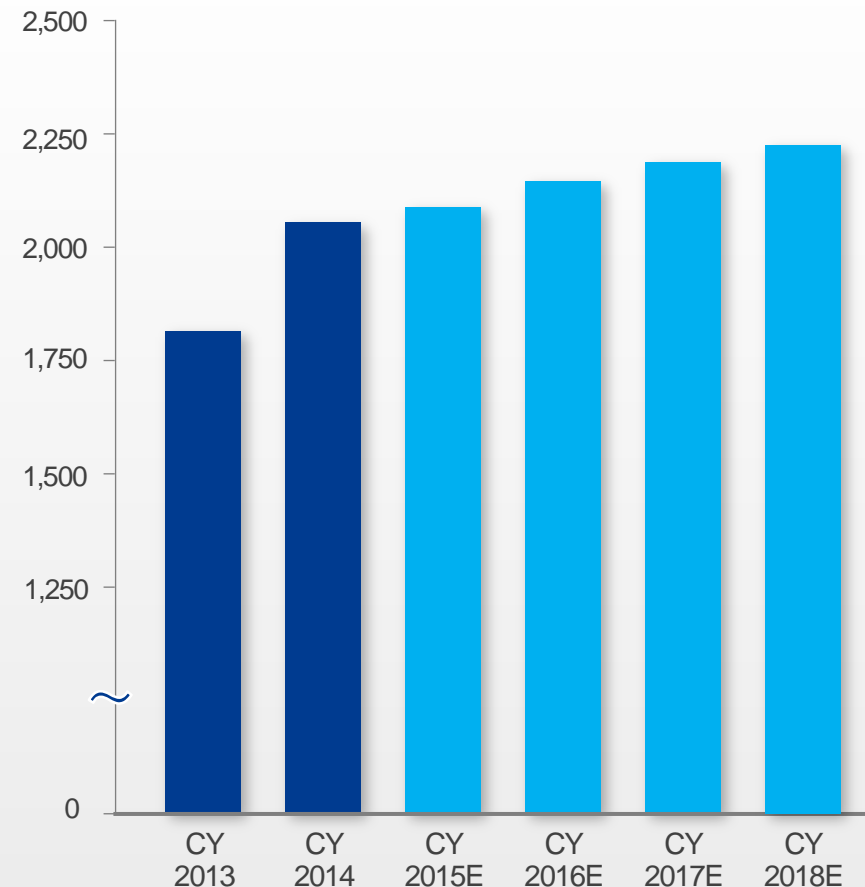
- LCD has a greater advantage over the OLED display in terms of manufacturing costs, long life, high definition, visibility in sunlight, supply chain capacity, etc.

### Joint R&D for ultra-thin LED chips and optical sheet

- Supply chain companies jointly start a new R&D project to keep advantage over OLED.

### Global Production of Small and Medium-sized LCDs

(Millions of units)



Source: Fuji Chimera Research Institute



# 3-1. Profits do not decline by HDD volume down (Future of Ball Bearings and Pivot Assemblies)

External sales reached 163 million units in September, hitting a record high again!

## Demand will continue to drive external sales up

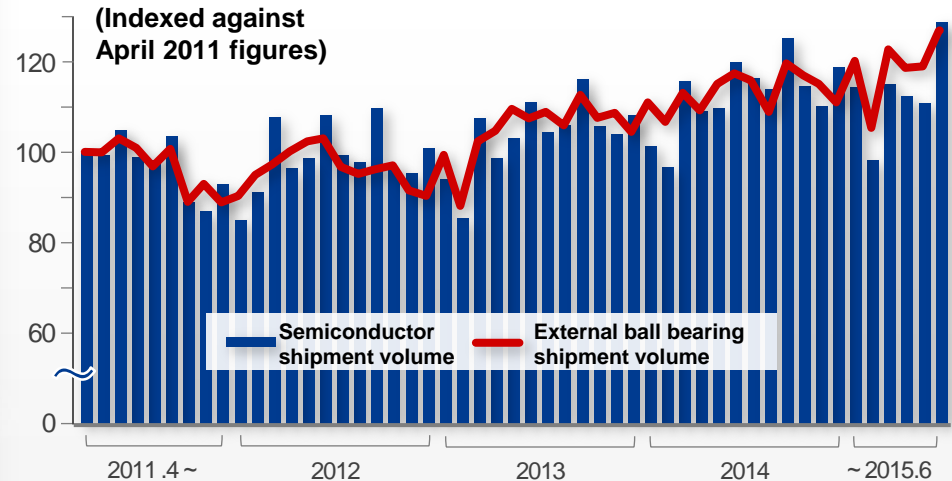
- External ball bearing sales are closely related to semiconductor shipment volumes and global GDP growth.
- Since the spring of 2013 demand has been growing in step with increasing sales of high-value-added products, including smaller and more energy efficient (electric) cars, server fan motors for advanced cloud computing applications, ATMs, etc.
- External sales hit record highs three times last fiscal year and twice this fiscal half and are still growing.

## Although internal sales will decline as the HDD market shrinks, the Five Arrows strategy will boost external sales and keep the damage to a minimum

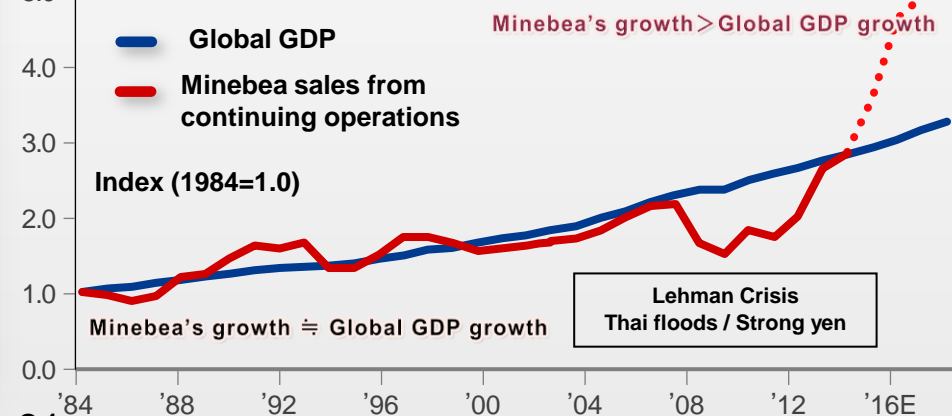
- About 30% of all ball bearings we make are used in-house. While sales of HDD pivot assemblies (which account for the majority of that figure) had been slipping in the shrinking HDD market, they are now recovering.
- Will boost ball bearing production capacity and enhance ability to meet demand for flexible pricing.
- Profit declines from pivot assemblies can be more than offset by growth in external ball bearings volume.

November 5, 2015

## Correlation between Monthly External Bearing Shipment and Semiconductor Market



## Minebea sales from continuing operations and global economic growth



# 3-2. Profits do not decline by HDD volume down (Future of HDD spindle motors)

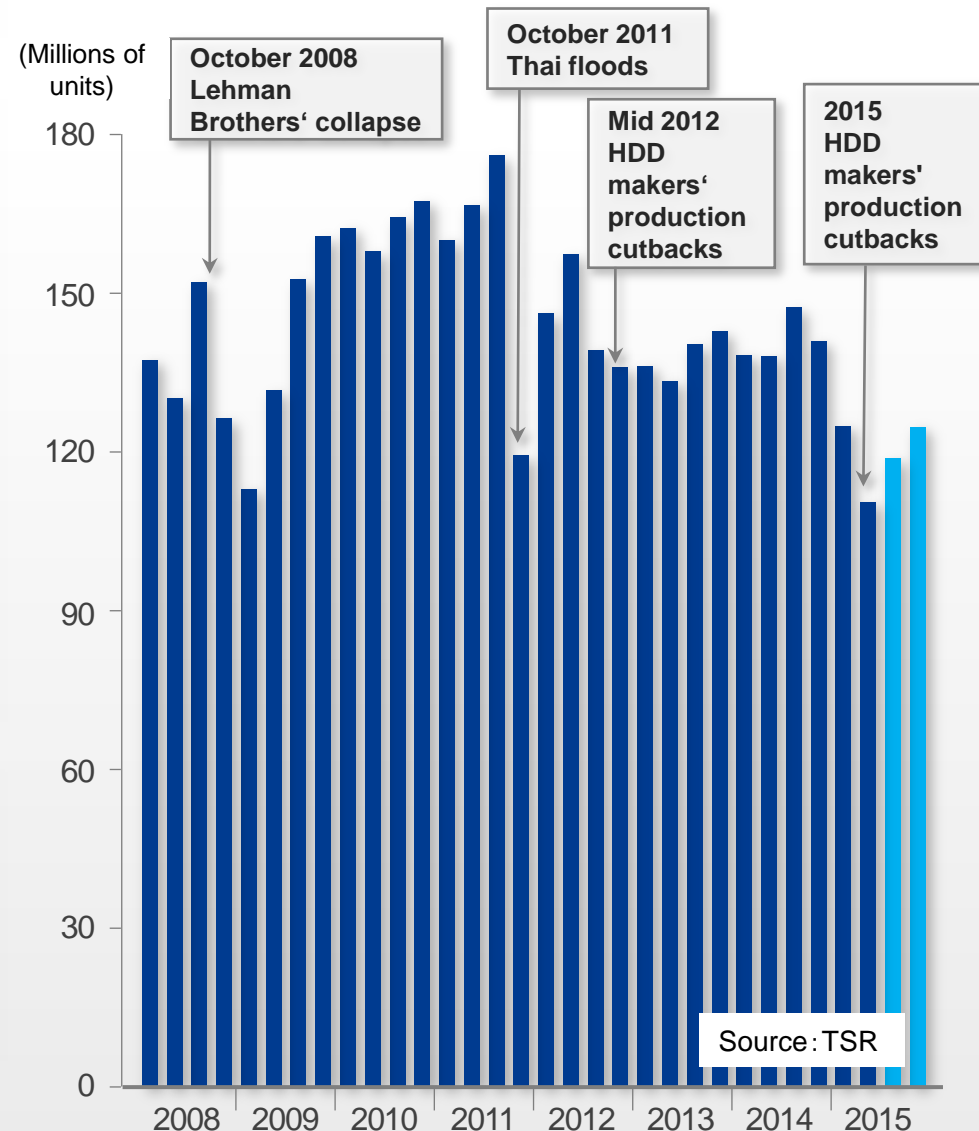
## High-end-focused HDD spindle motor business to expand

- HDD shipment volume is expected to reach 450 million units in 2015.
- The HDD market is slowly shrinking due to 1. sluggish PC sales, 2. SSDs eroding the market share in the mobile device market, and 3. the shift to cloud computing.
- HDD shipments dropped sharply once in the first half but are recovering after bottoming out in June.
- Since data storage needs still continue to surge, high-end HDD demand is expected to grow further due to their per bit price advantage over other data storage solutions.

## Focus on maintaining profitability

- HDD spindle motors: Focus on high-end, increase quantity

## HDD Market Shipment Volume



# 4-1. Measuring Components business to become a growth driver this year, next and one after next

## Leverage synergy from acquisition

- Take advantage of the synergy from the February 2015 Sartorius Mechatronics T&H acquisition ASAP (1. increase use of Minebea products, 2. expand the sales territory for Minebea measuring components, and 3. utilize Minebea's mass production capacity in Thailand and elsewhere).
- Maintain high profit margin even after acquisition

## Steady sales growth of existing products

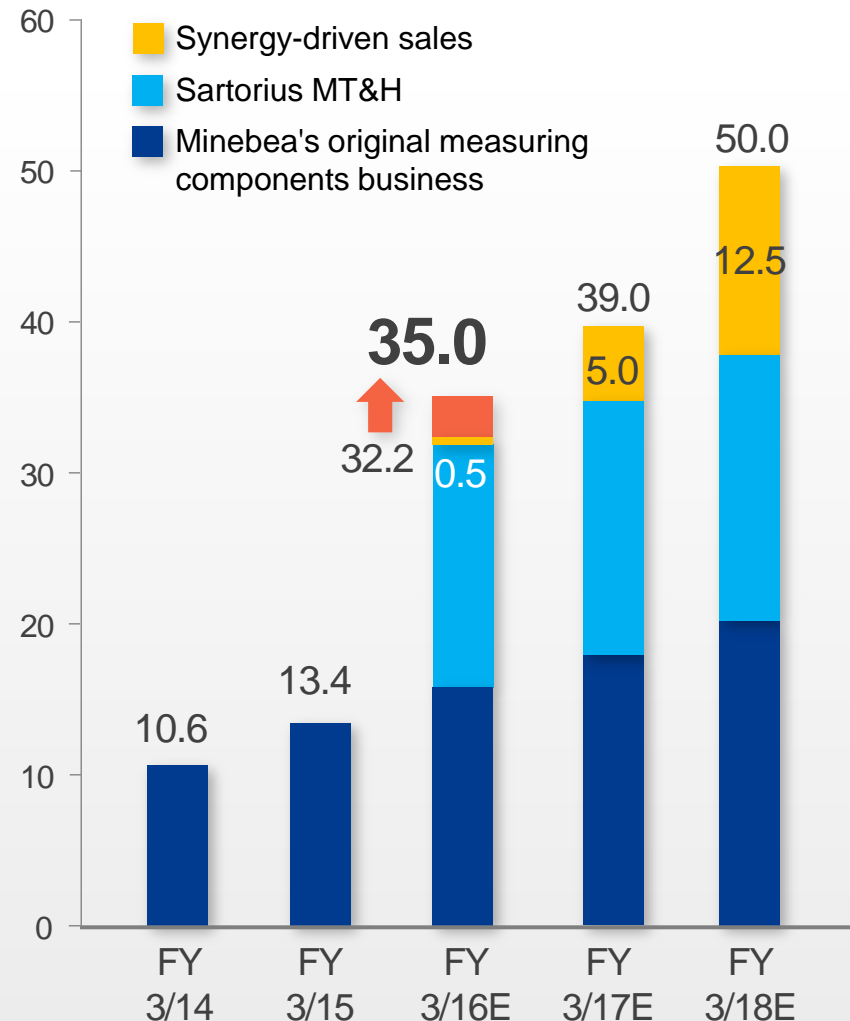
- Robust sales led by seat sensors for the North American automobile market

## Work on developing new applications

- Enter a market worth 300 billion yen in total next year and onward
1. Sensors for medical beds
  2. Sensors for monitoring the tightness of bolts
  3. Sensors for walking bipedal robots
  4. Smart agricultural sensors, and more

## Measuring Components Sales

(Billions of yen)



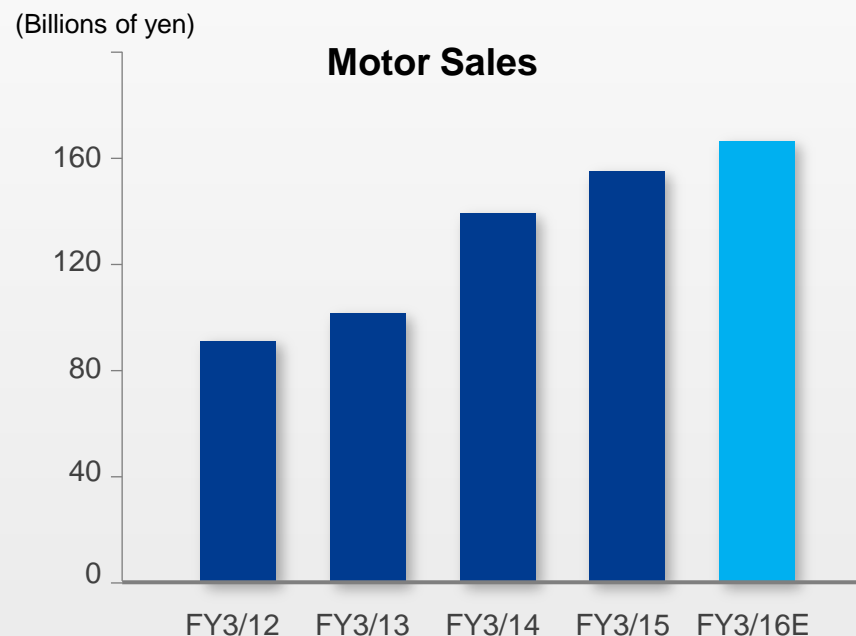
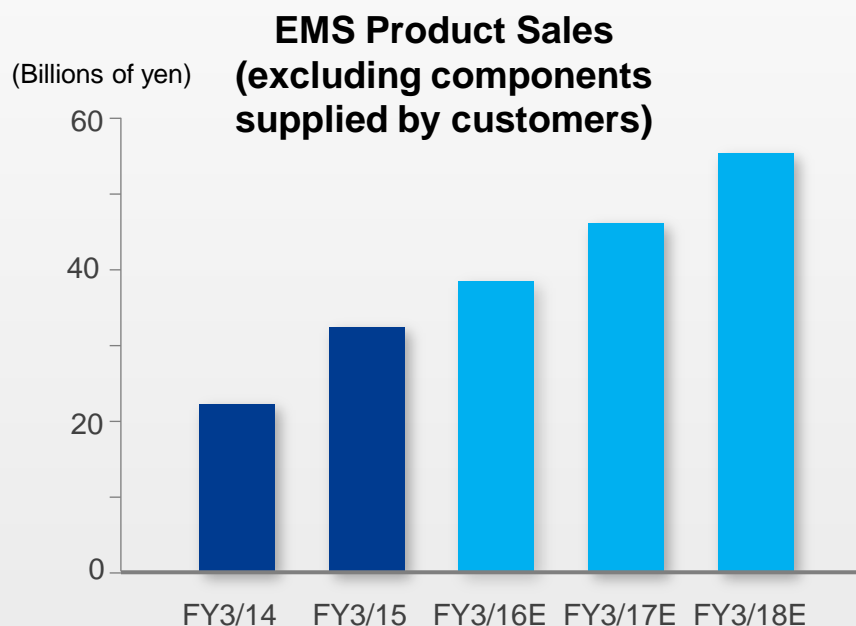
## 4-2. Motor business to become a growth driver this year, next and one after next

1

Vehicles with more sophisticated features to drive demand for Minebea's small-sized motors

2

Orders for motor technology-driven EMS products to remain upbeat



1

One-time loss posted at NHBB

2

LED backlight sales increase delayed despite healthy motor and measuring component sales

- Sales to exceed 100 billion yen in Q3
- Production now at full capacity

3

Impact of declining pivot assembly sales

## Second half targets well within reach

1. September sales and operating income jumped, totaling 69 billion yen and 7 billion yen respectively (on a managerial accounting basis).
2. Positive effects of weak Thai baht and Chinese renminbi to start showing.
3. External ball bearing sales volume as well as sales of LED backlights and measuring components to increase, profit margin of motors to improve

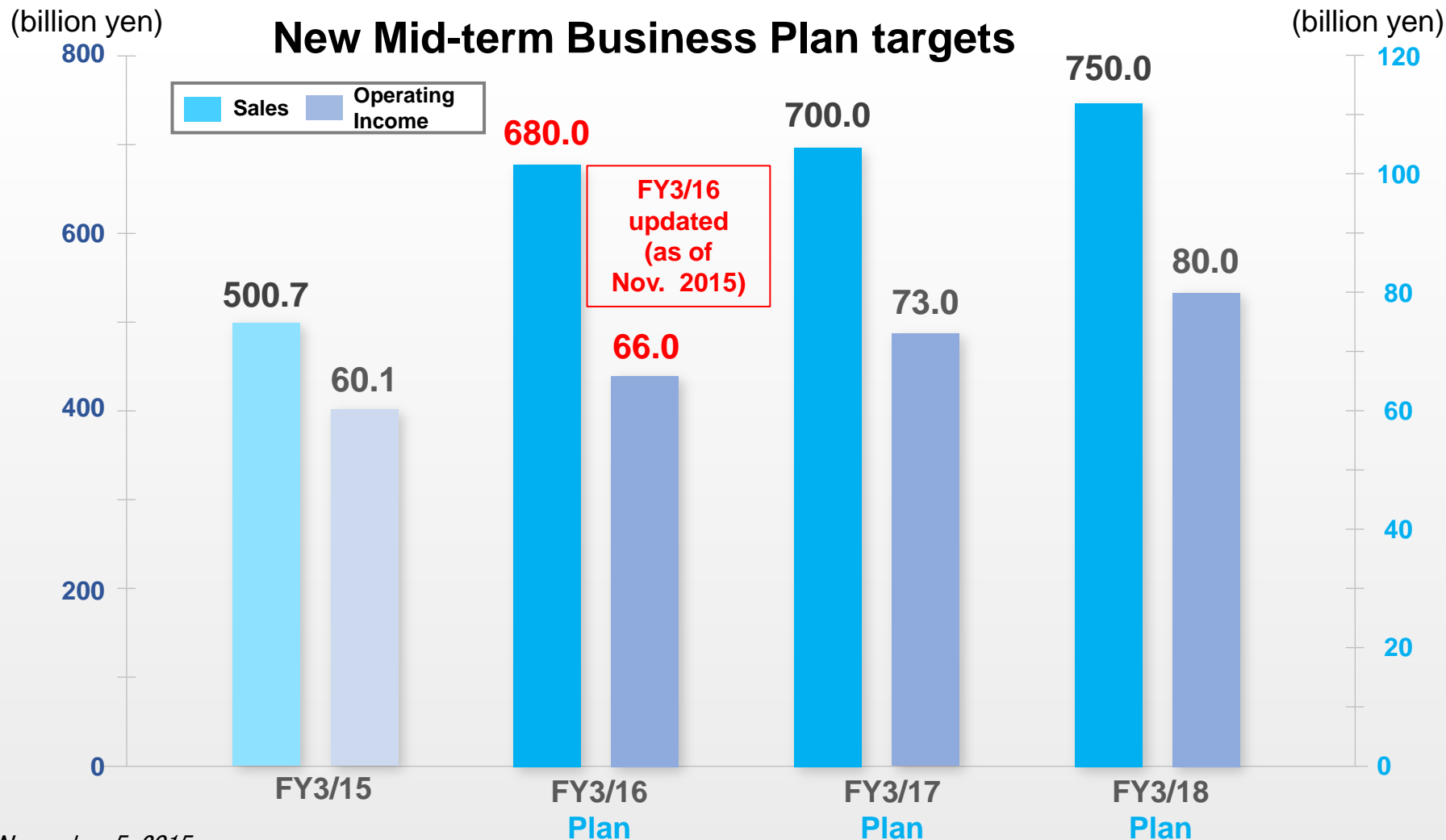
## Only slight change to capital investment plan for this fiscal year

**Competitive edge will be strengthened further as depreciation costs to significantly drop next year**

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	Full Year	1H	2H Revised Forecast	Full Year Revised Forecast	YoY	2H July Forecast	Full Year July Forecast
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Net income per share (yen)	106.73	47.49	80.85	128.34	+20%	74.35	133.72

# New Mid-term Business Plan targets

Targets as simple check points to our goal for 2020



1

Smart city project in Cambodia

2

SALIOT™ (Smart Adjustable Light for IoT)

3

J3DD head-up displays



# 1. Smart City Project in Cambodia

Combining Minebea's wireless control technology-driven Smart City Project with **Mitsubishi Heavy Industries'** road traffic solutions/technologies!

**OSAKI Electric** has joined this project with smart meter technologies!

**Minebea**  
Passion to Exceed Precision

- A model project candidate for the Japanese Ministry of the Environment's JCM financing program
- Some 9,000 highly efficient LED street lights to be installed at 5 locations in Phnom Penh, etc. beginning in 2016



Building showcase for the most advanced Smart City in the world

1. Traffic monitoring system
2. Parking management system
3. Smart Meter

**Global Smart City Market Forecast**

**4,000** trillion yen\*  
2010 to 2030 cumulative

\*Source: Smart City Project

**MITSUBISHI**  
HEAVY INDUSTRIES, LTD.  
Our Technologies, Your Tomorrow

- Jointly develop ICT-based road traffic solutions/technologies (1. & 2.)

**OSAKI**

- Jointly develop solutions with electric meter (smart meter) (3.)

## 2. SALIOT™ (Smart Adjustable Light for IoT) will be in full marketing stage next year

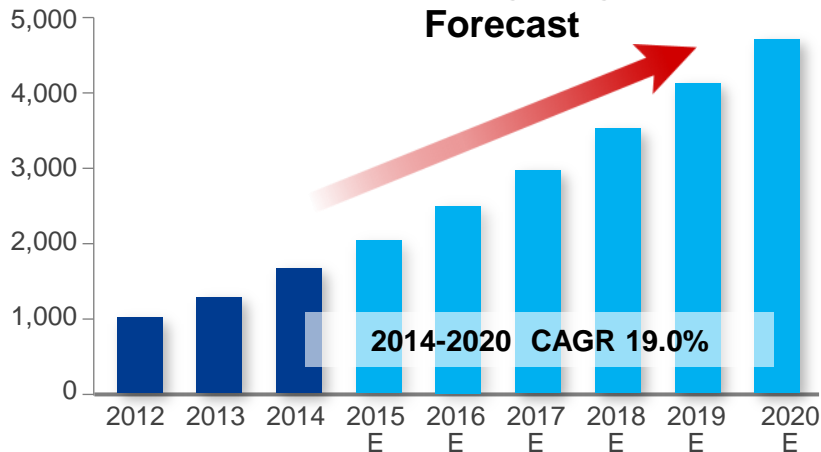
Industry's first LED light capable of  
automatically adjusting light distribution angle

### Build a global sales network for SALIOT™

- Formed an alliance with CTI, which will serve as a general distributor of Minebea lighting devices and smart network related products in Thailand
- Opened a showroom and began market research in Bangkok.
- Already adopted by museums in Japan, luxury car dealers in Bangkok, etc.
- To be exhibited at a trade show in San Diego, U.S.A. in 2016

(Billions of yen)

### Global LED Lighting Market Forecast



# 3. J3DD head-up displays

Started mass production of optical components for head-up displays (HUDs)  
Leverage thin glass molding technology to make more lightweight HUDs with a higher degree of precision

## Orders received for European luxury cars

- Okamoto Glass received an order for HUD condensed lenses from an automotive parts manufacturer. J3DD will produce the lenses.
- J3DD makes optical components for HUDs, including condensed lenses, reflective mirrors, and combiners, and is preparing for mass production.

## Advantages of thin glass

- Can be placed near the light source due to excellent heat resistance (to high-intensity LED and laser light)
- Thin glass molding offers advantages for making larger display HUDs when it comes to precision, form stability, weight, etc.

**Optimal for smaller, lighter-weight and light distribution control applications**



**Sample image**

(Left) HUD

condensed lens

(Bottom) HUD

combiner



## HUD market forecast

**40.2** billion yen  
2014 results



**157.3**  
billion yen  
2020 projection

Source: Fuji Chimera Research Institute

Also raised the year-end dividend forecast by 4 yen  
for an annual dividend of 20 yen

## Dividend for FYE 3/2016

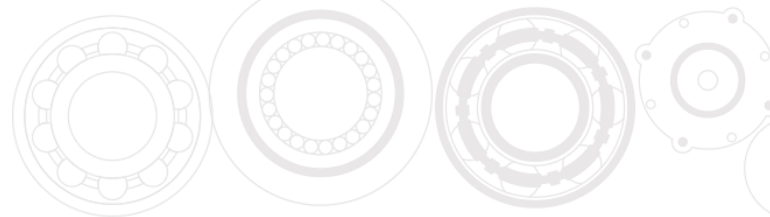
	May forecast	July forecast	Current forecast
Interim	TBD	→ 10	yen/share
Year-end (forecast)	TBD	→ TBD	→ 10 yen/share

## (For reference) Dividend for FY ended 3/2015

Annual dividend: 12 yen (6 yen interim/6 yen year-end)

## Look into M&A and alliance opportunities in specific fields and targets

- **Cautiously aiming at large scale M&A deals**
- **Give priority to boosting machined components business, including via medium to small M&As and various alliances**



# Minebea Co., Ltd. Business Results

<http://www.minebea.co.jp/>

Any statements in this presentation which are not historical are future projections based on certain assumptions and executive judgments drawn from currently available information. Please note that actual performance may vary significantly from any particular projection due to various factors.

Factors affecting our actual performance include but are not limited to: (i) changes in economic conditions or demand trends related to Minebea's business operations; (ii) fluctuation of foreign exchange rates or interest rates; and (iii) our ability to continue R&D, manufacturing and marketing in a timely manner in the electronics business sector, where technological innovations are rapid and new products are launched continuously.

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