



Overview of Business Results

for the 1st Half of Fiscal Year Ending March 31, 2021
(April 2020 → September 2020)

 **SANYO SPECIAL STEEL Co., Ltd.**

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Outline of Statements of Income

1. Outline of 2020FY 1st Half Result

Sanyo's sales volume (non-consolidated) was quite stagnant due to the dwindling demand triggered by the expansion of COVID-19 infection. We regrettably recorded an ordinary income in FY20/1H of negative 4.0 billion yen, deteriorating by 6.2 billion yen from FY19/1H. Ordinary income in FY20/1H increased by 1.4 billion yen (-5.4→-4.0) compared to the previous forecast (announced on July 31,2020) due to an increase in Sanyo non-consolidated sales volume and the earlier than expected recording of inventory valuation gain.

(Reference) 2020FY 1st Half Sales Volume (for Ovako and MSSS; January 2020 to June 2020)

| | FY20/1H (A) | | FY19/1H (B) | | Change(B) → (A) | |
|---|-------------|--------------------------|-------------|--------------------------|-----------------|--------------------------|
| | Amount | Ratio(%) | Amount | Ratio(%) | Amount | Ratio(%) |
| Sales Volume (Thousands of ton) | 627 | (per month) 104.5 | 902 | (per month) 150.3 | -275 | (per month) -45.8 |
| (Sanyo) | 273 | 45.4 | 463 | 77.1 | -190 | -31.7 |
| (Ovako) | 320 | 53.3 | 387 | 64.5 | -67 | -11.2 |
| (MSSS) | 35 | 5.8 | 52 | 8.7 | -18 | -2.9 |

2. Statements of Income (FY20/1H vs FY19/1H)

(Unit : Billion yen)

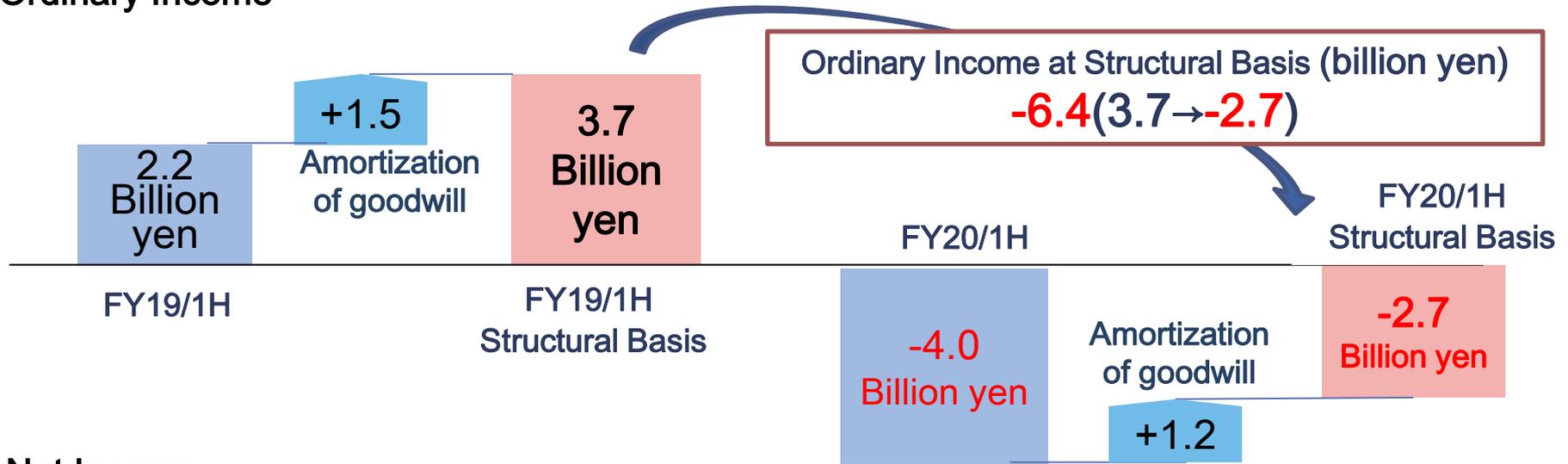
| | FY20/1H (A) | | FY19/1H (B) | | Change(B) → (A) | |
|--|-------------|----------|-------------|----------|-----------------|----------|
| | Amount | Ratio(%) | Amount | Ratio(%) | Amount | Ratio(%) |
| Net Sales | 97.2 | 100.0 | 146.1 | 100.0 | -48.9 | -33.5 |
| Operating Income | -3.9 | -4.0 | 2.6 | 1.8 | -6.5 | - |
| Ordinary Income | -4.0 | ROS -4.1 | 2.2 | ROS 1.5 | -6.2 | - |
| (Sanyo) | -1.7 | - | 3.2 | - | -4.9 | - |
| (Ovako)* ¹ | 0.4 | - | 1.4 | - | -0.9 | -68.9 |
| (MSSS)* ¹ | -0.8 | - | -0.7 | - | -0.1 | - |
| (Amortization of goodwill) | -1.2 | - | -1.5 | - | +0.3 | - |
| Net Income* ² | -3.3 | -3.4 | 1.4 | 0.9 | -4.7 | - |
| Net Income (Structural Basis)* ³ | -2.1 | -2.1 | 2.9 | 2.0 | -4.9 | - |

*1 The consolidated accounting period for Ovako and MSSS is January to June 2020. *2 Profit attributable to owners of parent

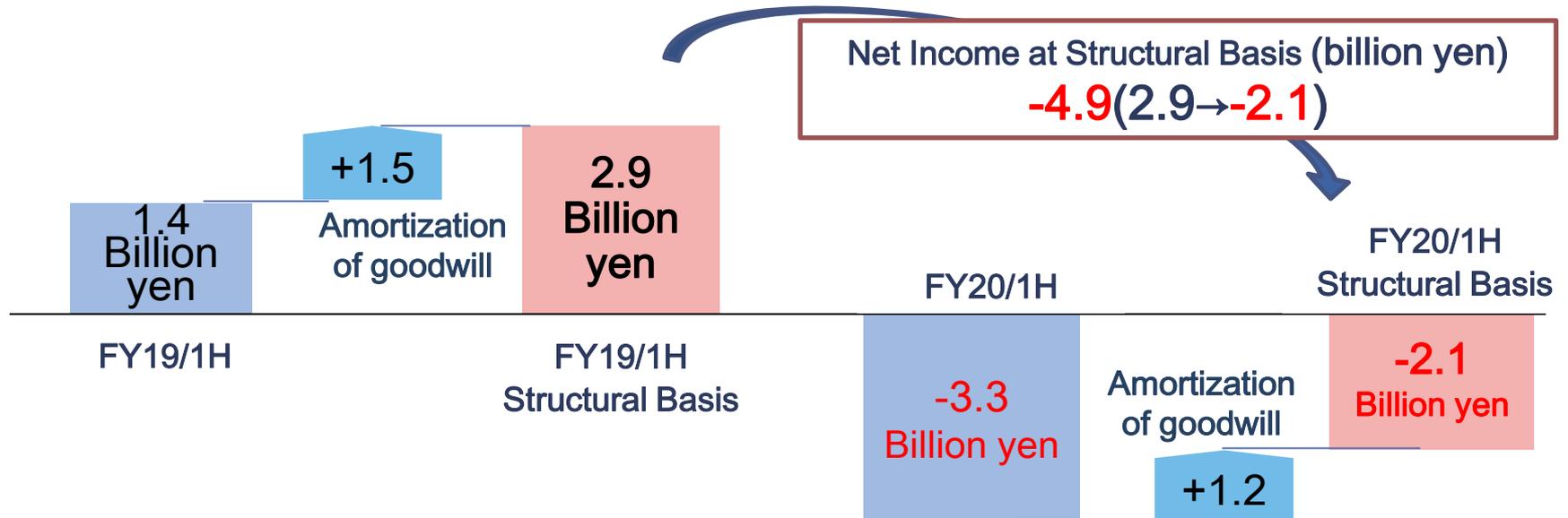
*3 Adjusted by amortization of goodwill

Income (Structural Basis) FY19/1H vs. FY20/1H

Ordinary Income

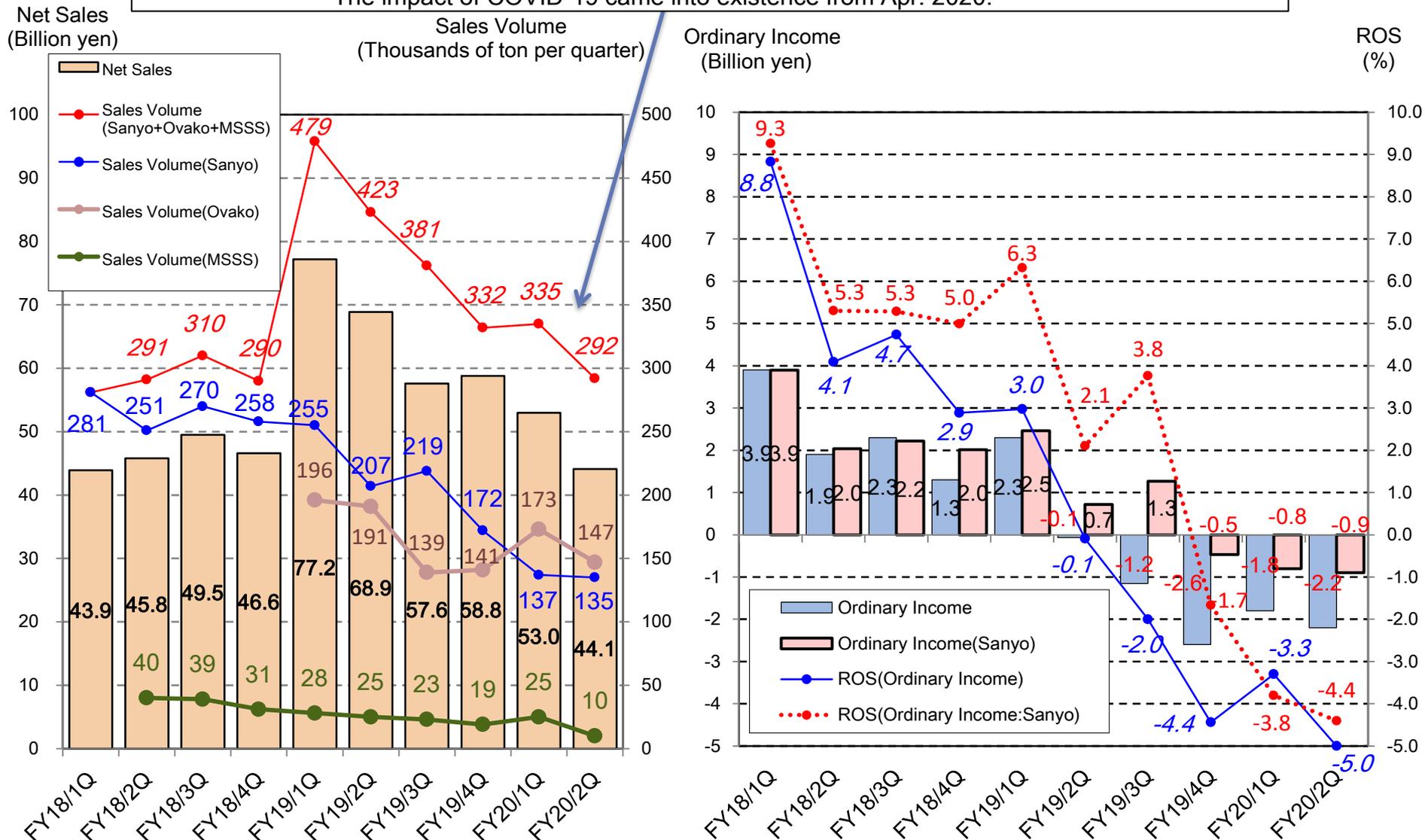


Net Income

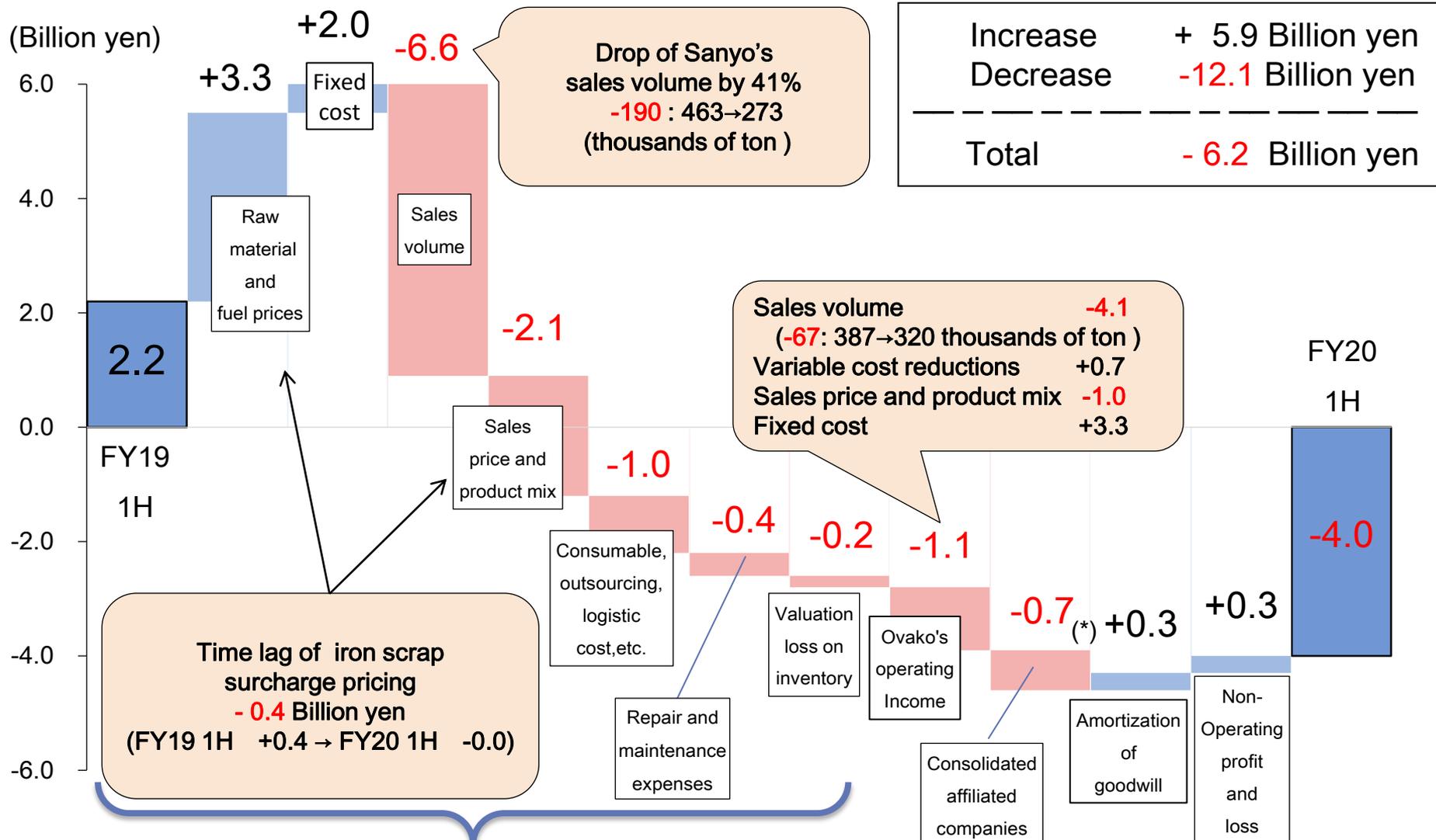


Net Sales and Income (quarterly)

Sanyo ; Sales volume decreased in Apr. – Sept. due to the impact of COVID-19.
 Ovako, MSSS ; Sales volume increased in Jan. - March 2020 from Oct. – Dec. 2019.
 The impact of COVID-19 came into existence from Apr. 2020.



Ordinary Income Variance Analysis (FY19 1H → FY20 1H)



Sanyo's Non Consolidated Operating Income Variance
-5.0 billion yen

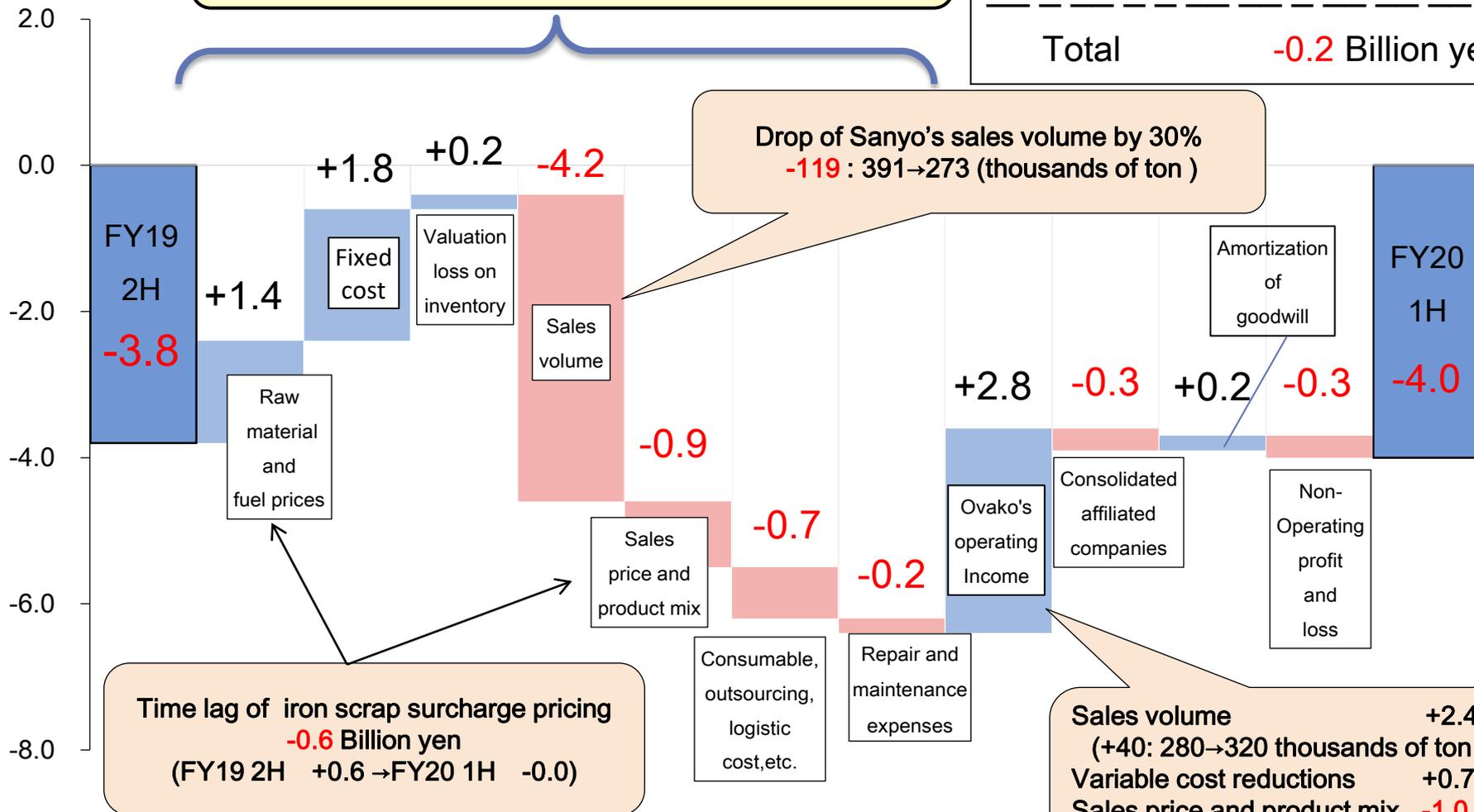
(*) Including operating income variance as below:
MSSS -0.1 billion yen, Other affiliated companies of formed and fabricated materials section -0.3 billion yen.

Ordinary Income Variance Analysis (FY19 2H → FY20 1H)

Sanyo's Non Consolidated Operating Income Variance
-2.6 billion yen

| | |
|--------------|-------------------------|
| Increase | +6.4 Billion yen |
| Decrease | -6.6 Billion yen |
| ----- | |
| Total | -0.2 Billion yen |

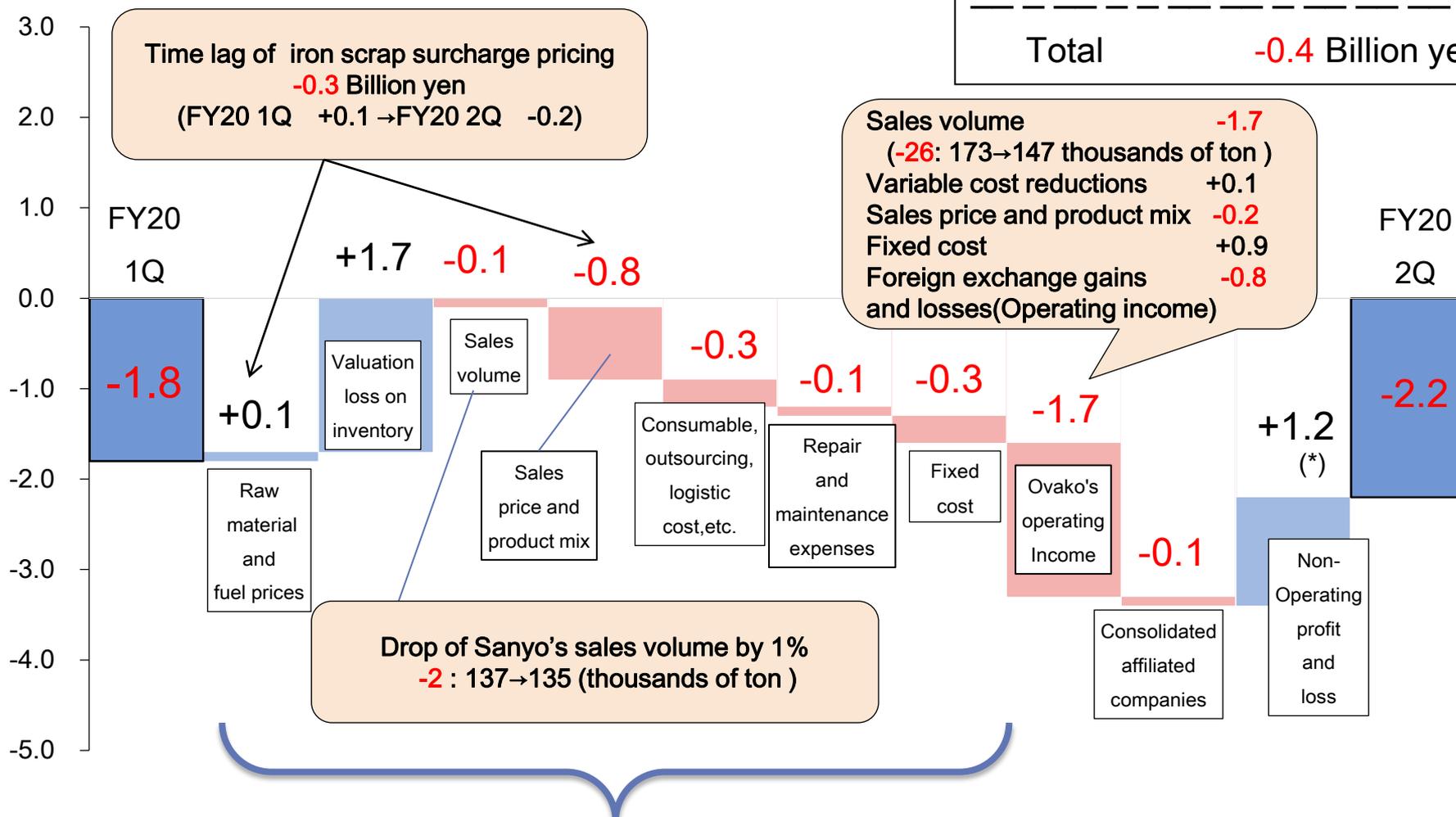
(Billion yen)



| | |
|------------------------------------|--------------|
| Sales volume | +2.4 |
| (+40: 280→320 thousands of ton) | |
| Variable cost reductions | +0.7 |
| Sales price and product mix | -1.0 |
| Fixed cost | + 0.7 |

Ordinary Income Variance Analysis (FY20 1Q → FY20 2Q)

(Billion yen)



| | |
|----------|------------------|
| Increase | +3.0 Billion yen |
| Decrease | -3.4 Billion yen |
| <hr/> | |
| Total | -0.4 Billion yen |

Sales volume -1.7
 (-26: 173→147 thousands of ton)
Variable cost reductions +0.1
Sales price and product mix -0.2
Fixed cost +0.9
Foreign exchange gains and losses(Operating income) -0.8

Drop of Sanyo's sales volume by 1%
 -2 : 137→135 (thousands of ton)

Sanyo's Non Consolidated Operating Income Variance +0.2 billion yen

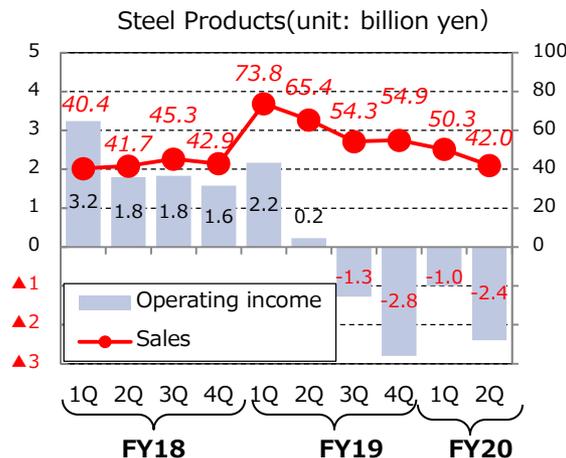
(*) Including Ovako's foreign exchange gains and losses +1.1 billion yen

Earnings by Business Segment

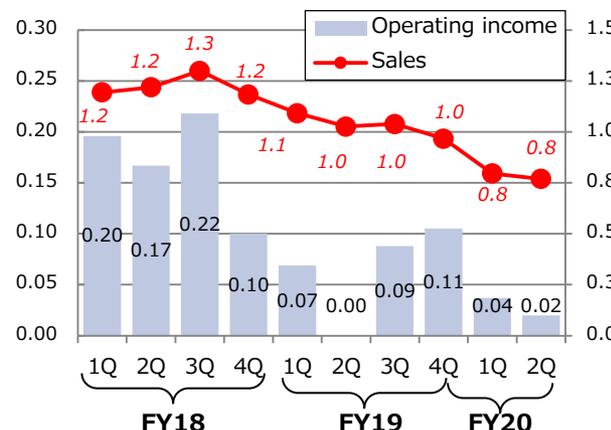
(Unit : Billion yen)

| | FY20/1H (A) | | | FY19/1H (B) | | | Change (B) → (A) | | |
|---------------------------------|-------------|------------------|---------|-------------|------------------|---------|------------------|------------------|---------|
| | Net Sales | Operating Income | ROS (%) | Net Sales | Operating Income | ROS (%) | Net Sales | Operating Income | ROS (%) |
| Steel Products | 92.3 | -3.3 | -3.6 | 139.2 | 2.4 | 1.7 | -46.8 | -5.7 | -5.3 |
| Metal Powders | 1.6 | 0.1 | 3.7 | 2.1 | 0.1 | 3.2 | -0.6 | -0.0 | +0.5 |
| Formed and Fabricated Materials | 5.9 | -0.7 | -11.0 | 9.1 | 0.1 | 1.1 | -3.2 | -0.7 | -12.1 |
| Sub-total | 99.8 | -3.9 | -3.9 | 150.4 | 2.6 | 1.7 | -50.6 | -6.5 | -5.6 |
| Other | 0.7 | 0.0 | 2.8 | 0.8 | 0.0 | 3.3 | -0.1 | -0.0 | -0.5 |
| Adjustments | -3.4 | 0.0 | — | -5.1 | 0.0 | — | +1.8 | +0.0 | — |
| Consolidated Total | 97.2 | -3.9 | -4.0 | 146.1 | 2.6 | 1.8 | -48.9 | -6.5 | -5.8 |

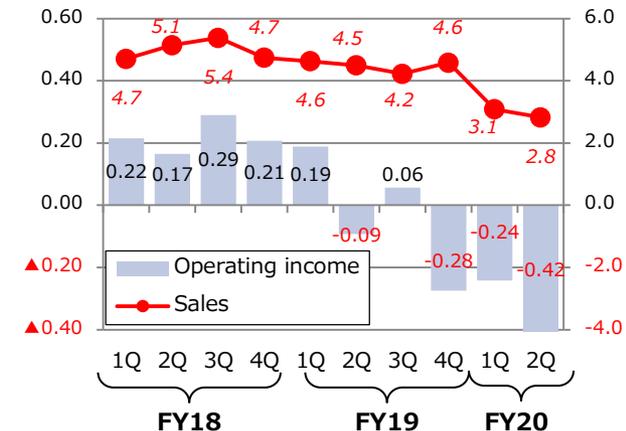
Change in Business Segment



Metal Powders(unit: billion yen)

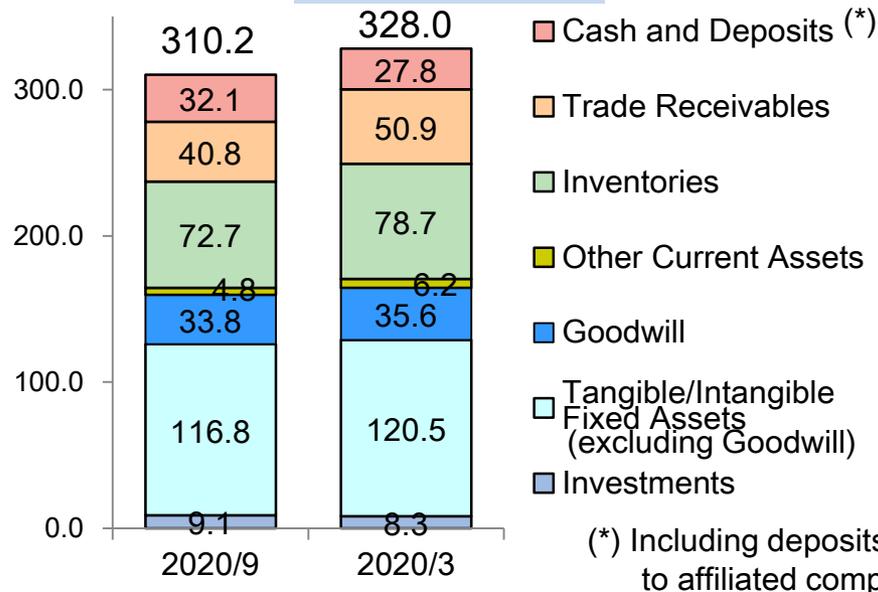


Formed and Fabricated Materials (unit: billion yen)

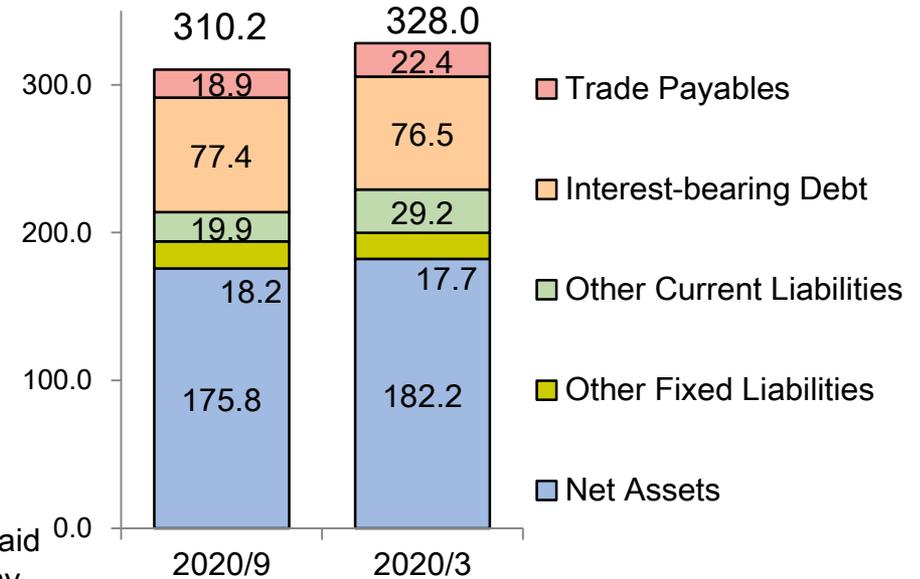


Balance Sheets

(Billion yen)



(Billion yen)



| Major changes in Assets | - 17.8 billion yen (-5%) |
|-------------------------|--------------------------|
| Trade Receivables | - 10.1 |
| Inventories | - 6.0 |
| Goodwill | - 1.8 |

| Major changes in Liabilities and Net Assets | - 17.8 billion yen (-5%) |
|---|--------------------------|
| Net Assets | - 6.4 |

(Reference) Assets of Sanyo, Ovako and MSSS (non consolidated basis)
Sanyo 238.0 billion yen, Ovako 89.0 billion yen, MSSS 12.7 billion yen

| Equity Ratio | 2020/9 | 2020/3 |
|--------------|--------|--------|
| | 55.6% | 54.4% |

■ Ovako's goodwill

- According to the accounting standard for impairment of fixed assets, it would be "Indicators of impairment", in case Ovako fails to achieve a positive EBIT of more than 2.6 billion yen in FY21 to exceed the amount of annual goodwill amortization, since Ovako is expected to be negative in EBIT for two consecutive years by -0.6 billion yen in FY19 and -3.3 billion yen in FY20.
- Nevertheless, even if Goodwill would be fully impaired, Sanyo continues to maintain the financial robustness, with the equity ratio nearly to 50% and the D/E ratio around 0.3 to 0.4 after full impairment of Ovako's goodwill.

Statements of Cash Flows

(Unit : Billion yen)

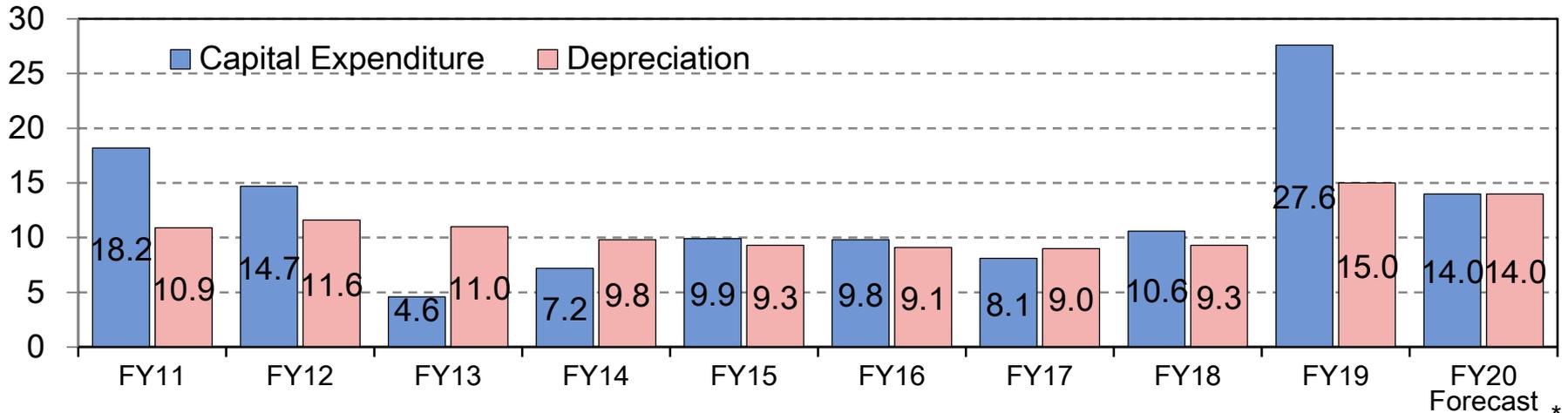
| | FY18 1H | FY18 2H | FY19 1H | FY19 2H | FY20 1H |
|---|---------|---------|---------|---------|---------|
| Cash flows from operating activities (A) | 3.3 | 7.5 | 16.4 | 23.1 | 17.1 |
| Net income before income taxes | 11.4 | 8.7 | 10.9 | 5.1 | 4.0 |
| Depreciation & Amortization of goodwill | 6.8 | 3.5 | 2.1 | -5.4 | -4.1 |
| Income taxes | 4.5 | 5.1 | 8.8 | 10.5 | 8.1 |
| Working capital, etc. | -1.5 | -1.7 | -1.9 | -2.3 | 1.3 |
| | -6.5 | 0.6 | 7.4 | 20.3 | 11.8 |
| Cash flows from investing activities (B) | -5.5 | -63.5 | -1.0 | -11.4 | -14.1 |
| Capital expenditure | -3.8 | -5.3 | -6.6 | -11.7 | -13.9 |
| Purchase of shares of subsidiaries | -2.2 | -58.3 | - | - | - |
| Proceeds from sale of securities | - | 0.1 | 1.1 | 1.0 | - |
| Others | 0.4 | 0.0 | 4.4 | -0.8 | -0.2 |
| Free Cash Flows (A+B) | -2.2 | -56.0 | 15.3 | 11.6 | 3.0 |
| Cash flows from financing activities (C) | -2.0 | 67.9 | -17.2 | -3.9 | 1.8 |
| Increase/Decrease in borrowings/bonds/commercial papers/lease obligations | -1.2 | 1.7 | -12.8 | -3.5 | 1.8 |
| Proceeds from issuance of common shares | - | 67.1 | - | - | - |
| Purchases or Sales of treasury stock | -0.0 | -0.0 | -3.0 | 0.5 | -0.0 |
| Cash dividends | -0.8 | -1.5 | -1.4 | -0.9 | -0.0 |
| Others | -0.0 | 0.6 | -0.0 | -0.0 | -0.0 |
| Translation Difference (D) | -0.2 | -0.0 | -0.6 | 0.2 | -0.4 |
| Net Increase/Decrease in Cash and Cash Equivalents (A+B+C+D) | -4.4 | 11.9 | -2.4 | 7.9 | 4.4 |

EBITDA
(simplified method)

(*) Cash and cash equivalents include deposits paid to affiliated company

Capital Expenditure and Depreciation

(Billion yen)



*Capital Expenditure of 14.0 billion yen in FY20 forecast includes following

- 1) 9.5 billion yen for Sanyo (including 5.3 billion yen for Sanyo Factory Renovation to resolve bottlenecks at No.2 Bar & Wire Rod Mill)
- 2) 3.6 billion yen for Ovako
- 3) 0.6 billion yen for MSSS.

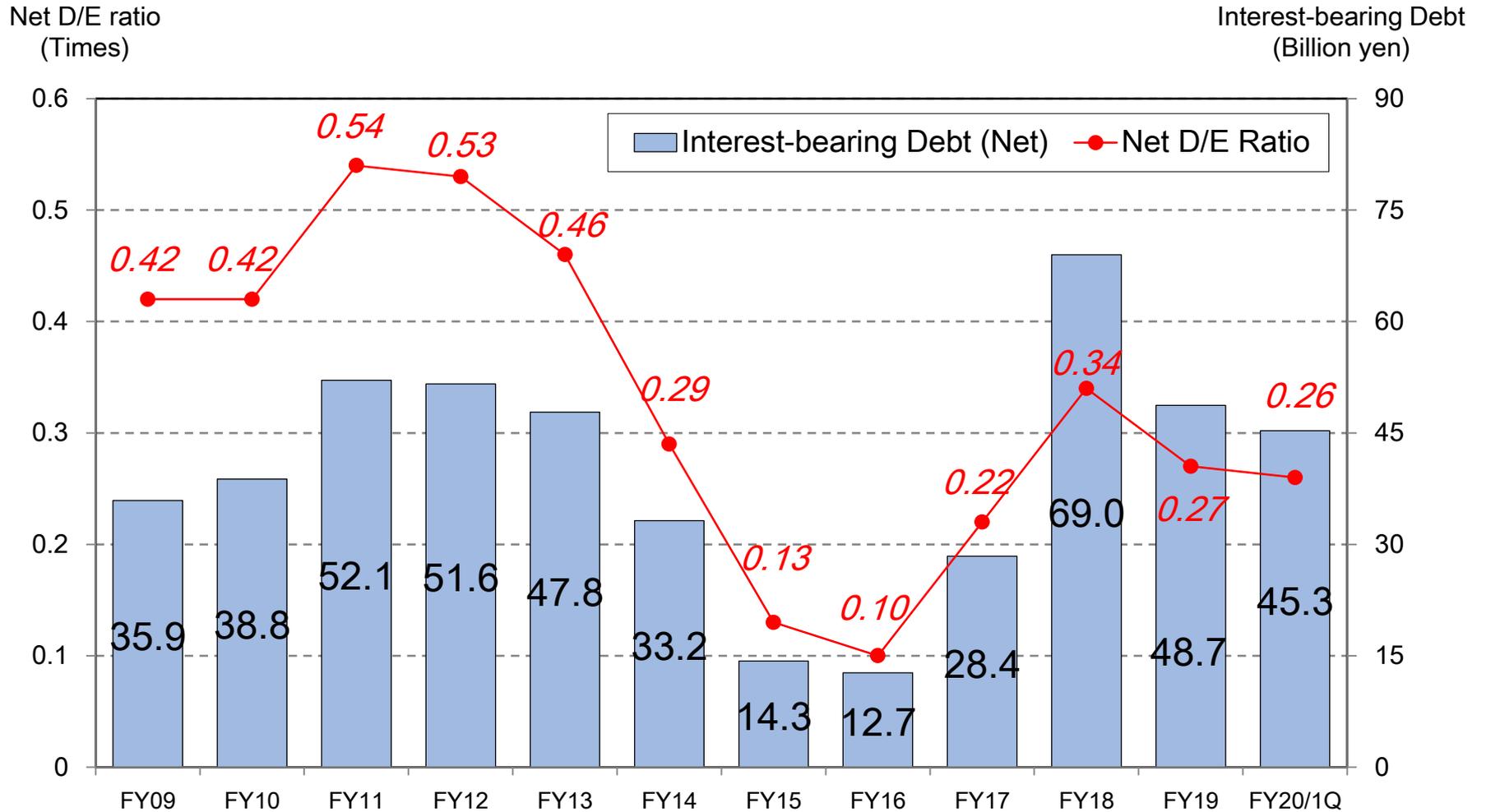
Depreciation of 14.0 billion yen in FY20 forecast includes

- 1) 7.3 billion yen for Sanyo and
- 2) 5.6 billion yen for Ovako and
- 3) 0.4 billion yen for MSSS.

Changes in depreciation methods

- ◆ Since FY20, Sanyo and domestic subsidiaries have changed the depreciation method. (declining balance method → straight-line method)
- ◆ The reason for this change is unifying the our group accounting policies on global basis.
- ◆ We considered following issues to change the depreciation method.
 - The facilities used by the our group are expected to operate steadily in the future
 - There is little risk that our products and equipment will become obsolete due to changes in the market environment or technology.
 - Timing of changes in depreciation methods
 - Synchronizing with start of full-scale operation of new facilities in the No.2 Bar & Wire Rod Mill
- ◆ Depreciation in FY20 will decrease by 2.5 billion yen and profit improvement effect will be 1.9 billion yen compared to previous method.

D/E Ratio



* Interest-bearing Debt(Net) = Interest-bearing Debt – (cash + deposits paid to affiliated company)

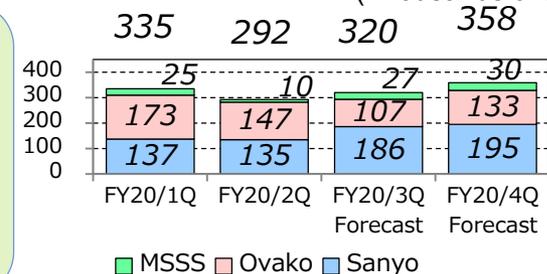
Business Forecast for FY20 (announced on October 29,2020)

1. 2020FY Outlook

- The drop of sales volume due to COVID-19 has bottomed out in July-September, even though sales volume will be relatively stagnant until December,2020. The consolidated accounting period of Ovako and MSSS has a lag of three months.
- Ordinary loss for FY20 2H will be 3.5 billion yen as a result of following reasons.
 - Earlier than expected recording of inventory valuation gain in FY20/1H and
 - Ovako and MSSS are expected to increase their profits compared to the previous forecast,
- Consequently, Ordinary loss for FY20 will be 7.5 billion yen, 0.5 billion yen positive compared to the previous forecast. We have carried out and will continue to implement profit improvement measures in order to increase the consolidated earnings.

(Reference)2020FY Sales volume outlook

(Thousands of ton)



2. 2020FY Forecast

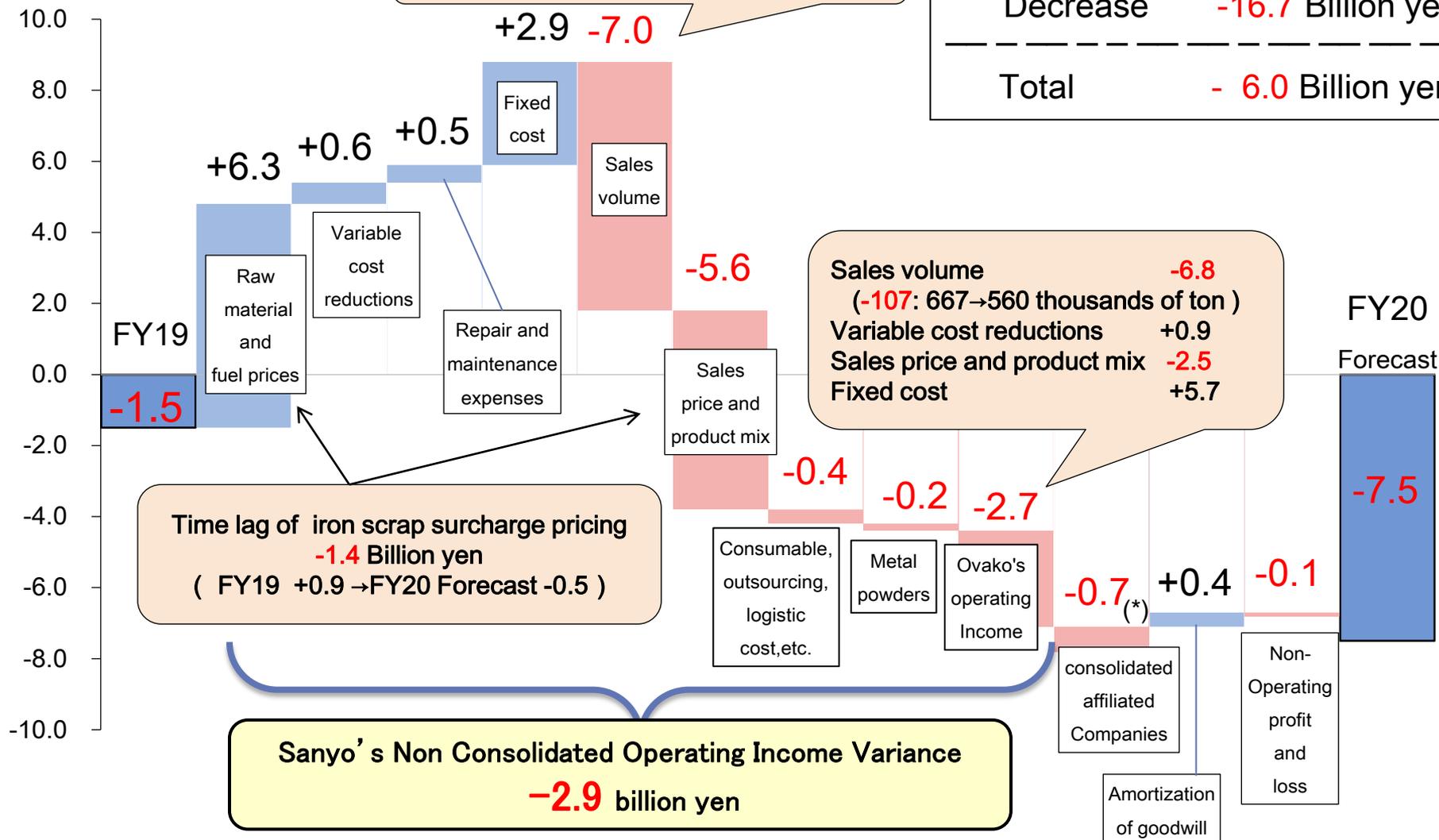
(Unit : Billion yen)

| | Revised forecast (A) | | | Previous forecast (B) | | | Change(B) → (A) | | |
|---------------------------------|----------------------|-------|-------|-----------------------|-------|-------|-----------------|------|------|
| | 1H | 2H | FY20 | 1H | 2H | FY20 | 1H | 2H | FY20 |
| Net Sales | 97.2 | 107.8 | 205.0 | 95.0 | 105.0 | 200.0 | +2.2 | +2.8 | +5.0 |
| Operating Income | -3.9 | -3.4 | -7.3 | -5.4 | -2.3 | -7.7 | +1.5 | -1.1 | +0.4 |
| Ordinary Income | -4.0 | -3.5 | -7.5 | -5.4 | -2.6 | -8.0 | +1.4 | -0.9 | +0.5 |
| (Sanyo) | -1.7 | 2.7 | 1.0 | -2.9 | 4.1 | 1.2 | +1.2 | -1.4 | -0.2 |
| (Ovako) | 0.4 | -3.8 | -3.4 | 0.4 | -4.1 | -3.7 | - | +0.3 | +0.3 |
| (MSSS) | -0.8 | -0.6 | -1.4 | -0.8 | -0.8 | -1.6 | - | +0.2 | +0.2 |
| (Amortization of goodwill) | -1.2 | -1.4 | -2.6 | -1.2 | -1.2 | -2.5 | - | -0.1 | -0.1 |
| Net Income | -3.3 | -3.3 | -6.6 | -4.8 | -2.3 | -7.1 | +1.5 | -1.0 | +0.5 |
| Net Income (Structural Basis) | -2.1 | -1.9 | -4.0 | -3.6 | -1.1 | -4.6 | +1.5 | -0.9 | +0.6 |
| Sales Volume (Thousands of ton) | 627 | 679 | 1,306 | 608 | 675 | 1,283 | +19 | +4 | +23 |
| (Sanyo) | 273 | 381 | 654 | 253 | 378 | 631 | +20 | +3 | +23 |
| (Ovako) | 320 | 241 | 560 | 320 | 255 | 575 | -0 | -14 | -15 |
| (MSSS) | 35 | 57 | 92 | 35 | 42 | 77 | - | +15 | +15 |

Major assumptions after October 2020 · Scrap iron 26,000 yen/t (H2 market price in Himeji area) · Crude oil(Dubai) 45\$/BL · Exchange rate 105 yen/US\$, 125 yen/€

Ordinary Income Variance Analysis (FY19 to FY20 Revised Forecast)

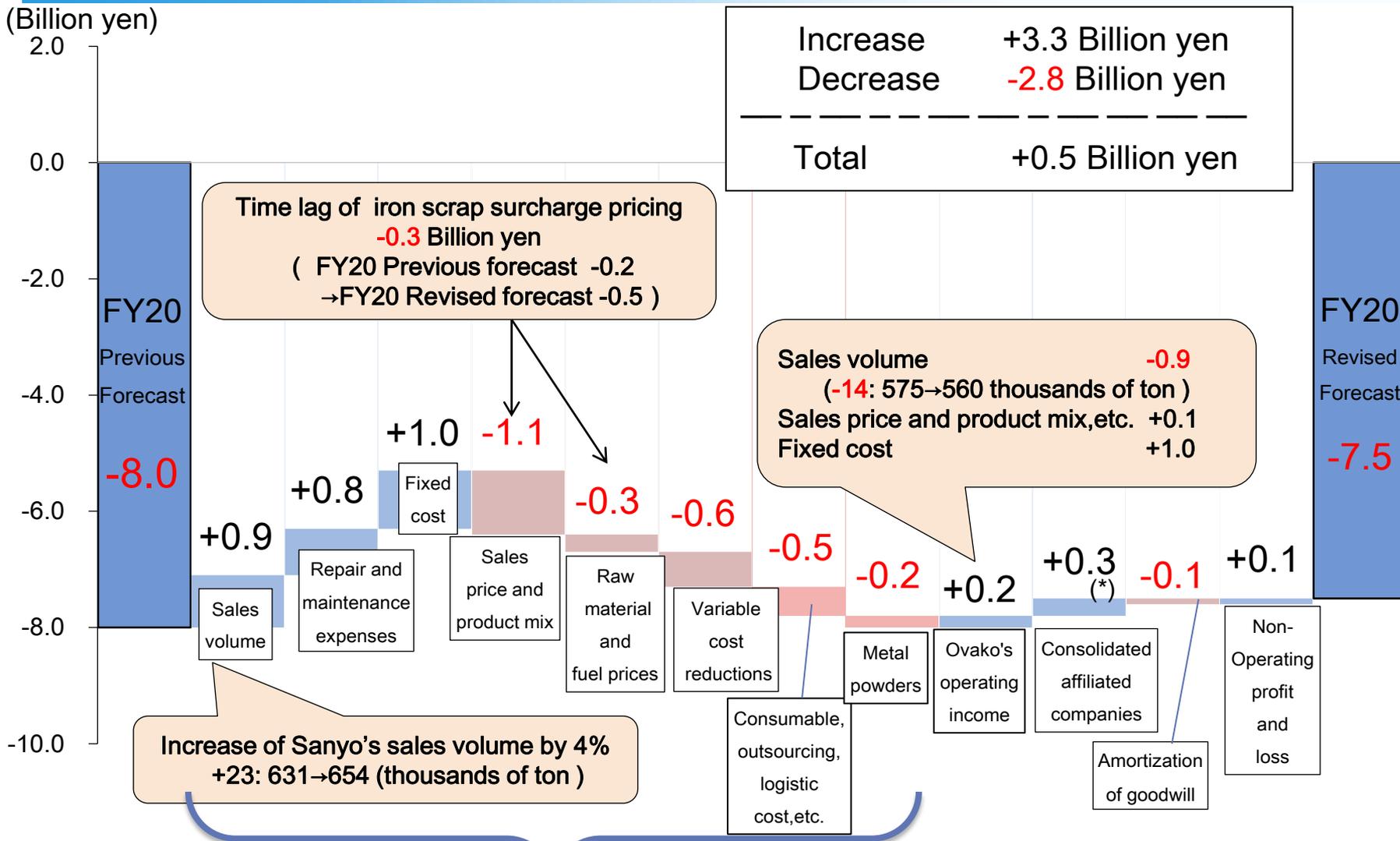
(Billion yen)



(*) Including operating income variance as below:

MSSS -0.1 billion yen, Other affiliated companies of formed and fabricated materials section -0.3 billion yen.

Ordinary Income Variance Analysis (FY20 Previous forecast to FY20 Revised forecast)

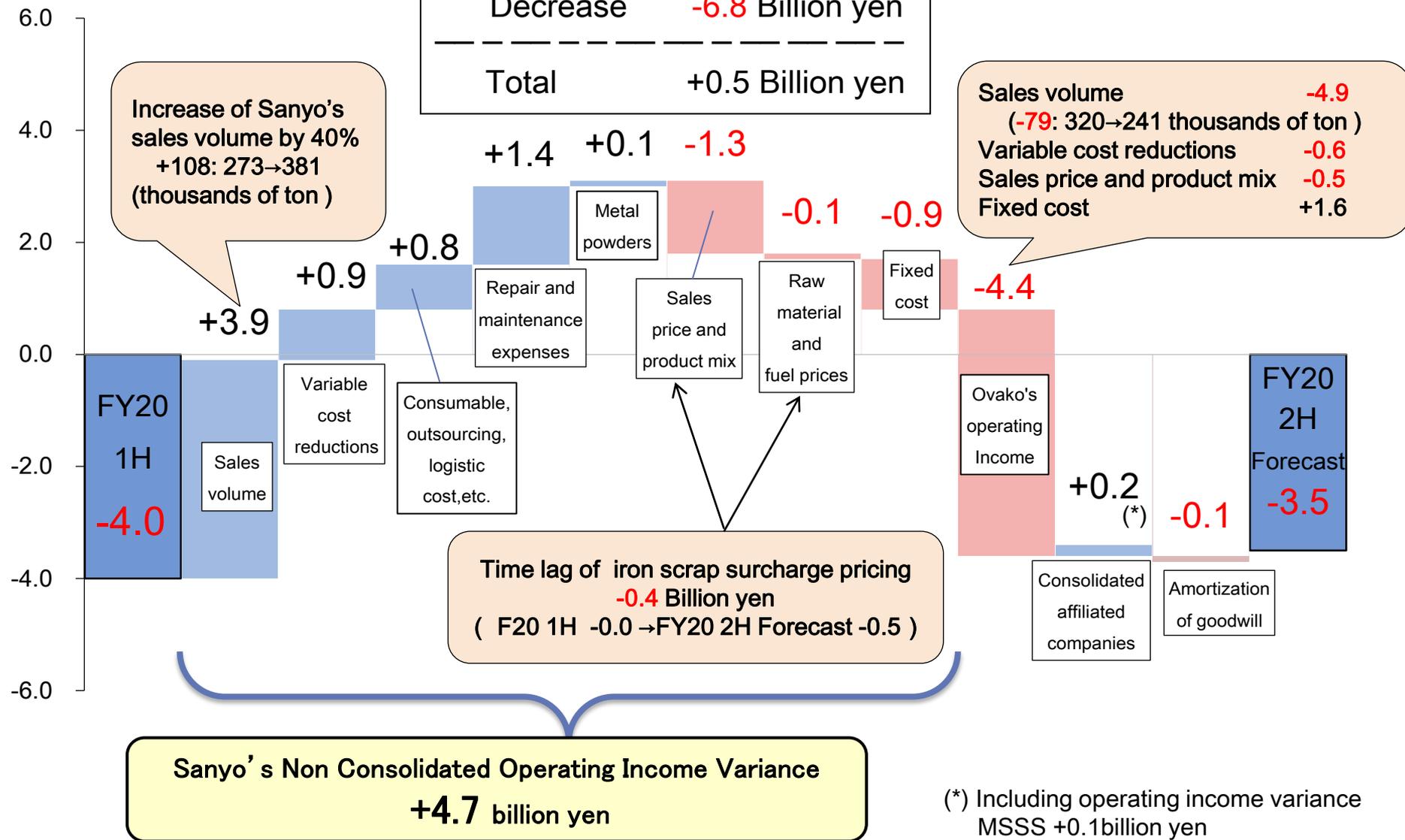


Sanyo's Non Consolidated Operating Income Variance +0.1 billion yen

(*) Including operating income variance as below:
 MSSS +0.1billion yen, Other affiliated companies of formed and fabricated materials section +0.2 billion yen.

Ordinary Income Variance Analysis (FY20 1H to FY20 2H Revised Forecast)

(Billion yen)



(*) Including operating income variance MSSS +0.1 billion yen

Review of Performance <Sanyo>

Overview of FY 2020

(Until 2019)

Acceleration of destocking in main customer industry;
 a) Machine tool, b) Robot, c) Automotive, d) Industrial machinery,
 d) Construction machinery.

↓
 Pursuing optimum production and cost minimum operation &
 Implementing emergency profit improvement measures from FY19/4Q

↓
 Inventory adjustment was expected to mostly complete at the end of FY19/4Q,
 and profit improvement measures were taking effects.

COVID-19 Impact

Due to the decline of demand, the customer industry re-entered into a destocking phase (see figure on the right). resulting into a significant drop of sales volume.

(FY20/1H result)

The ordinary loss was 1.7 billion yen as a result of negative effects from the drop of sales volume (decreased by 41% compared to FY19/1H) due to COVID-19 impact.

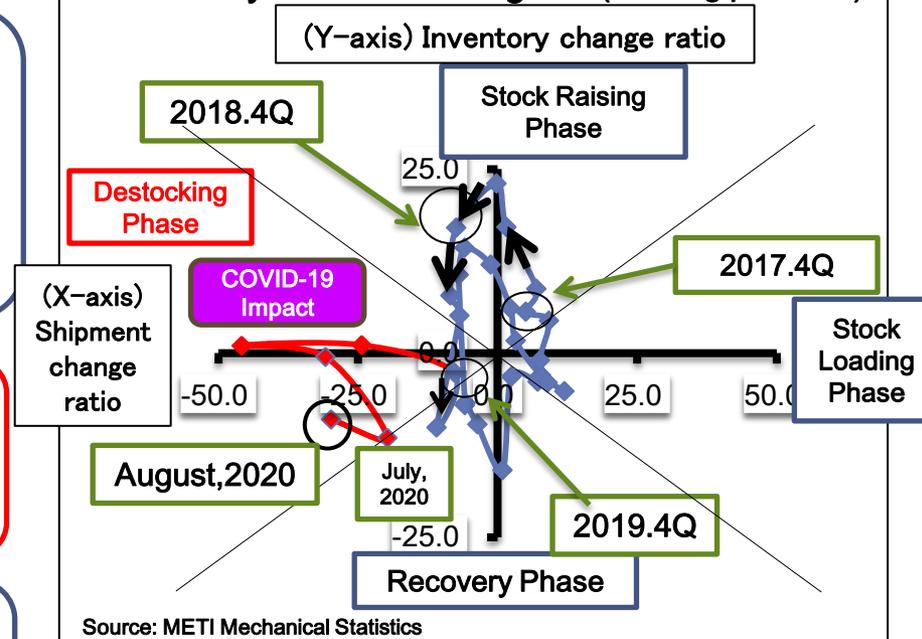
Positive effects from “emergency profit improvement measures and actions” and “reduction of depreciation expenses by change in depreciation methods” contributed to offset the above mentioned negative effects.

(FY20 forecast)

The ordinary income of the 2nd half FY20 is expected to be positive, 2.7 billion yen, due to gradual recovery of sales volume compared to the 1st half of FY20, though some of COVID-19 impact will linger until Dec. 2020. As a comparison with the previous forecast, FY20/2H profits will decrease because of the earlier than expected recording of inventory valuation gain in FY20/1H.

Consequently, the ordinary income for the full FY 20 is expected to be 1.0 billion yen positive.

Inventory circulation diagram (Bearing products)



Profit improvement measures and actions

(1) Acceleration of profit improvement measures

We will further promote the followings to strengthen financial soundness.

- Practicing voluntary partial return of executive compensation and manager's salary as planned.
- Additional reductions in overtime and further utilization of the unemployment insurance program for temporary leave.
- Additional reduction of fixed cost, repair and maintenance expenses and others.

(2) Effort to lower break-even point

We will bolster the corporate robustness by pursuing further cost minimum operation and additional reduction of fixed cost. We aim to enable Sanyo being profitable even if production and sales volume does not return to high level.

Headquarter : Stockholm, Sweden Manufacture and sale of special steel bars, pipes, rings, etc.
 Manufacturing sites in Sweden and Finland. An affiliated company of Sanyo since March 2019.

Overview of FY 2020

Recent trend of market

Since autumn 2018, the demand for special steel in Europe has been stagnant mainly due to U.S.-China trade dispute, Brexit, and automobile sales plunge triggered by WLTP. Nevertheless, the destocking process was completed by end 2019, and the market started to show some signs of recovery in January 2020.

Result of 2020 1H (January to June 2020)

The demand for special steel in Europe recovered in 2020/1Q;Jan.-Mar.2020, and the COVID-19 impact on sales was still limited. Although the COVID-19 impact started to materialize from 2Q;Apr.-Jun.2020, Ovako's ordinary income for the 1st half;Jan.-Jun.2020, was in surplus by 0.4 billion yen.

Profit improvement measures and actions

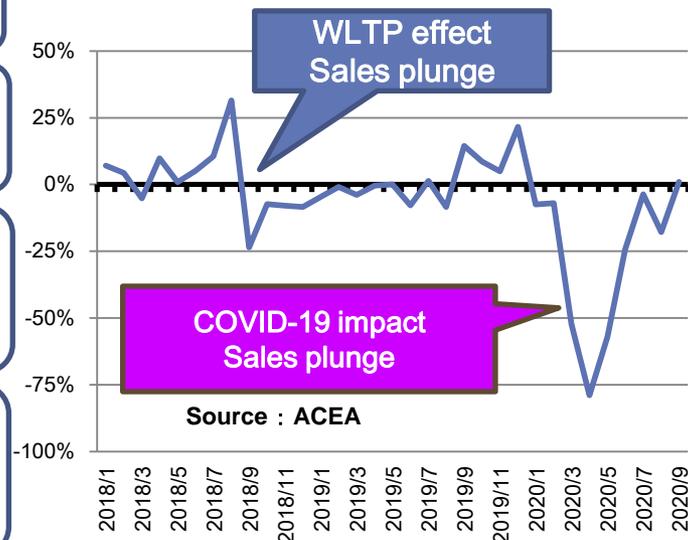
- Ovako will vigorously continue to pursue the followings to regain profitability and increase competitiveness.
- Reduction of fixed cost, partly by utilizing the unemployment compensation scheme for temporary lay off
 - Reduction of 120 employees which accounts approx. 5% of the total personnel (newly introduced measure)
 - Maximizing synergies among the 3 companies, Ovako, Sanyo and Nippon Steel
 - a)Sales promotion activities b)Reduction of operational cost c)Reduction of procurement cost

Forecast for FY2020 (January to December 2020)

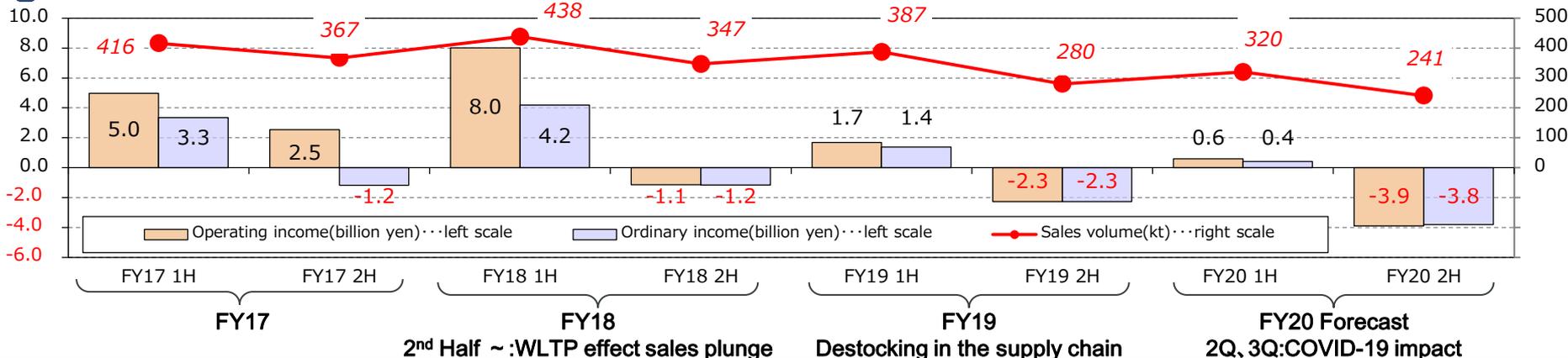
The COVID-19 impact will peak in 3Q;Jul.Sep.2020, and together with the effect of regular maintenance outage in July and December, the sales volume for the 2nd half;Jul.-Dec.2020 will drop significantly, resulting in an ordinary loss for FY20 2H of 3.8 billion yen. Consequently, Ovako's ordinary loss for FY20 will be 3.4 billion yen. In the second half of the fiscal year, approximately 0.3 billion yen in expenses associated with staff reductions will be recorded as extraordinary losses.

Units of automobile sales in Europe

(Year-on-year rate)



Trend of Operating income, Ordinary income and Sales volume



Overview of FY 2020

Domestic car sales in India

Since 2018/11 YoY negative trend

2019/08 YoY ▼30%

2019/10~12 sales volume bottoms out

→ Destocking was predicted to end

MSSS's sales volume of 1Q increased by 28% from 4Q of the previous year, partly owing to the recommencement of shipments to railways, but sales volume in 2Q significantly decreased due to COVID-19 impact, and Ordinary loss for the 1H was 0.8 billion yen.

Impact of COVID-19

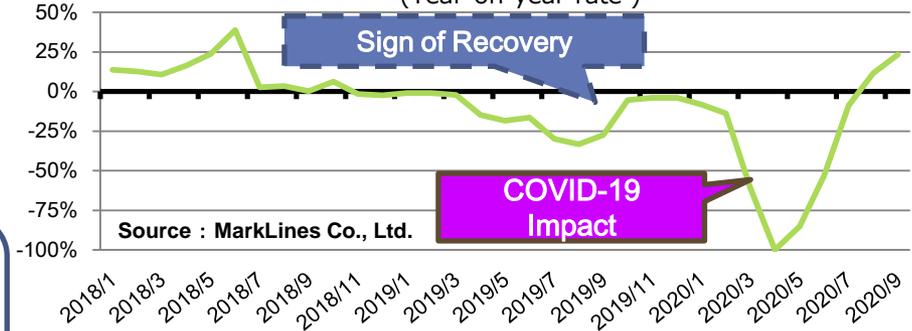
- Lockdown of the surrounding region of MSSS site, Khopoli, Maharashtra and ordered to halt operation from late March to mid May and from mid July to end of July.
- Limited supply of oxygen for operation due to giving precedence to supply to medical institutions
- Demand for automobiles at low level until July 2020, but turned positive on YoY basis since August, 2020.

MSSS earnings outlook

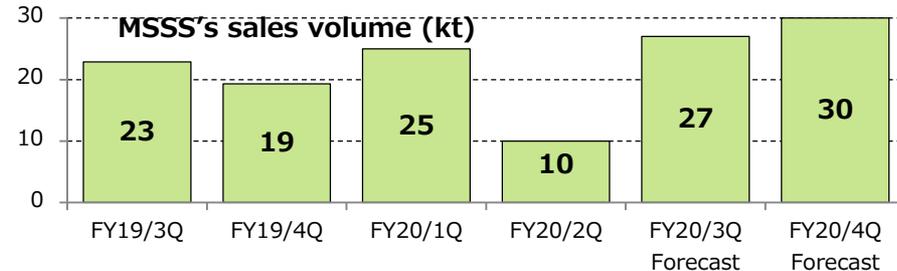
The drop of sales volume has bottomed out in April-June. The sales volume is expected to recover in FY20 2H. Ordinary loss for the 2H is expected to be 0.6 billion yen. Consequently, the ordinary income for the full FY 20 is expected to be 1.4 billion yen negative.

Units of automobile sales in India

(Year-on-year rate)



MSSS's sales volume (kt)



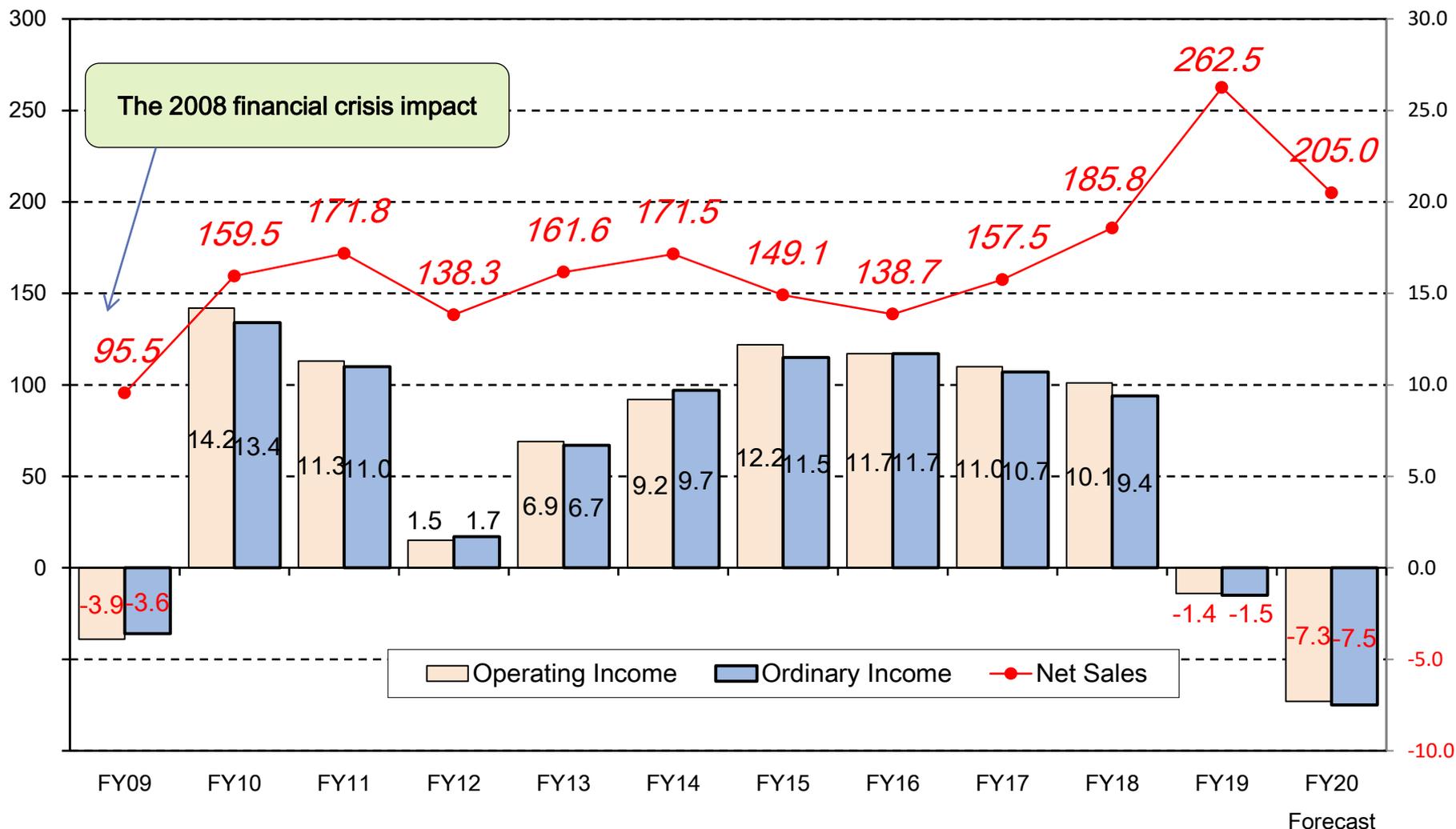
Profit improvement measures and actions

- Reducing operation cost by improving energy intensity and efficiency, and reducing procurement cost by use of low-cost raw materials.
- Intensifying sales network, securing higher sales volume and increasing orders of higher margin products.
- Securing stable orders for railways.
(expected to be 2,000 t/month)
- Reducing labor cost including optimization of manning.

Net Sales and Income (fiscal)

Net Sales
(Billion yen)

Operating Income
Ordinary Income
(Billion yen)



*MSSS has been consolidated since FY18/2Q, and Ovako has been consolidated since FY19/1Q for profit and loss.

Interim Dividend and Dividend Forecast for FY20

To our deepest regret, we halt the interim dividend payment for FY20, in accordance with our negative business result of a net loss of 3.3 billion yen in FY20/1H.

In addition, since our business forecast for FY20 is negative, we regrettably consider to halt the year-end dividend payment as well.

(Reference) Dividend for FY19

| | | FY19 | |
|---|-------------|----------------------------------|---------------------------------|
| | | After amortization of goodwill | Before amortization of goodwill |
| Net Income | Billion yen | -3.7 | 0.5 |
| Earnings per share | ¥/share | -67.1 | 9.3 |
| Annual dividend | A ¥/share | 15.5 (Interim 15.5 Year-end 0.0) | |
| <i>Payout ratio</i> *1 | times | - | 1.7 |
| Dividend | Billion yen | 0.9 | |
| Repurchase of Shares (1,730,000shares) *2 | | 2.5 | |
| Total Return to Shareholders | | 3.4 | |
| Total Return Ratio *3 | times | - | 6.5 |

*1 Payout Ratio · · Dividend / Earnings Per Share

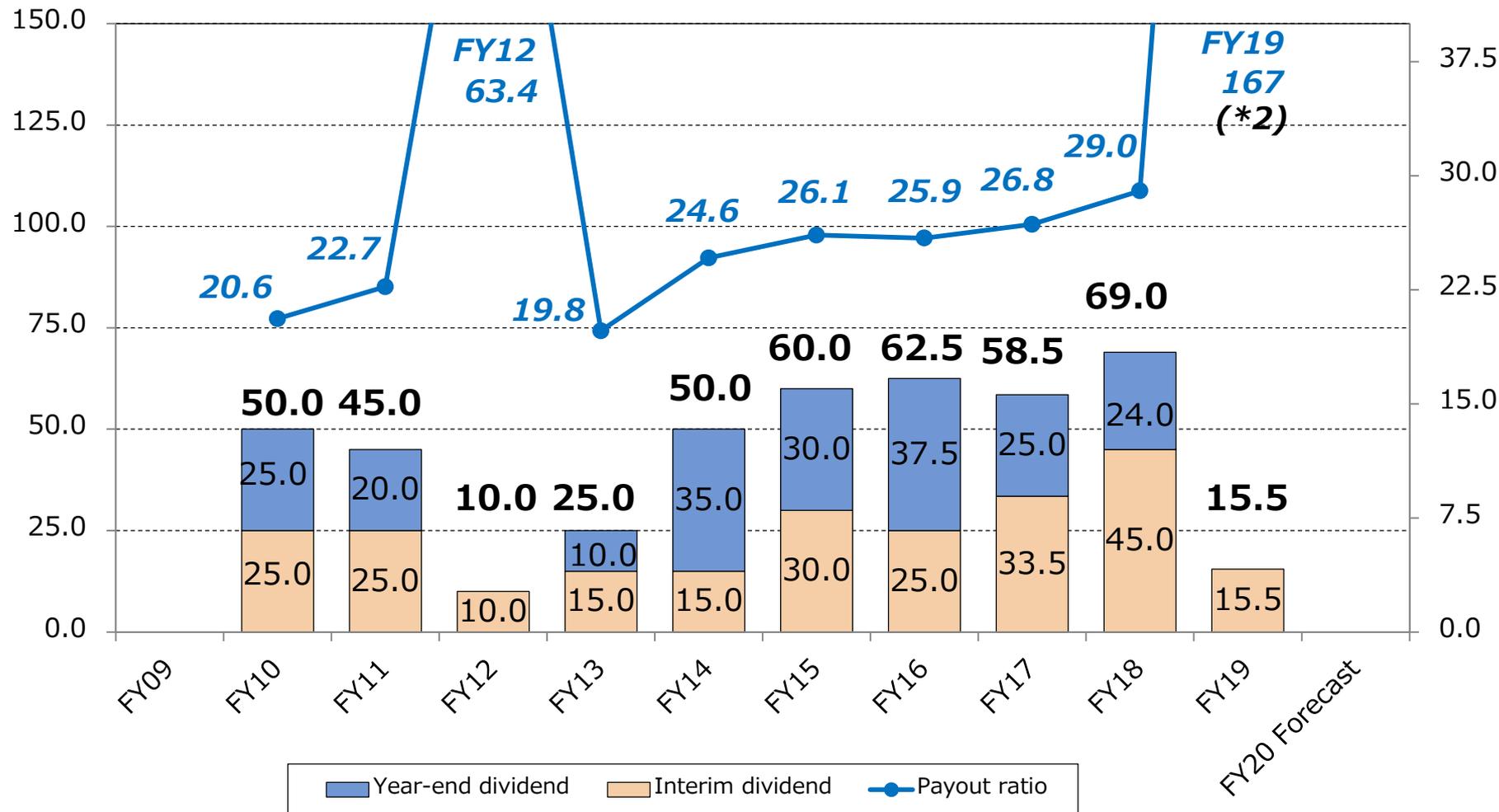
*2 A total treasury stock of 2,930,000 shares(former possession 1,200,000 shares +repurchase 1,730,000 shares) was cancelled on December 27, 2019. It is 5.1% of the total number of issued shares before cancellation.

*3 Total Return Ratio · · · Total Return / Net Income

Dividend Trend

(Yen per share)

(%)



*1 We conducted a one-for-five reverse stock split of our company's shares effective on October 1, 2017. Dividend is adjusted after the one-for-five reverse stock split .

*2 Calculated by Earnings Per Share before goodwill amortization

(1) Commercialization of a New Copper Alloy Powder Ideal for Laser Additive Manufacturing

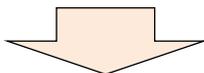
(announced on August 24, 2020)

We have developed new copper alloy powder that achieves both

- High-relative-density additive manufacturing
- Electro-thermal conductivity

【Features】

- It can be used for producing highly functional copper components with complex shapes.
- It can achieve electro-thermal conductivity similar to that of pure copper, and strength exceeding that of pure copper.

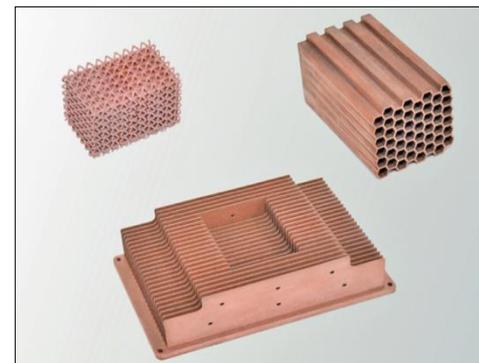


Our copper alloy powder is expected to ;

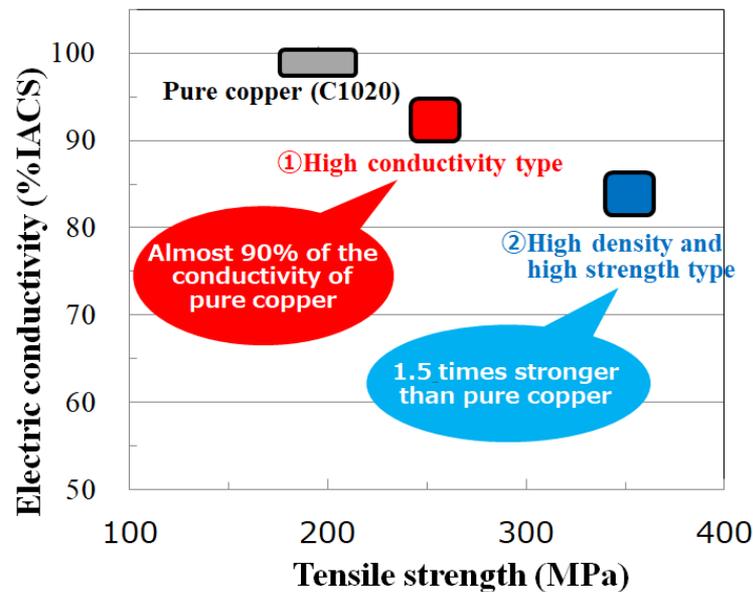
- Optimize the shapes of parts such as electronic and electrical components and heat exchangers
- Create new markets in the automotive, aerospace, and medical fields.

We can provide copper alloy powder to suit application, such as

1. High conductivity type
(Almost 90% of the conductivity of cast pure copper)
2. High density and high strength type
(1.5 times stronger than cast pure copper)



Examples of moldings by laser additive manufacturing



(2) Commercialization of a Cobalt-free Maraging Steel Powder for Additive Manufacturing (announced on October 5, 2020)

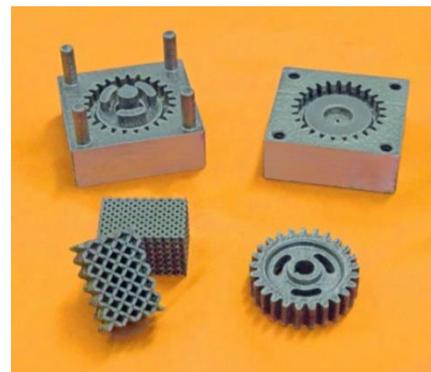
We have developed new maraging steel powder that achieves

- High strength and high toughness

comparable to that of conventional maraging steel (*1)

- Without the addition of cobalt (*2)

by using our unique alloy design and structure control technology.



Examples of moldings by additive manufacturing

【Features】

- Eliminating the need for health protection measures, because of no addition of cobalt, which is a Specified Chemical Substance in Japan.
- Making it easy to apply in the additive manufacturing of molds and components that require high strength and high toughness.

(*1) Maraging Steel

- It combines both high strength and high toughness, through heat treatment.
- It is used in a wide variety of fields including industrial machinery, automotive, and aerospace.

(*2) Cobalt

- A rare metal with a high procurement risk due to extremely uneven distribution of resource areas and international issues around its mining in politically unstable regions.
- It contributes to improve strength and toughness of maraging steel. However, since cobalt is a Specified Chemical Substance in Japan, manufacturing processes using maraging steel powder which contains a certain percentage of cobalt as a material are required health protection measures such as installation of dust eliminators.

(3) Announcement of the “Declaration of Partnership Building” (September 30, 2020)

We announced the “Declaration of Partnership Building” (*) for increasing value added across supply chains.

Our Priority Items

- 1 . Building mutually-beneficial relationships among the entirety of the supply chain and new partnerships across business scales, groups and borders, and others.
- 2 . Following the Promotion Standards.

Sanyo will continue to build mutually-beneficial relationships with clients and enhance partnerships for development of both side as business partners.

*Declaration of Partnership Building

- The “Council on Promoting Partnership Building for Cultivating the Future” introduced. This council consists of the following members: relevant ministers; Chairman of the Keidanren; Chairman of the Japan Chamber of Commerce and Industry; and President of the Japanese Trade Union Confederation (RENGO). Cabinet Office and Small and Medium Enterprise Agency promote this framework.
- The council encourages companies to engage in the following issues:
 - 1.Preventing SMEs and small enterprises from “bearing burdens caused by unfair trade conditions” and continuing to advance efforts for encouraging companies to introduce appropriate trade practices, while taking into consideration impacts of the novel coronavirus disease; and
 - 2.Encouraging companies to build new partnerships involving efforts for increasing value added across supply chains and open innovation across business scales, groups and borders, and others.



“Declaration of Partnership Building”
logotype

(4) Participating in the “Challenge Zero” (announced on October 13, 2020)

- In June 2020, the Japan Business Federation announced the “Declaration on ‘Challenge Zero’ towards a “decarbonized society””.
- 163 companies and organizations participate in this new initiative and 352 innovation challenges are shown as in October 2020.
- We showed our support for it and announced concrete two actions. <https://www.challenge-zero.jp/en/member/158>



① Contribution to zero CO₂ emissions by developing bearing steel for long-life wind power generation

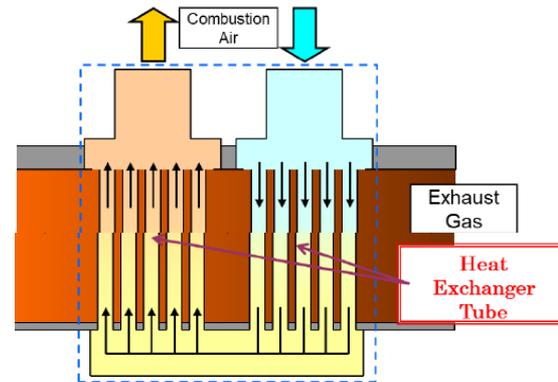
- Wind power generation is an effective measure for zero CO₂ emissions in power generation.
- In order to make the equipment highly-reliable that can continuously and stably generate, we aim to develop bearing steel for wind power generation that can obtain stable long-life property, based on our high-cleanliness technology for steel. Furthermore, we will contribute to zero CO₂ emissions by its implementation and spreading.



【Appearance of wind power generation equipment】

② Reduction of CO₂ emissions in various industrial furnace operations by developing high-strength heat-resistant steel tubes for heat exchangers

- Industrial furnaces are equipped with waste heat recovery devices, such as the heat conversion type recuperator, to improve their energy efficiency in order to reduce CO₂ emissions.
- We will contribute to the realization of a decarbonized society by developing high-strength heat-resistant steel tubes that can improve the heat recovery efficiency of the recuperator and expanding their application to industrial furnaces.



【Outline of heat exchange in the recuperator】

(5) Participating in three exhibitions for Metal Powders

① TECHNO-FRONTIER 2020

- In September 2020, it was held online.
- We displayed High-Grade Magnetic Powders for noise suppression parts.
- Our products contribute to advanced technologies such as 5G, AI(Artificial Intelligence), ADAS(Advanced Driver Assistance Systems), Autonomous driving and others.

② Additive Manufacturing Expo

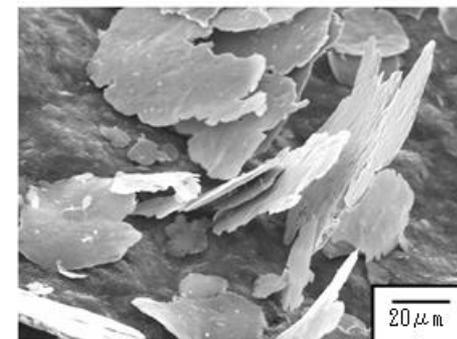
- In September 2020, it was held in Nagoya.
- We displayed high-grade Metal Powders.

③ Highly-functional METAL EXPO

- In October 2020, it was held in Osaka.
- We displayed high-grade Metal Powders.

Our exhibits

- **High-Grade Magnetic Powders for noise suppression parts**
(Application example : Noise suppression sheet for 5G)
- **Copper Alloy Powders for Laser Additive Manufacturing (Topics(1))**
- **Cobalt-free Maraging Steel Powders (Topics(2))**



[SEM image of Flaky Powders]



Countermeasures of COVID-19 Infection (as of October 29,2020)

Countermeasures in Japan

- Upgraded telework environment. Promoting working from home.
- Implementation of staggered working hours.
(Only 4% of the employees commute to Himeji head office by public transportation)
- Implementation of staggered lunch time.
- Installing alcohol disinfectants to each workplace and distributing masks to all employees.
- Installing thermography camera and thermometer at workplace.
- Individual measurement of body temperature before entering workplace.
- Promoting periodical hand-washing, mouth rinsing, disinfection with alcohol, and wearing of masks.
- Frequent ventilation of room air, maintaining inter-personal distance during work.
- Restricting of face to face conferences, recommendation of web meetings.
- Prohibition of foreign business trips in general.
- Limiting domestic business trips based on travel areas and customer's policy.

Countermeasures in overseas' affiliates

- All measures and actions in accordance with the laws, regulations and policy of each country.
- Collecting information of each country and supporting the representatives and their family.
- Supporting Japanese representatives to return to their global workplace, based on the situation of medical care, living condition and immigration of each country.
(Representatives already returned to Finland in June 2020, to China and Indonesia in July 2020, to Sweden and Thailand in September 2020. We are monitoring the situation to decide when to have our representatives return to India.)
- Individual measurement of body temperature before entering workplace.
- Promoting periodical hand-washing, mouth rinsing, disinfection with alcohol, and wearing of masks.

Emergency Profit Improvement Measures and Actions

Emergency profit improvement measures and actions to realize a swift recovery (announced on January 31, 2020)

| | Measures | | Term |
|--|---|-----------------------------|---------------------------------------|
| ① Voluntary partial return of executive compensation(*) | Representative Director and President | 20% of monthly compensation | From February 2020 for the time being |
| | Director and Managing Executive Officer | 10% of monthly compensation | |
| | Fellow Executive Officer | | |
| | Executive Councilor | 7% of monthly compensation | |
| ② Utilizing the unemployment insurance for temporary leave program | Planning to utilize the unemployment insurance for temporary leave program about two days furlough in a month for all employees working at Head Office/Plant. | | From March 2020 for the time being |
| ③ Voluntary partial return of manager's salary | General Manager Position | 5% of monthly salary | From February 2020 for the time being |
| | Group/Section Manager Position | 3% of monthly salary | |
| | Other Manager | 1% of monthly salary | |
| ④ Reduction of other expenses | Promoting operational efficiency and reduce expense to the minimum, such as implementing intensive cost-minimization operations, and curbing non urgent expenditures and investments. | | |

(*) Full-time Audit & Supervisory Board Members have voluntarily offered to return 10% of monthly compensation in the same period as well.

- Estimated profit improvement for year ; 0.5 Billion yen
- Additional profit improvements of 0.5 billion yen in FY2019, and 1.0 billion yen in FY2020 (+0.5 billion yen from FY2019) by reductions in bonuses and overtime.
- Further profit improvement measures and actions being implemented by affiliated companies, including Ovako and MSSS .

After COVID-19 (from March 2020)

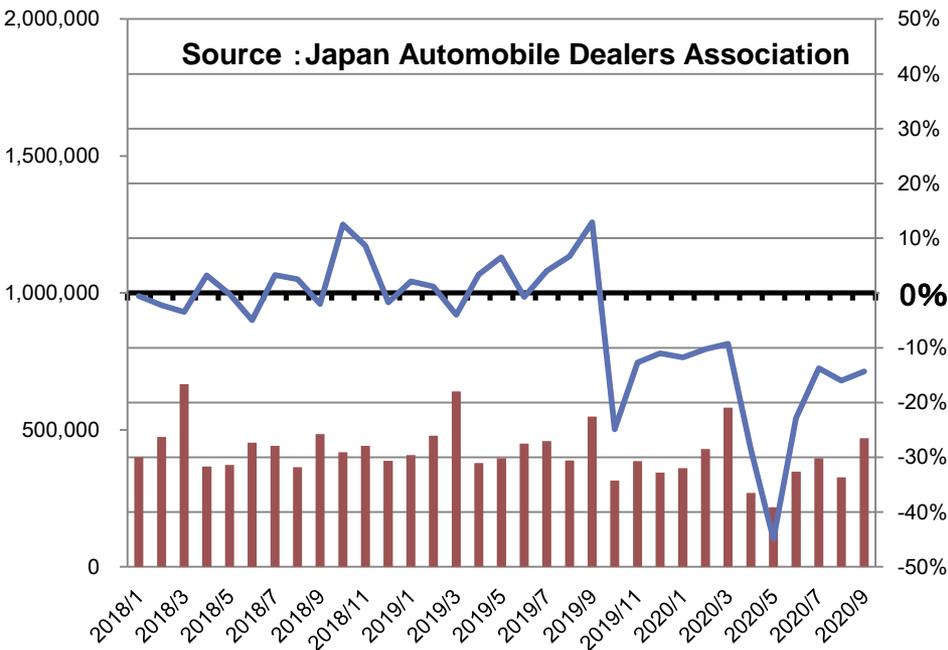
- Utilizing the unemployment compensation scheme for temporary lay off for employees of branch offices, in addition to employees of Himeji Head Office/Plant.
- Higher compensation rate applied, based on the introduction of the Special Measures against Corona Act of the government.
- More reductions in overtime by drop of production and enhancing operational efficiency. Decrease of business trip expenses.
- Utilizing the unemployment compensation scheme for temporary lay off in Ovako, since April, 2020 , and implementing permanent reduction of 120 employees (approx.5% of total personnel).

Trends in Automobile Market

Units of automobile sales in Japan

(Year-on-year rate)

(Unit : 1car)

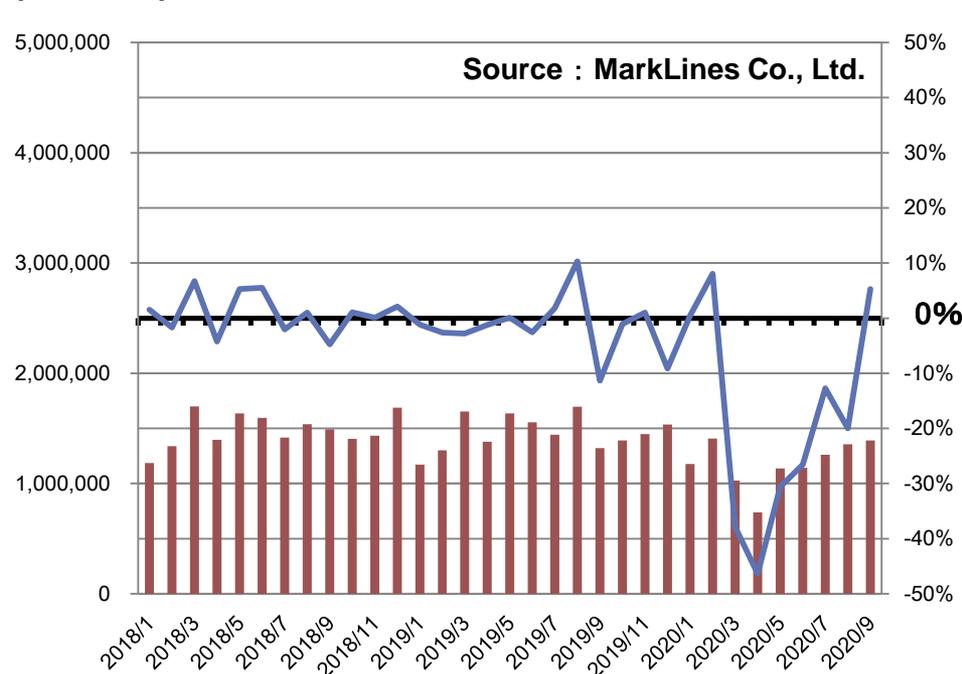


2019/7-9; Demand rush before VAT raise.
 2019/10 ; ▼25% on YoY basis after VAT raise
 and easing decline of sales until 2020/3
 2020/5 ; ▼45% on YoY basis due to COVID-19 impact
 2020/6 ~ ; easing decline of sales from 2020/5
 2020/9 ; ▼14% on YoY basis

Units of automobile sales in U.S.

(Year-on-year rate)

(Unit : 1car)



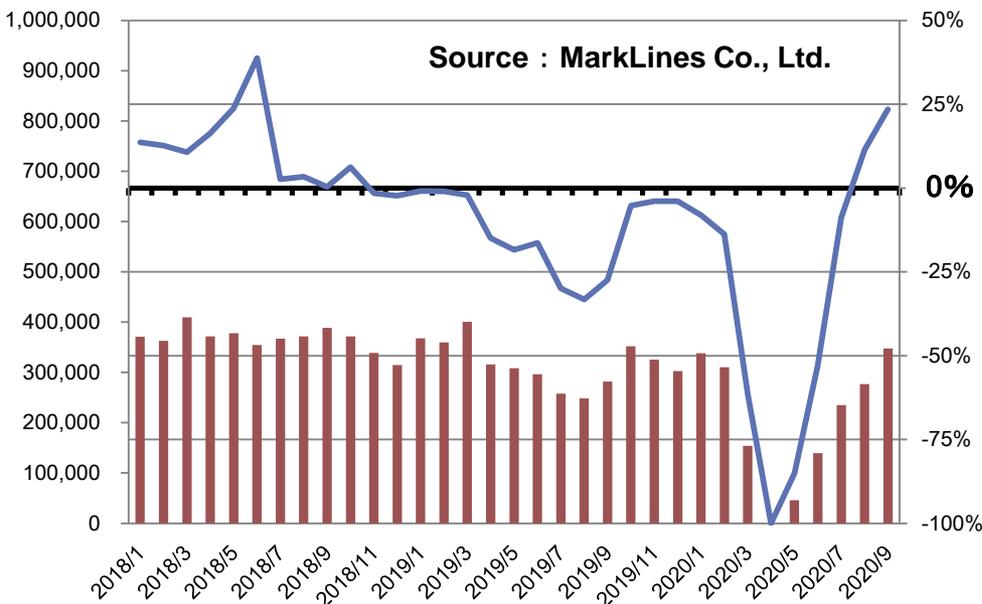
2018; Stable sales
 2019; Slowing sales due to the effects of labor strike
 and others
 2020/2 ; there is the sign of recovery
 2020/4 ; ▼46% on YoY basis due to COVID-19 impact
 2020/5~ ; easing decline of sales
 2020/9 ; recovering to +5% on YoY basis

Trends in Automobile Market

Units of automobile sales in India

(Year-on-year rate)

(Unit : 1car)



Continuous drop since 2018/07 due to;

a) higher insurance premiums, b) higher fuel prices, c) tightening automobile loans, and d) deterioration of employment.

2020/3 ; ▼62% on YoY basis due to COVID-19 impact

2020/4 ; ▼100% on YoY basis due to lockdown resulting from expansion of COVID-19

2020/5 ; sales activities resume

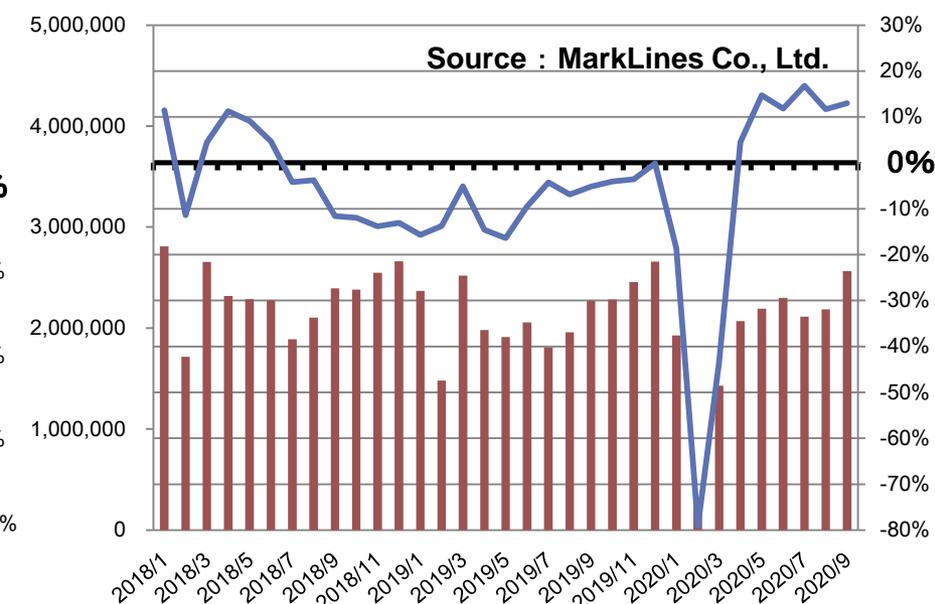
2020/6~ ; easing decline of sales

2020/9 ; +23% on YoY basis

Units of automobile sales in China (Factory shipment base)

(Year-on-year rate)

(Unit : 1car)



Continuous drop due to; a) the effects of the U.S.-China trade dispute, and b) introduction of new emission restrictions in urban areas.

2019 summer ~ ; easing decline of sales

2020/2 ; ▼79% on YoY basis due to COVID-19 impact

2020/3~ ; recovering sales

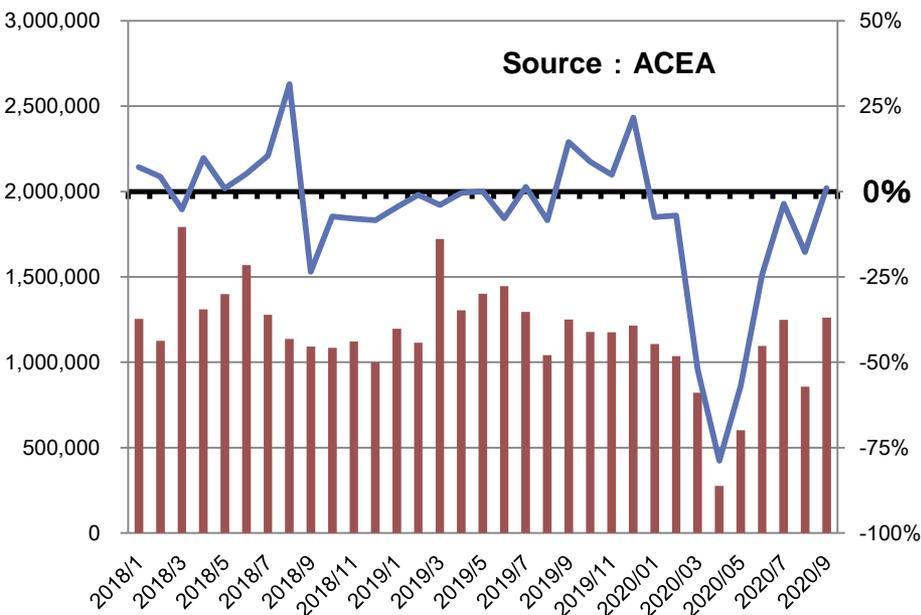
2020/5~ ; over 10% on YoY basis

Trends in Automobile Market

Units of automobile sales in Europe

(Year-on-year rate)

(Unit : 1car)

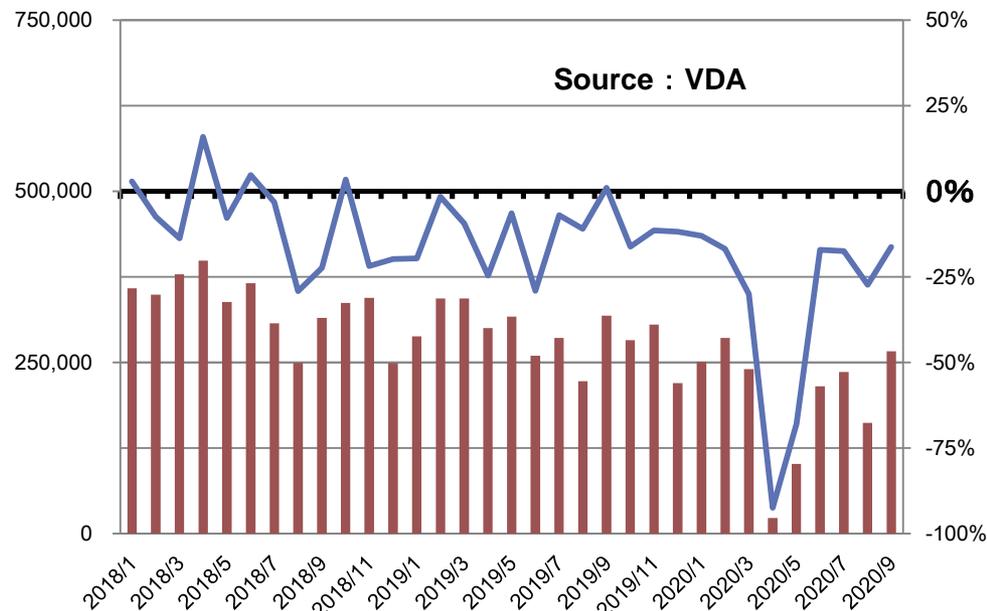


2018/9; Huge fluctuation due to WLTP.
Stagnate tendency due to concern of Brexit, and U.S.- China trade dispute.
Sign of recovery from 2019/9 though absolute number of units sold is mediocre.
2020/4 ; ▼79% on YoY basis due to COVID-19 impact
2020/5~ ; easing decline of sales
2020/9 ; +1% on YoY basis

Units of automobile export from Germany

(Year-on-year rate)

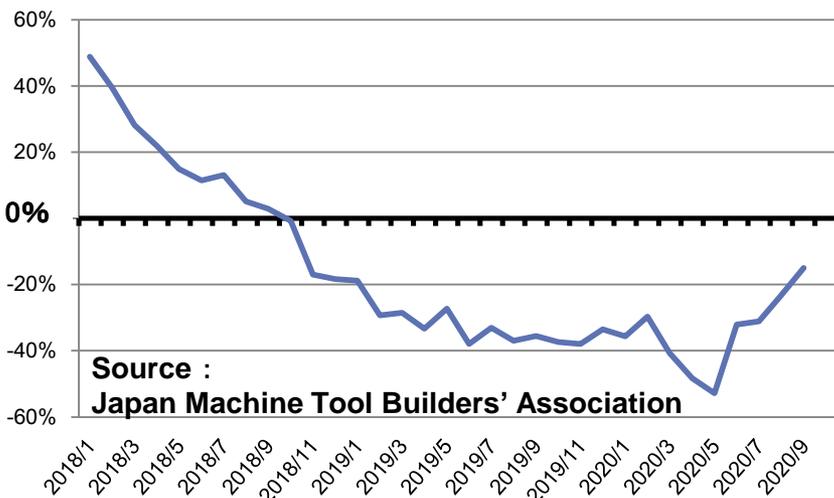
(Unit : 1car)



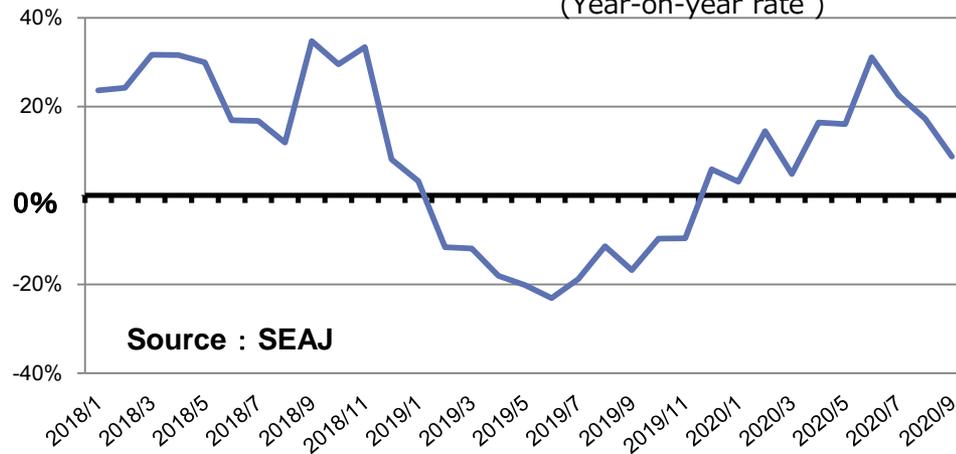
Continuous drop due to;
a) demand decrease in China affected by the U.S.- China trade dispute.
b) inventory adjustments.
2020/4 ; ▼ 92% decrease on YoY basis
2020/5~ ; easing decline of export

Trends in Industrial Machinery and Construction Machinery Market

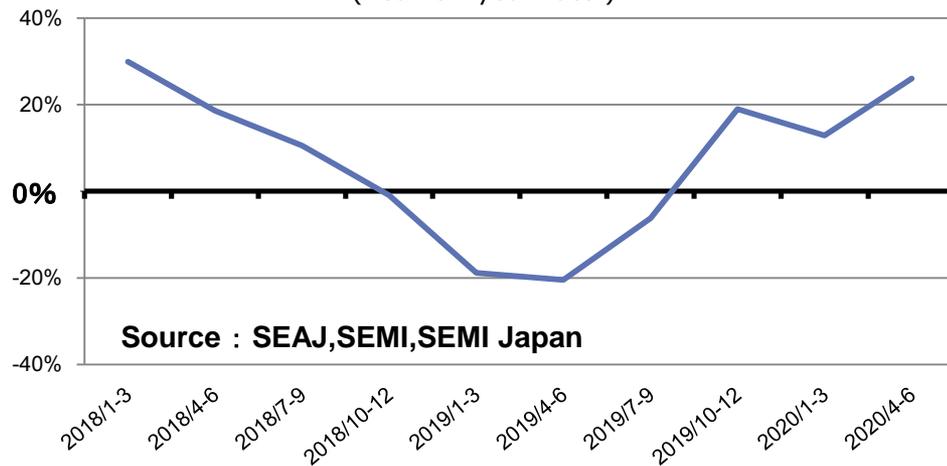
Sales amount of machine tool orders (Japan) (Year-on-year rate)



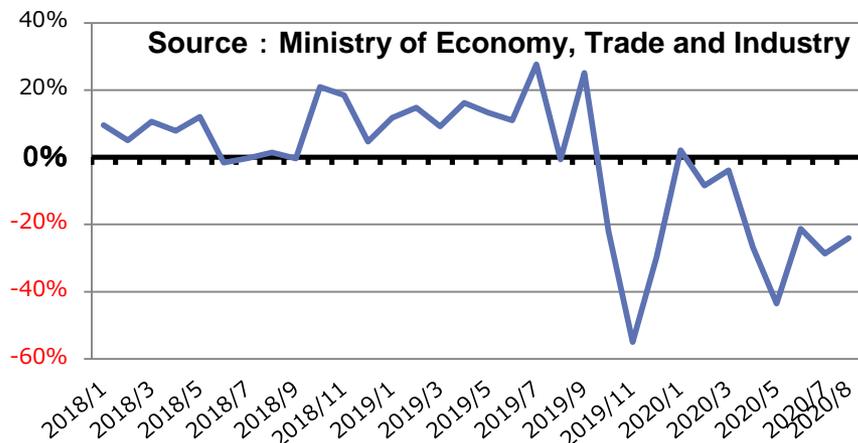
Sales amount of semiconductor manufacturing equipment (Japanese equipment) (3 month moving average) (Year-on-year rate)



Sales amount of world wide semiconductor equipment (Year-on-year rate)



Domestic production of excavator-based construction machinery (Year-on-year rate)



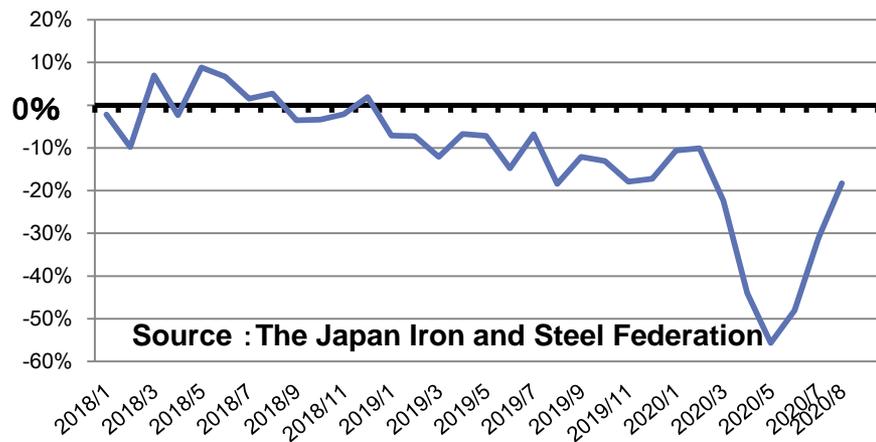
Machine tools: 2018/10 ~ ; continuous drop due to U.S.-China trade dispute & 2020/5 ; ▼53% on YoY basis due to COVID-19 impact & 2020/6 ~ ; easing decline of sales and 2020/9 ; ▼15% on YoY basis

Semiconductor equipment: Recovery from autumn 2019 attributable to increase of 5G and data-center related demand.

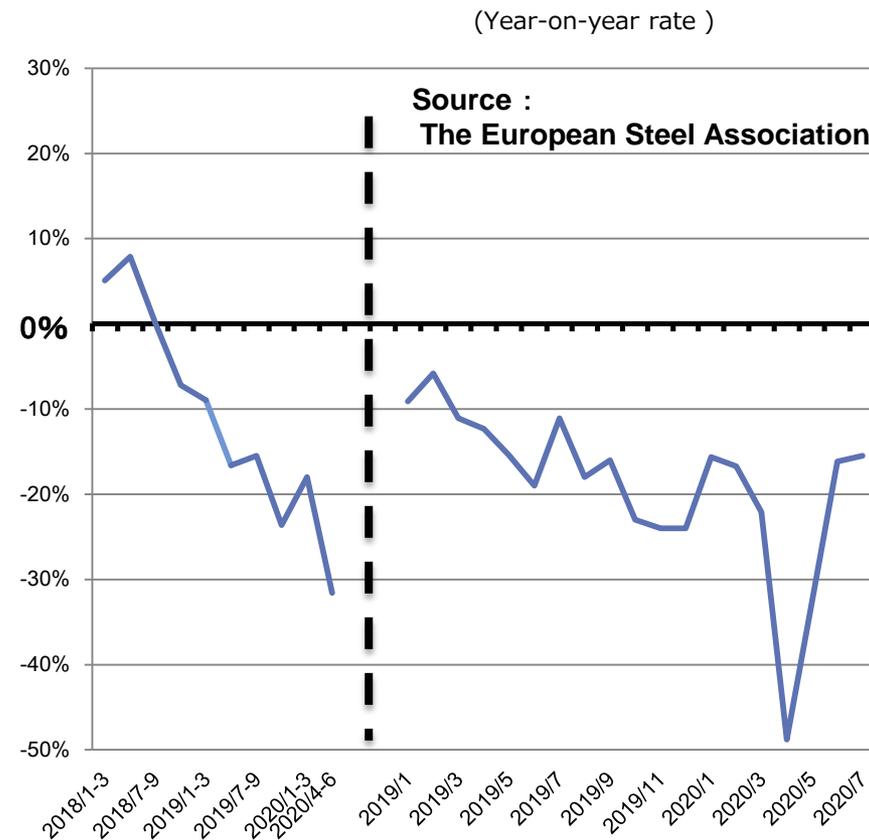
Construction machinery: 2019/10~11 drop due to the consumption tax hike & 2020/2~ continuous drop due to COVID-19 impact

Trends in Special Steel Market

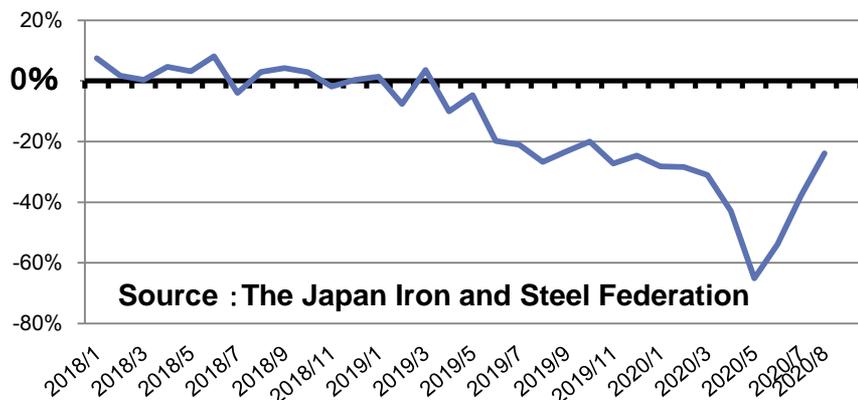
Volume of order booked (Specialty steel products)
(Year-on-year rate)



Volume of European deliveries : Bars and Flats / Alloy Engineering Steel
(Year-on-year rate)



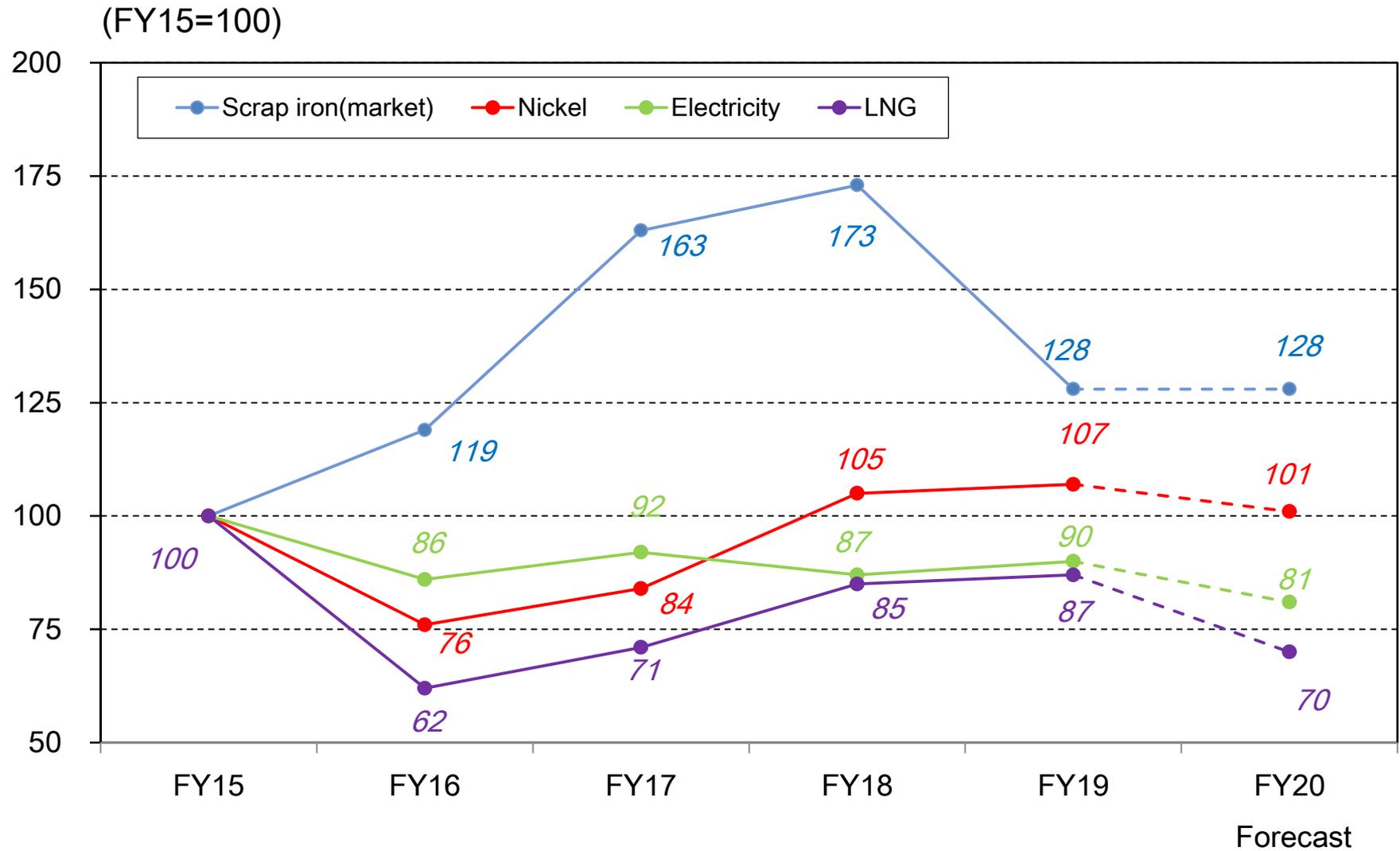
Volume of order booked (Bearing steel)
(Year-on-year rate)



Regarding bearing steel, big negative trend from summer 2019 due to 1) Sluggish global demand in the domestic automotive, construction machinery, industrial machinery, and semiconductors sectors, 2) Huge inventory adjustment, and 3) COVID-19 impact. 2020/5 ; ▼65% on YoY basis
2020/6~ ; easing decline and ▼24% on YoY basis in 2020/8

2018/10 ~ ; negative trend due to 1) Sluggish demand in the European automotive sector, 2) Inventory adjustment in supply chain, and 3) COVID-19 impact.
2020/7 ; ▼16% on YoY basis

Raw Materials and Fuel Prices



* Based on purchase price

(Cautionary Statement)

Business forecasts contained in this document are based on the information available at the time of the release of this document, and actual results may differ from these forecasts due to various factors that may occur in the future. The business forecasts should not be interpreted as any commitment to or guarantee of future performance.