June 19, 2024

Highlights of General Heavy Machinery Manufacturers' Financial Results for Fiscal Year 2023

The following are Japan Credit Rating Agency, Ltd. (JCR)'s perception of the current status and highlights for rating concerning the financial results for the fiscal 2023 (FY2023) and earnings forecasts for FY2024 of Japan's six general heavy machinery manufacturers (collectively, the "Companies"): SUMITOMO HEAVY INDUSTRIES, LTD. ("SHI"), MITSUI E&S Co., Ltd. ("MITSUI E&S"), Hitachi Zosen Corporation ("Hitachi Zosen"), Mitsubishi Heavy Industries, Ltd. ("MHI"), Kawasaki Heavy Industries, Ltd. ("KHI") and IHI Corporation ("IHI").

1. Industry Trend

General heavy machinery manufacturers operate in wide-ranging business domains, which can be roughly categorized into: aerospace; ship and ocean; and land.

The aerospace sector can be divided into the areas of defense-related and commercial aircraft-related businesses. For the defense-related business, some heavy machinery manufactures are increasing order intake due partly to the moves of the Japanese government that expanding defense spending. As for commercial aircraft-related business, negative impact on the performance caused by the COVID crisis dissolved by and large. On the other hand, a large amount of loss arose from PW1100G-JM, a new engine model, for FY2023. This was caused by a deficiency found in the engine production process in Pratt & Whitney, a subsidiary of US major air defense company of RTX, and additional inspections were required for engines already shipped out. In relation to this, RTX announced recording of estimated loss of approximately US 7 billion dollars as the impact of the additional inspections required up to 2026. General heavy machinery manufacturers participating in this program, MHI, KHI and IHI, also recorded the loss according to their participation ratios. That said, each of the companies expressed their intentions not to carry over the loss in the next fiscal year, thereby profit/loss is expected to improve for FY2024. On the other hand, production rate of joint aircraft production products for The Boeing Company ("Boeing") handled by MHI and KHI is on the way of improvement but still remains low. It is expected to take time for full swing recovery.

In the ship and ocean sector, movements of business down scaling and withdrawal from the business are continuing for new ship building, and in February 2024, SHI announced that it would withdraw from the new ship building for general commercial vessels upon completion of production of the backlog of orders at the end of December 2023. In addition to the business down scaling as mentioned above, an improvement in ship price for order intake and weakened yen are working positively for the earnings, thereby, risk of recording a large amount of loss in the new ship building has become lower. Furthermore, an improvement in the new ship building market conditions has also become a tailwind for ship main engines handled by MITSUI E&S and Hitachi Zosen. As the orders for building new ship increases in shipyards in Japan, the number of inquiries for ship main engine to the both companies is increasing. While restrictions on CO2 emission volume of vessels are becoming increasingly tight, new demand will likely be arouse such as using LNG and ammonium fuels for ship main engines.

The land sector can be roughly divided into mass-production business with shorter lead time and order-based business with longer lead time. Demand trend for mass-production business varies by the products' sales areas and business categories of each company handles, but the business environment for the products related to semiconductors and construction machinery in the China is generally severe. On the other hand, demand for some products is steady such as those for two-wheeled and four-wheeled vehicles for the U.S. and Europe handled by KHI and logistics equipment for Americas by MHI. The market is expected shrink in the future for turbocharger for vehicles handled by MHI and IHI along with vehicle electrification; however, a certain sales volume is being maintained currently. For order-based business, a loss giving a large impact on the overall performance of a company will unlikely be incurred partly because the Companies have tightened the control from the early stage of projects.

2. Financial Results

Orders received for FY2023 was 12,204.9 billion yen for the Companies combined. The four companies, except for SHI and Hitachi Zosen, made a year-on-year increase. Expansion of orders received related to the defense-related business boosted the overall figures for MHI, KHI and IHI. Furthermore, MITSUI E&S increased orders received for ship main engines and container cranes. Orders received for waste incinerators overseas grew, but that in Japan decreased for Hitachi Zosen, SHI decreased orders received in relation to demand decrease of products related to semiconductor and construction machinery in China (FY2022 was a nine-month period due to change in the fiscal year end, but recalculated the figures based on 12-month period for a comparison purpose/ hereinafter the same).

For FY2023, net sales (revenue for MHI, KHI and IHI) and operating income (figures derived from gross profit less SG&A expenses for MHI, KHI and IHI) of the Companies combined were 9,768.2 billion yen and 321.3 billion yen respectively. Although profit/loss of KHI and IHI deteriorated along with recording of a large amount of expenses related to above-mentioned PW1100G-JM but profit grew for the remaining four companies. Demand trend for the mass-production business varied by product, but secured a certain amount of profits partly because price revisions progressed in general and a benefit of weakened yen. In the order-based business, projects each company worked on made steady progress by and large. Due partly to an improvement in the new ship building market in the ship and ocean sector, a large amount of loss was not recognized and performance of the ship main engine also remained steady. For the commercial aircraft-related business, profit/loss improved where the impact of additional inspections for PW1100G-JM is excluded.

At the end of FY2023 (SHI - at the end of December 2023 / other five companies - at the end of March 2024), the financial structure of the Companies combined was shown as the equity ratio came to 31.6% and DER stood at 0.53x as opposed to 29.9% and 0.59x at the end of the previous fiscal year (MHI, KHI and IHI use equity attributable to owners of parent for equity capital). Although interest-bearing debt expanded due partly to an increase in working capital requirements and others, the financial structure improved as equity capital increased through profit accumulation and others (KHI's interest-bearing debt is based on the figure in the material of financial results briefing / interest-bearing debt for other five companies include corporate bonds, CPs and borrowings).

3. Highlights for Rating

For FY2024 performance forecast, the four companies, except for SHI and MITSUI E&S, project a year-on-year growth or returning profitability in operating income (business profit). In addition to the expectation that performance of the order-based business is expected to be steady by and large, demand will probably be in the recovery trend for products for construction machinery and semiconductors in the mass-production business. Although MITSUI E&S and SHI will decrease profits from the previous fiscal year, in which both companies performed well, they are expected to maintain relatively high profit levels. Profit is projected to grow for MITSUI E&S where excluding the non-recurring factor such as gains on reversal of provision for loss on civil engineering construction overseas recorded in the previous fiscal year. SHI incorporates R&D expenses in relation to construction of a pilot plant in the performance forecast for FY2024. Where such expenses are excluded, operating income is expected to be on par with the previous fiscal year level.

In the land sector, because trend in demand trend varies by the business category and geographical location of customers for the mass-production businesses, the trend should be checked by product. JCR is particularly paying attention to the trend in Chinese economy and the timing of demand recovery for semiconductors, and also will keep an eye on demand trend of products with relatively stable sales to date whether there is any change in it. For the order-based business, JCR continuously pays attention to trend in orders received and project management status. In the next, JCR is paying attention to continuity of an improvement in the order intake environment for new ship building in the ship and ocean sector. There are a number of factors, which support the demand for new ship building including replacing aged ships, response to environmental restrictions and others, but the order intake environment is also susceptible to external factors including exchange rates and ship owners' willingness to place orders. Therefore, future trend should be closely monitored. Lastly, in the aerospace sector, the key factor is still the trend in performance of commercial aircraft-related business. As for PW1100G-JM, for which a large amount of loss was recorded for FY2023, JCR will watch whether additional expenses are incurred and also paying attention to recovery status of the production rate of joint aircraft production products for Boeing.

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(Chart 1) Orders Received and Earnings

(JPY 100 mn)

		Orders Received	Net Sales	Operating Income	Net Income Attributable to Parent's Shareholders
SHI (6302)	FY2022 (nine-month period)	9,847	8,540	448	57
	FY2022 (comparable performance - based on 12-month period)	11,648	10,182	600	163
	FY2023	10,086	10,815	743	327
	FY2024 (F)	11,200	11,100	700	410
MITSUI E&S (7003)	FY2022	3,223	2,623	93	155
	FY2023	3,369	3,018	196	250
	FY2024 (F)	3,300	3,000	170	350
Hitachi Zosen (7004)	FY2022	7,375	4,926	200	155
	FY2023	7,151	5,558	243	189
	FY2024 (F)	6,200	5,700	260	160

		Orders Received	Revenue	Profit from Business Activities / Business (Operating) Profit	Gross Profit less SG&A Exp.	Profit (Loss) Attributable to Owners of Parent
MHI (7011)	FY2022	45,013	42,027	1,933	1,413	1,304
	FY2023	66,840	46,571	2,825	2,347	2,220
	FY2024 (F)	58,000	49,000	3,500	-	2,300
KHI (7012)	FY2022	20,374	17,256	823	815	530
	FY2023	20,834	18,492	462	361	253
	FY2024 (F)	23,600	22,500	1,300	-	780
IHI (7013)	FY2022	13,661	13,529	819	808	445
	FY2023	13,768	13,225	(701)	(679)	(682)
	FY2024 (F)	17,200	16,000	1,100	-	600

		Orders Received	Net Sales	Operating Income	Net Income Attributable to Parent's Shareholders
Total of the Companies	FY2022	101,294	90,546	3,931	2,754
	FY2023	122,049	97,682	3,213	2,559
	FY2024 (F)	119,500	107,300	-	4,600

Notes:

1. MHI, KHI and IHI have adopted IFRS. MHI and KHI's profit from business activities / business (operating) profit derived using the following calculation formula: revenue less cost of sales, SG&A expenses and other expenses, and add share of profit of investments accounted for using the equity method and other income. That of IHI was derived using the following calculation formula: revenue less cost of sales, SG&A expenses and other expenses, and add other income.
2. Since SHI has changed the end of accounting period from March 31 to December 31, and the results for FY2022 were based on the nine-month period for SHI and the subsidiaries in Japan. Figures in the total section was derived based on SHI's disclosed figures for the 12- month period for FY2022 so that it can be comparable.
3. For the total net sales, figures of revenue were used for MHI, KHI and IHI.
4. For the total operating income, the figures derived from gross profit less SG&A expenses were used for MHI, KHI and IHI.

(Source: Prepared by JCR based on financial materials of above companies)

(Chart 2) Financial Structure

(JPY 100 mn, %, times)

		Equity Capital	Interest-bearing Debt	Equity Ratio	DER
SHI	End-FY2022	5,692	1,607	49.5	0.28
	End-FY2023	6,197	1,622	51.6	0.26
MITSUI E&S	End-FY2022	1,064	1,415	24.2	1.33
	End-FY2023	1,420	1,620	30.4	1.14
Hitachi Zosen	End-FY2022	1,496	724	31.2	0.48
	End-FY2023	1,726	740	32.4	0.43

		Equity Attributable to Owners of Parent	Interest-bearing Debt	Ratio of Equity Attributable to Owners of Parent	DER
MHI	End-FY2022	17,409	7,424	31.8	0.43
	End-FY2023	22,446	7,289	35.9	0.32
KHI	End-FY2022	5,762	5,898	23.4	1.02
	End-FY2023	6,340	6,539	23.7	1.03
IHI	End-FY2022	4,312	3,936	22.2	0.91
	End-FY2023	3,759	4,491	17.9	1.19

		Equity Capital	Interest-bearing Debt	Equity Ratio	DER
Total of the Companies	End-FY2022	35,737	21,006	29.9	0.59
	End-FY2023	41,891	22,302	31.6	0.53

Notes:
1. End-FY2022: At the end of December 2022 for SHI and at the end of March 2023 for other five companies. End-FY2023: At the end of December 2023 for SHI and at the end of March 2024 for other five companies.
2. Interest-bearing debt of KHI includes lease liabilities based on the figure in the material of financial results briefing. Interest-bearing debt of the five other companies includes corporate bonds, commercial paper and borrowings (excluding lease obligations, etc.).
3. Figures of Hitachi Zosen shown above reflect the evaluation of equity content of subordinated loans.
4. MHI, KHI and IHI have adopted IFRS.
5. Total of the Equity Capital: Sum of Equity Capital for the Companies under JGAAP and Equity Attributable to Owners of Parent for those under IFRS.

(Source: Prepared by JCR based on financial materials of above companies)

<Reference>

Issuer: SUMITOMO HEAVY INDUSTRIES, LTD.
Long-term Issuer Rating: A+ Outlook: Stable

Issuer: MITSUI E&S Co., Ltd.
Long-term Issuer Rating: BB+ Outlook: Stable

Issuer: Hitachi Zosen Corporation
Long-term Issuer Rating: A- Outlook: Stable

Issuer: Mitsubishi Heavy Industries, Ltd.
Long-term Issuer Rating: AA- Outlook: Stable

Issuer: Kawasaki Heavy Industries, Ltd.
Long-term Issuer Rating: A Outlook: Stable

Issuer: IHI Corporation
Long-term Issuer Rating: A- Outlook: Positive

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