

Highlights of Major General Chemical Manufacturers' Financial Results for Fiscal Year Ended March 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 year ended March 2023 (FY2022) and earnings forecasts for FY2023 of Japan's six general chemical manufacturers: ASAHI KASEI CORPORATION ("ASAHI KASEI"), Resonac Holdings Corporation (Resonac HD; with a January-December accounting period), SUMITOMO CHEMICAL COMPANY, LIMITED ("SUMITOMO CHEMICAL"), TOSOH CORPORATION ("TOSOH"), Mitsui Chemicals, Inc. ("Mitsui Chemicals"), and Mitsubishi Chemical Group Corporation ("Mitsubishi Chemical Group").

1. Industry Trend

Regarding basic materials, the average utilization rate of domestic ethylene centers in FY2022 was 84.7% (average 94.3% in FY2021). The monthly utilization rate, which exceeded 90% in only two months of April and July 2022, remains at a low level throughout the fiscal year. In March 2023, it was 79.6%, less than 80% for the first time since June 2012. This was mainly due to the impact of the zero-COVID policy implemented in China on downstream production activities and a decline in consumer spending under inflationary pressure. Reflecting the weak demand, the market conditions of petrochemical products also tended to soften in general, and profitability deteriorated compared with FY2021. Basic chemicals and raw materials for synthetic fibers also remained weak in FY2022. The supply-demand balance of these products tightened in the first half of FY2021 due to the impacts of severe cold waves that occurred in North America, but market conditions subsequently subsided following the normalization of supply. Like petrochemical products, their market conditions lowered in FY2022 due to a fall in demand and spreads narrowed overall.

Regarding businesses and products in specialty areas, packaging materials for foods, etc. and agrochemicals continue to be stable. On the other hand, healthcare-related performance varied depending on individual company and product, and situations for automobile and electronics-related products were generally severe. Auto production has recovered from the slump caused by the COVID-19 pandemic but the recovering pace has been slow. Therefore, demand for high-performance materials for auto interiors/exterior and various materials for auto lithium-ion secondary batteries has also been on a weak trend. In electronics-related products, demand for related high-purity chemicals, manufacturing process-related products, and functional films slowed sharply in the second half of the fiscal year, as the market for semiconductors and displays became increasingly adjusted, with the tail-off of the at-home consumption. The rise in raw materials / fuel prices served as a negative factor for profitability, but it was passed on to selling prices with a stronger stance than in the past, which is a characteristic this time.

2. Financial Results

In FY2022 (for Resonac HD, fiscal year ended December 2022), the six companies' combined EBITDA (Note 1) was 1.5 trillion yen, down 18.5% from the record high of FY2021. However, in FY2022, Mitsubishi Chemical Group recorded a special factor (Note 2) related to royalties on Gilenya (multiple sclerosis treatment) of 126 billion yen. If this was excluded, it would be a decrease of more than 20% compared to FY2021. In FY2022, yen depreciation served as a supporting factor for earnings, but this was hurt by deteriorating market conditions for basic material products and a slowdown in demand for various products. Viewing in chronological order, results in the first half of the fiscal year remained firm following the strong earnings in FY2021, but in the second half, adjustments in the semiconductor and display markets appeared on the earnings front, resulting in a significant deterioration toward the end of the fiscal year.

In FY2022, each of the five companies, excluding Mitsubishi Chemical Group, reported a decline in operating income (core operating income under IFRS). SUMITOMO CHEMICAL, in particular, saw a significant decline by more than 60% year on year. The main reasons behind the decline at SUMITOMO CHEMICAL is attributable to substantial losses in the Essential Chemicals & Plastics sector, which handles petrochemicals and basic chemicals, as well as a large income drop in pharmaceuticals due to the impact of the end of exclusive sales period for Latuda (atypical antipsychotic treatment) in the U.S.

Mitsubishi Chemical Group achieved an operating income increase, but given the aforementioned special factor, it is a decrease actually. ASAHI KASEI, SUMITOMO CHEMICAL and Mitsubishi Chemical Group recorded significant losses related to structure reforms. As a result, ASAHI KASEI posted a record net loss of 91.3 billion yen, while SUMITOMO CHEMICAL became profitable but reported a large year-on-year decrease in net income.

At the end of FY2022, the six companies' total shareholder's equity was 6.7 trillion yen. A simple comparison is not possible, because of factors such as changes in accounting standards, the effects of hybrid financing and an increase in the currency exchange adjustment account with yen's depreciation, but the equity capital has more than doubled in ten periods since the end of FY2012. In response to changes in the business environment, steady capital reinforcement has been proceeding over the long term, although the profit accumulation has sometimes temporarily come to a standstill. Meanwhile, the total net interest-bearing debt of the six companies at the end of the FY2022 was about 5 trillion yen, the highest level ever. Behind this is the fact that the companies in recent years have aggressively invested in growth, and demand for working capital has increased due to rises in raw materials / fuel prices. Looking at the industry as a whole, however, the current financial structure is at a relatively sound level. There are cases in which results are somewhat severe for some companies, but each company has secured a reasonable level of financial durability, not in the status where financial risk is a concern.

(Note 1) Gross profit – SG&A expenses + depreciation expenses is used under IFRS.

(Note 2) As the licensee, Novartis Pharma AG (“Novartis Pharma”), claimed that it was not obligated to pay royalties, Mitsubishi Tanabe Pharma Corporation had not recorded any royalty income since February 2019. However, in February 2023, an arbitration decision was made that all provisions that established Novartis Pharma's obligation to pay royalties were valid, resulting in a one-time recognition of the unrecognized portion of the revenue.

3. Highlights for Rating

According to the initial plan for FY2023, ASAHI KASEI, TOSOH and Mitsui Chemicals project an increase in operating income (core operating income in IFRS). Mitsubishi Chemical Group expects an income decrease but it will be an increase actually. Meanwhile, Resonac HD and SUMITOMO CHEMICAL project an income decrease. Overall, the companies are expected to face difficult earnings conditions in the first half with electronics-related adjustments continuing. However, earnings are assumed to recover, in light of a gradual recovery of auto production, and the expectation that demand for electronics-related products will start to pick up in the second half of the fiscal year. With regard to the two companies forecasting a year-on-year decline in income, Resonac HD is affected by the fact that the business environment for its mainstay semiconductor-related products will take a bottom phase in relation to its fiscal period. SUMITOMO CHEMICAL is expected to see a significant negative impact from an operating loss in pharmaceuticals due to the growing impact of LATUDA's patent cliff.

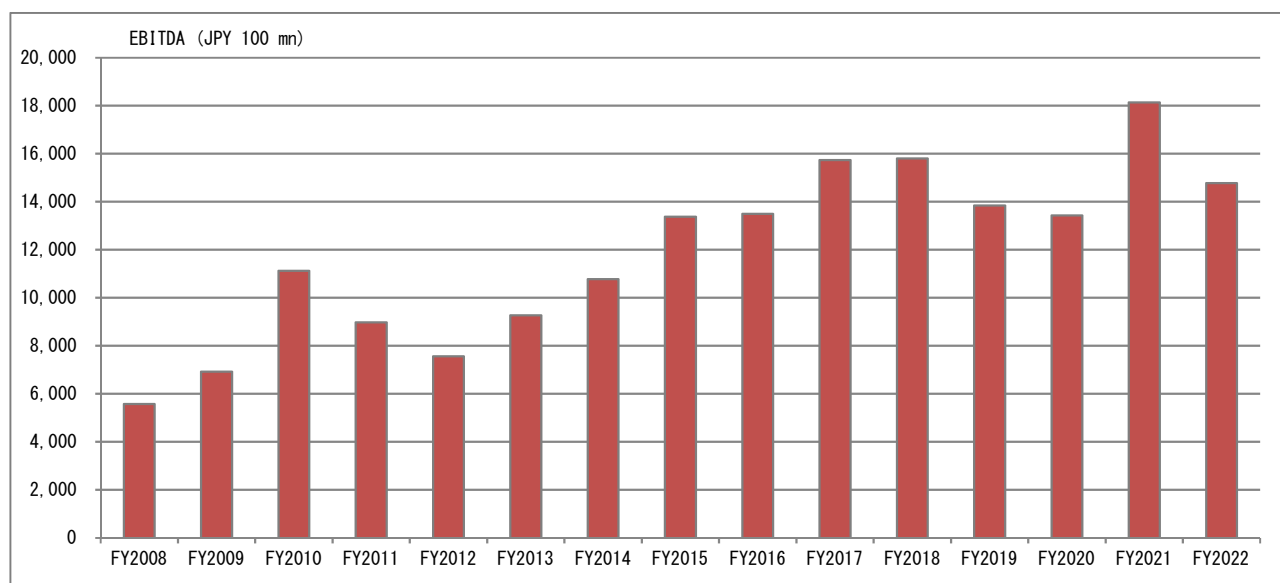
The biggest point to focus on in terms of earnings in FY2023 is trends in demand for various products, including automobiles and electronics-related products. The impact of the COVID-19 has subsided, but the current economy is globally under a downward pressure due to the persistently high level of inflation and the recent turmoil in the financial sector in the U.S. Despite an aspect as an essential industry that supplies products to a wide range of demand fields including daily necessities, the earnings of the industry are susceptible to global economic moves, production trends in the customer industry, and personal spending. The current business environment is considered to be at the bottom, but the timing of the recovery in earnings may delay depending on product demand. The second point is the situation of geopolitical risk. There is still no prospect of a settlement for the situation in Russia and Ukraine, and the confrontation between the U.S. and China is continuing. Although the raw materials / fuels prices are on a downward trend, depending on these circumstances, it is anticipated that the prices will be pushed up again and the semiconductor market will be adversely affected.

Other than the earnings aspect, JCR is focusing on two main points. The first point is the progress in financial improvement. In recent years, in cases where interest-bearing debt was significantly increased due to large acquisitions and other factors, the companies have been required to continue to improve their financials early by acquiring results from growth investments and adhering to investment discipline. The second point is business structural reform. These years, companies have been increasingly restructuring their businesses in order to promote growth strategies and decarbonization in the future, among others. Specifically, while they have designated electronics, mobility, healthcare and environment as growth areas and are accelerating growth by allocating management resources intensively to these areas, moves to restructure basic materials business including petrochemicals are increasingly active. In particular, the restructuring of basic materials is not limited to individual companies, but may extend to the industry as a whole going forward. While these moves are basically favorable from a rating

perspective, JCR will pay attention to whether the companies can enhance the competitive advantage and the continuity of their business through such efforts.

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(Chart 1) Total EBITDA of Six General Chemical Manufacturers



EBITDA = Operating Income + Depreciation Expenses + Amortization Expenses (Gross profit - SG&A expenses - depreciation expenses under IFRS)

(Chart 2) Consolidated Business/Financial Performance of Six General Chemical Manufacturers

(JPY 100 mn, times)

		Net Sales	Operating Income	Ordinary Income	Net Income	Interest-bearing Debt	Equity Capital	Total Assets	Net D/E Ratio	Equity Ratio
ASAHI KASEI (3407)	FY2021	24,613	2,026	2,120	1,618	7,662	16,874	33,490	0.31	50.4%
	FY2022	27,264	1,283	1,215	-913	9,394	16,609	34,545	0.41	48.1%
	FY2023F	28,650	1,600	1,650	1,000	—	—	—	—	—
Resonac HD (4004)	FY2021	14,196	871	868	-120	9,682	6,514	21,423	1.12	30.4%
	FY2022	13,926	593	593	307	9,099	6,877	21,004	1.05	32.7%
	FY2023F	13,400	-200	-310	-460	—	—	—	—	—
TOSOH (4042)	FY2021	9,185	1,440	1,604	1,079	919	7,089	10,876	-0.10	65.2%
	FY2022	10,643	746	899	503	1,767	7,388	11,942	0.08	61.9%
	FY2023F	10,800	950	950	600	—	—	—	—	—

		Sales Revenue	Core Operating Income	Operating Income	Net Income	Interest-bearing Debt	Equity Attrib. to Owners of the Parent	Total Assets	Net D/E Ratio	Ratio of Equity Attrib. to Owners of the Parent
SUMITOMO CHEMICAL (4005)	FY2021	27,653	2,347	2,150	1,621	12,254	13,431	43,081	0.64	31.2%
	FY2022	28,952	927	-309	69	13,363	12,961	41,655	0.80	31.1%
	FY2023F	29,000	400	200	100	—	—	—	—	—
Mitsui Chemicals (4183)	FY2021	16,126	1,618	1,473	1,099	6,660	7,126	19,349	0.68	36.8%
	FY2022	18,795	1,139	1,289	829	7,382	7,868	20,682	0.70	38.0%
	FY2023F	19,000	1,500	1,450	1,000	—	—	—	—	—
Mitsubishi Chemical Group (4188)	FY2021	39,769	2,723	3,031	1,771	21,599	14,580	55,738	1.31	26.2%
	FY2022	46,345	3,255	1,827	960	22,437	15,643	57,739	1.24	27.1%
	FY2023F	45,550	2,500	2,390	970	—	—	—	—	—

*1 IFRS for SUMITOMO CHEMICAL, Mitsui Chemicals and Mitsubishi Chemical Group.

*2 Core operating income is obtained by excluding profit/loss of non-recurring items from operating income under IFRS.

*3 Net income is net income attributable to shareholders of the parent (JGAAP) or net income attributable to owners of the parent (IFRS).

*4 Interest-bearing debt is the sum of borrowings, corporate bonds and CP. Equity content is considered in cases where there is hybrid financing.

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

<Reference>

Issuer: ASAHI KASEI CORPORATION

Long-term Issuer Rating: AA Outlook: Stable

Issuer: Resonac Holdings Corporation

Long-term Issuer Rating: A Outlook: Stable

Issuer: SUMITOMO CHEMICAL COMPANY, LIMITED

Long-term Issuer Rating: A+ Outlook: Stable

Issuer: TOSOH CORPORATION

Long-term Issuer Rating: A+ Outlook: Positive

Issuer: Mitsui Chemicals, Inc.

Long-term Issuer Rating: A+ Outlook: Stable

Issuer: Mitsubishi Chemical Group Corporation

Long-term Issuer Rating: A+ Outlook: Stable

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