

# Oleochemicals Sector Thematic

Chemicals | Sector Update

December 27, 2023

## Very few have got the knack of staying relevant

### Key Points

- We tracked the operating performance, innovation focus and expansion plans of domestic as well as global Oleochemicals players. FINRORG emerges as the clear winner in terms of operational parameters.
- Globally, there are very few pure-play Oleochemicals companies. Expansion plans by global companies are not a cause for concern in our view as some of the projects are either for dedicated customer centric product or cover various other segments such as F&F, Healthcare etc.
- We don't see base Oleochemicals businesses based out of Malaysia & Indonesia as threat because in most of the cases there is lack of intent towards R&D and the focus of future expansion also remains on the base business only.
- FINEORG is our top pick in our Specialty Ingredients coverage. We believe FINEORG and GALSURF can sustainably outgrow domestic as well as global peers in the respective end-user segments. Upgrade GALSURF to BUY.

**FINEORG is clear winner in Indian Oleochemicals space:** We compared historical performance of leading Oleochemicals companies in India. Despite assuming equal R&D capability, intent and resources to grow for all peers, FINEORG emerges as a clear winner on operational parameters. We believe that balance sheet strength can play a pivotal role, both during testing times like the current year and also while considering the expansion opportunities (organic and/or inorganic). GALSURF continues to gain market share in HPC space in India. MNCs having manufacturing presence in India also have elevated operating cost structure vis-à-vis Indian peers. Base Oleochemicals businesses in India have no 'right to win' on account of lack of R&D intent, RM price fluctuations and absence of pricing power.

**Oleochemicals on a global landscape:** We highlight that among others, Palsgaard and FINEORG are one of very few pure-play like-to-like Oleochemicals companies present in customer-centric downstream products market catering to industries such as F&B, Plastics, Cosmetics etc. (GALSURF in HPC). All others global companies are either present in B2C business or catering to diverse end-user segments apart from the pure Oleochemicals based consumer segments.

**Expansion by peers not a cause for concern:** We tracked expansion plans of all the global peers in detail and conclude that the same should not impact other incumbents to a large extent as these are product-specific capacities unlike the generic ones. Also, few announcements are basket announcements catering to flavour & fragrances, healthcare, industrial sector etc., which are not ideal for a like-for-like comparison.

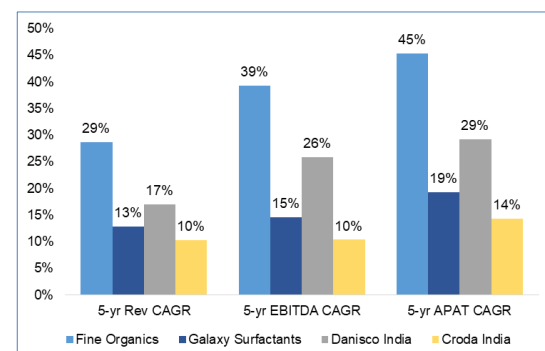
**Base Oleochemicals players from Malaysia & Indonesia not a threat:** Investors invariably argue on the point that Indonesian and Malaysian Oleochemicals players have a sourcing edge and could be a threat for incumbents. Despite sourcing benefit, we see very few players (For example, Emery Oleochemicals) scaling up and focussing more on downstream products, similar to FINEORG, Croda etc. We believe that easy access to capital and/or sourcing edge are not enough for base Oleochemicals companies to scale up downstream products. Application R&D is missing in most of the base Oleochemicals business models.

### Rating table

Company	Rating	CMP	Target Price	Upside (%)
FINEORG	Buy	4,838	6,000	24%
GALSURF	Buy	2,661	3,100	16%

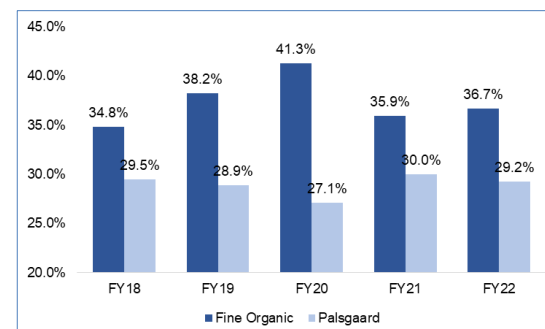
Source: Nirmal Bang Institutional Equities

### Rev/EBITDA/APAT CAGR over FY18-23



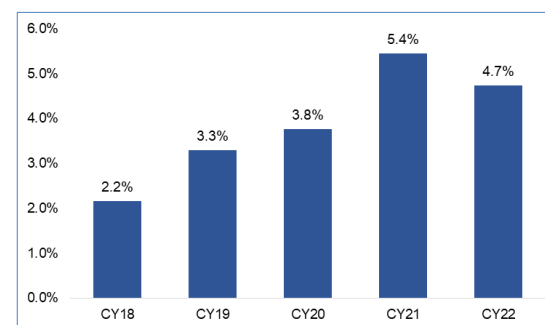
Source: Company, Nirmal Bang Institutional Equities

### FINEORG vs Palsgaard- Gross margin comparison



Source: Company, Nirmal Bang Institutional Equities

### Mid-low single digit operating margin for largest fatty acid producer in Malaysia



Source: Company, Nirmal Bang Institutional Equities

Please refer to the disclaimer towards the end of the document.

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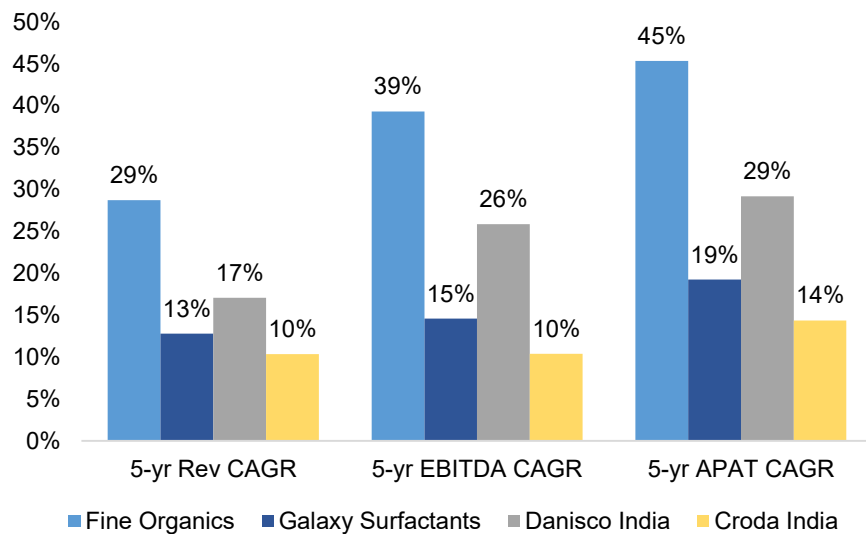
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**Oleochemicals in the Indian context**

**FINEORG a clear winner in Indian Oleochemicals space**

We compared financial performance of leading Oleochemicals companies in India (including MNCs present in India in unlisted space) over the last 5-7 years. Despite all the companies having R&D capability, intent and resources to grow on the similar lines, FINEORG emerges as a clear winner on operational parameters. We believe that balance sheet strength can play a pivotal role both during testing times like the current year and also while considering the expansion opportunities (organic and/or inorganic). Global MNCs such as Croda, Kerry Group, Danisco etc have manufacturing base in India for the last 1-2 decades. Despite that, we don't see significant scale-up by these names vis-à-vis Indian companies like FINORG and GALSURF. GALSURF continues to gain market share in India by consistently growing in double digit in volume terms over the last 4-5 years. MNCs operating in India through a manufacturing set up also don't seem to have the cost edge as can be seen from the elevated operating cost structure vis-à-vis FINEORG and GALSURF.

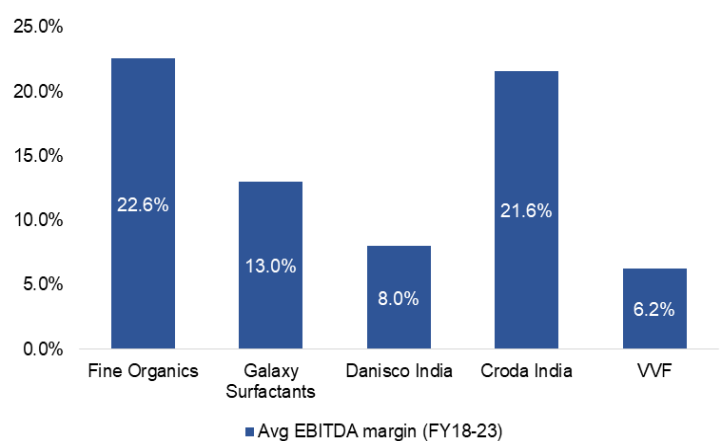
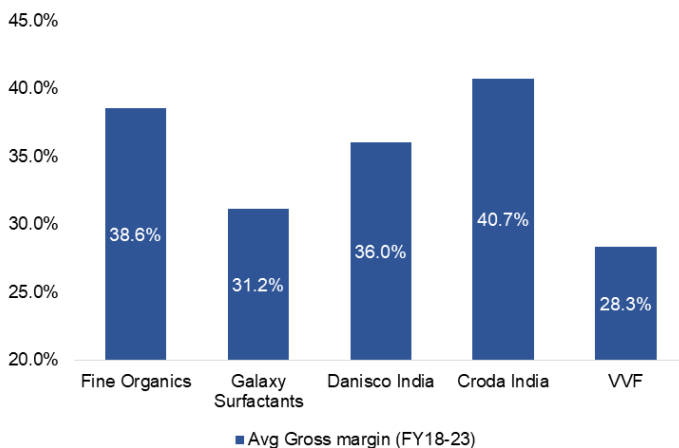
**Exhibit 1: Rev/EBITDA/APAT CAGR- FINEORG has consistently outperformed like-to-like peers**



Source: Company, Nirmal Bang Institutional Equities

**Exhibit 2: Average gross margin- pure custom-centric models yielding higher gross margin**

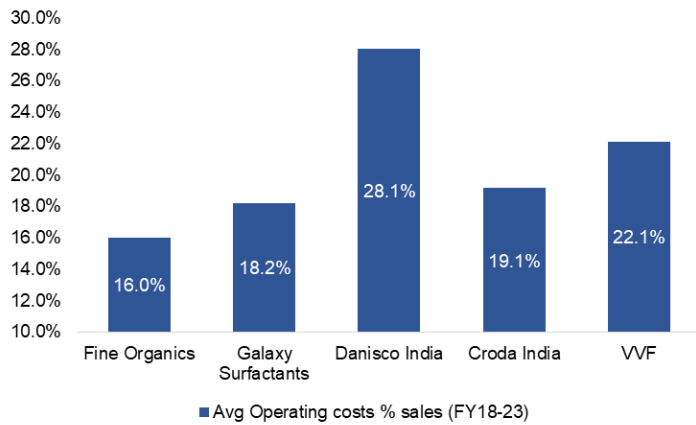
**Exhibit 3: Average EBITDA margin indicates better cost management by Indian players**



Source: Company, Nirmal Bang Institutional Equities

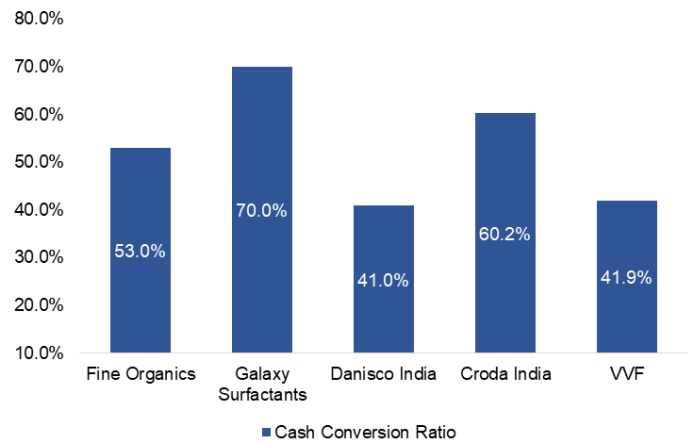
Source: Company, Nirmal Bang Institutional Equities

**Exhibit 4: Average operating costs as % sales- FINEORG and GALSURF at the lower end**



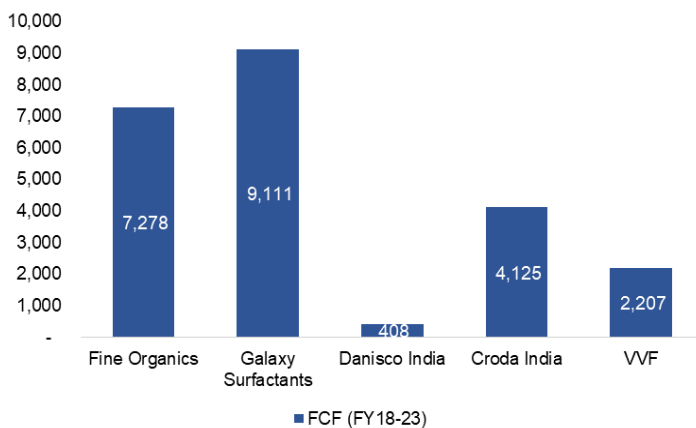
Source: Company, Nirmal Bang Institutional Equities

**Exhibit 5: Average cash conversion ratio- GALSURF and Croda India doing better than the rest**



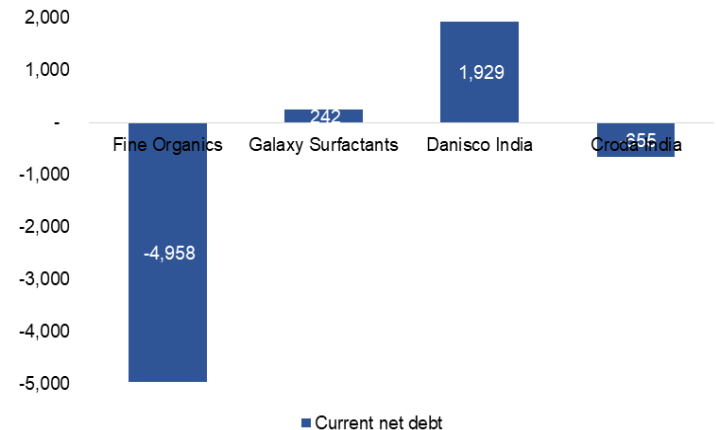
Source: Company, Nirmal Bang Institutional Equities

**Exhibit 6: Cumulative FCF generation (FY18-FY23) is a clear differentiator between Indian Cos and like-for-like MNC players in India**



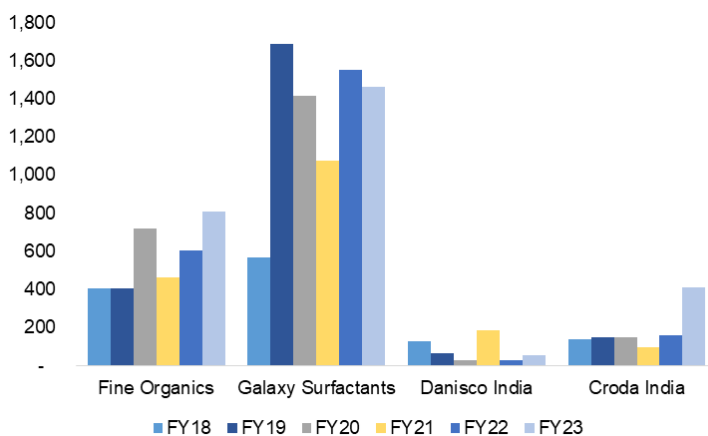
Source: Company, Nirmal Bang Institutional Equities

**Exhibit 7: Lean balance sheets across the board; but, FINEORG has the highest liquid cash reserves for future expansion**



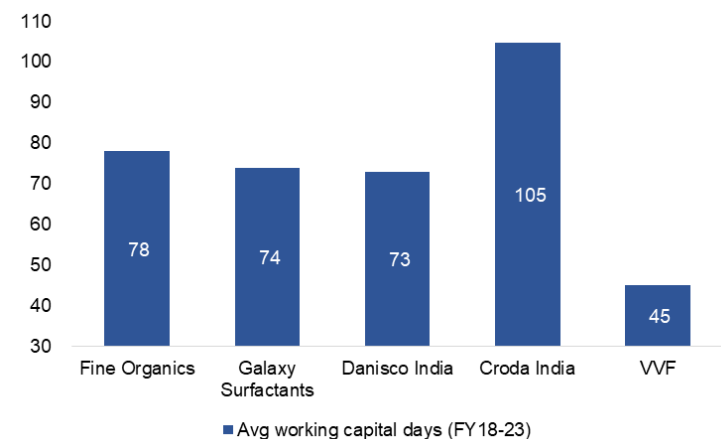
Source: Company, Nirmal Bang Institutional Equities

**Exhibit 8: Capex incurred over FY18-FY23 - GALSURF and FINEOGR top the list**



Source: Company, Nirmal Bang Institutional Equities

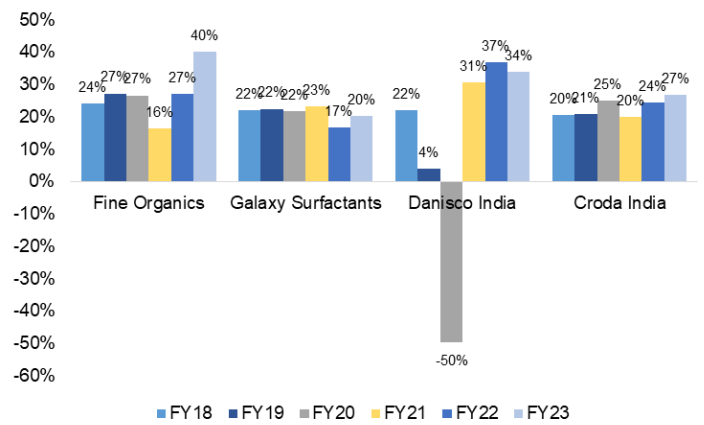
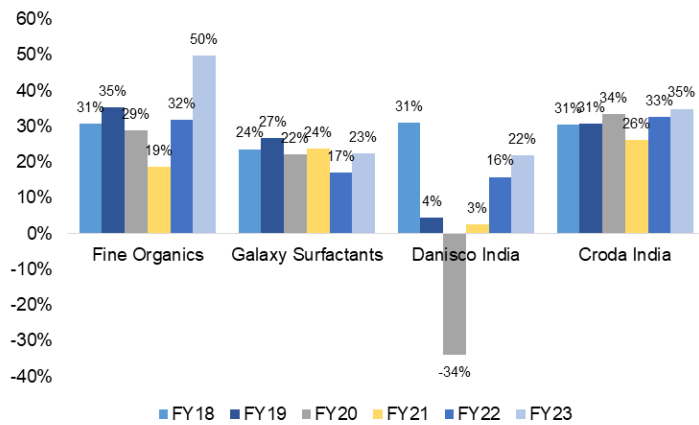
**Exhibit 9: Average working capital cycle is ~70 days barring Croda**



Source: Company, Nirmal Bang Institutional Equities

**Exhibit 10: ROCE- FINORG and Croda India at similar level; Danisco India depicts volatile trend**

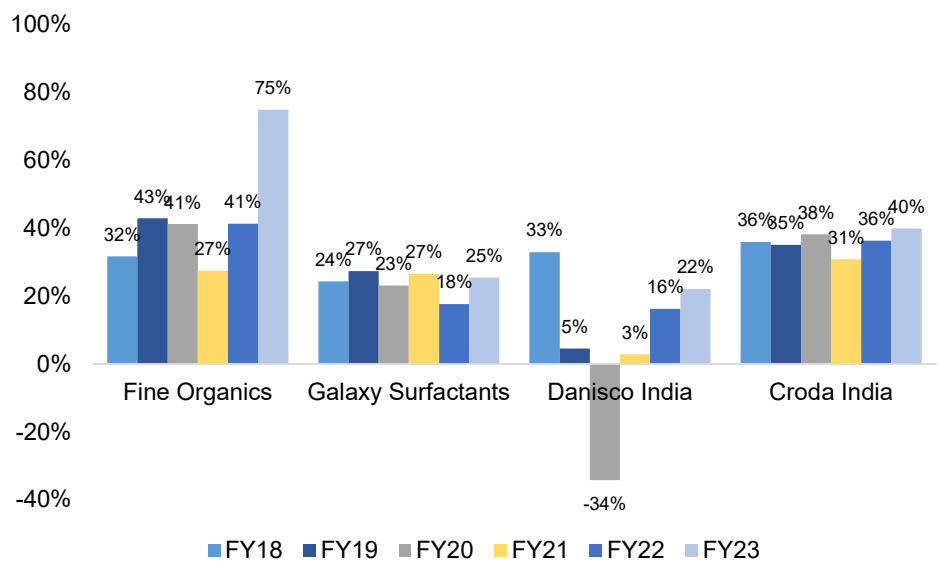
**Exhibit 11: ROE- average ~25% maintained by majority of them**



Source: Company, Nirmal Bang Institutional Equities

Source: Company, Nirmal Bang Institutional Equities

**Exhibit 12: ROIC- FINEORG has an upper hand due to significant cash reserves; benefit for FINEORG in FY23 not seen in others**



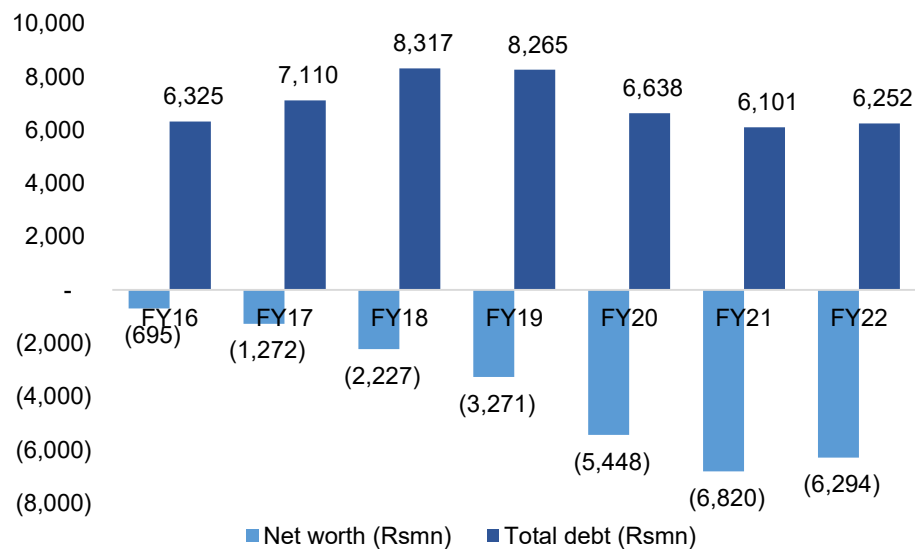
Source: Company, Nirmal Bang Institutional Equities

**No ‘right to win’ for Base Oleochemicals businesses in India**

Apart from the companies considered for comparison above, there are various companies present in base Oleochemicals space. But, we believe very few have the ‘right to win’ as mere access to capital and technology won’t lead to a successful scalable business franchise. We tracked the performance of some of the base Oleochemicals businesses in India as well. We believe that lack of R&D intent, RM price fluctuations and absence of pricing power are the key hindering factors. We have provided examples of VVF Ltd and Jocil Ltd. which have a reasonable presence in base Oleochemicals space in India.

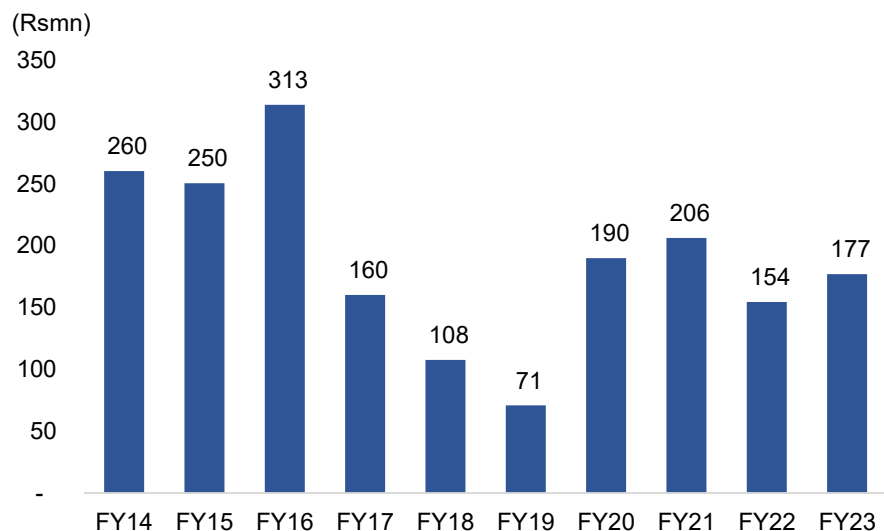
VVF has been struggling on account of accumulated losses in the past and mounting debt. Similarly, we have given Jocil’s EBITDA trend over the last 9-10 years. Jocil mainly manufacturers fatty acids and has been unable to scale up the business. All other companies considered for comparison above are predominantly present in the specialty derivatives and follow the customer-centric product approach.

**Exhibit 13: VVF India eroding net worth and has mounting debt- could not benefit during FY23 unlike others oleochemicals companies**



Source: Company, Nirmal Bang Institutional Equities

**Exhibit 14: Jocil EBITDA trend- manufacturer of fatty acids among other things could not scale up profitability over the years**



Source: Company, Nirmal Bang Institutional Equities

## Oleochemicals on a global landscape

### Palsgaard & FINEORG are only pure-play like-to-like oleochemicals players

We highlight that among others, Palsgaard and FINEORG are the only pure-play like-to-like Oleochemicals companies present in customer-centric downstream products market catering to industries such as F&B, Plastics, Cosmetics etc. GALSURF, a domestic leader in the HPC segment, has some share of revenue coming from crude derivatives based products, barring which its entire portfolio is Oleochemicals. However, apart from these names, all other global companies are either present in B2C business or catering to different end-user segments apart from the pure Oleochemicals segment. We present operational snapshot and key charts of select global Oleochemicals companies for better understanding of the corporate structure, financial parameters and product profile.

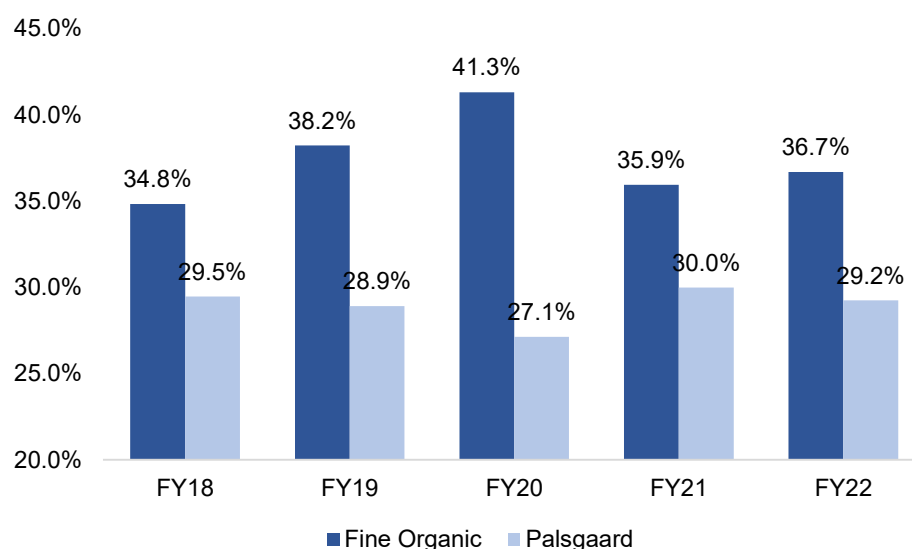
### Palsgaard

#### Exhibit 15: Paalsgaard Financial Summary

Particulars (DKK'mn)	CY17	CY18	CY19	CY20	CY21
Net Revenue	1,250	1,410	1,436	1,498	1,786
Gross Profit	368	408	389	449	522
Operating Profit	120	139	103	137	153
PAT	129	72	68	91	112
CAPEX	15	50	159	180	143
Gross profit margin	29.5%	28.9%	27.1%	30.0%	29.2%
Operating Margin	9.6%	9.9%	7.2%	9.1%	8.6%
ROIC	18.1%	19.5%	12.4%	14.5%	13.5%
ROE	13.5%	7.0%	6.3%	8.0%	9.1%

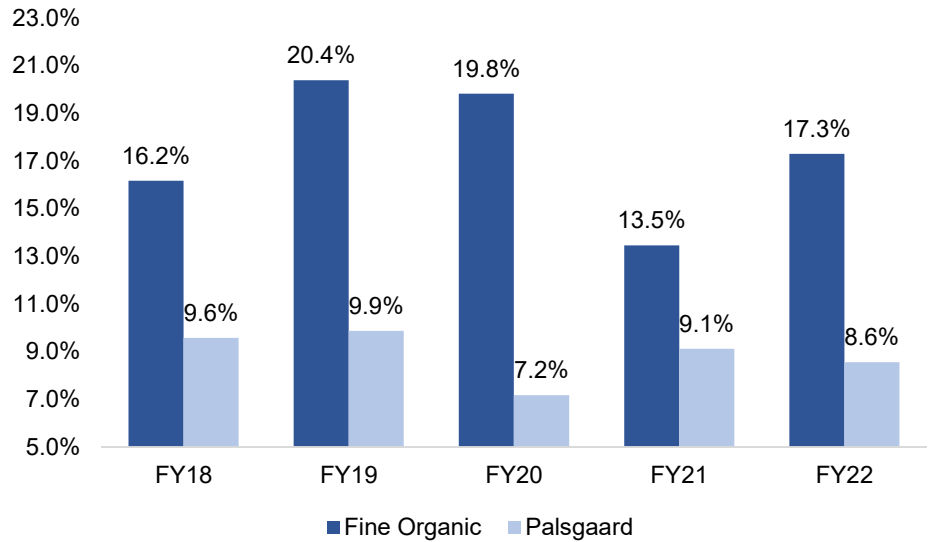
Source: Company, Nirmal Bang Institutional Equities Research

#### Exhibit 16: Palsgaard vs FINEORG gross margin comparison



Source: Company, Nirmal Bang Institutional Equities

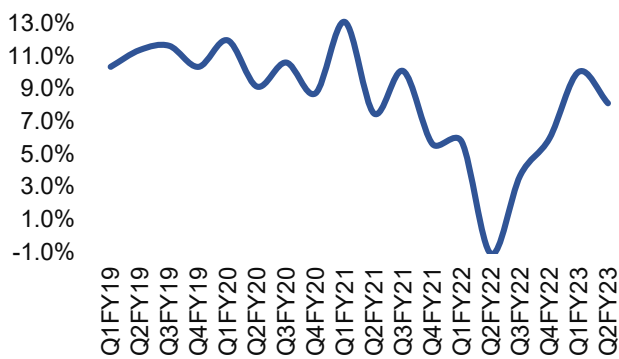
**Exhibit 17: Palsgaard vs FINEORG operating margin comparison**



Source: Company, Nirmal Bang Institutional Equities

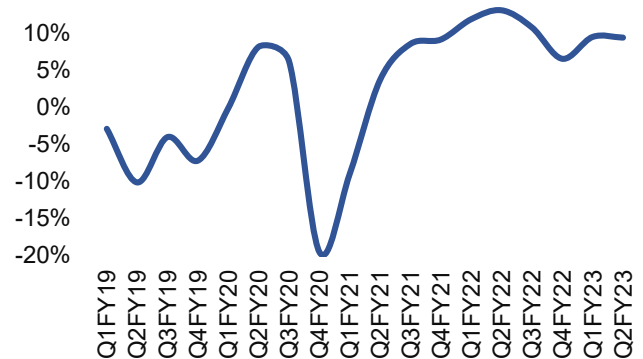
## Riken Vitamin

**Exhibit 18: Riken Vitamin operating margin for Domestic chemical business**



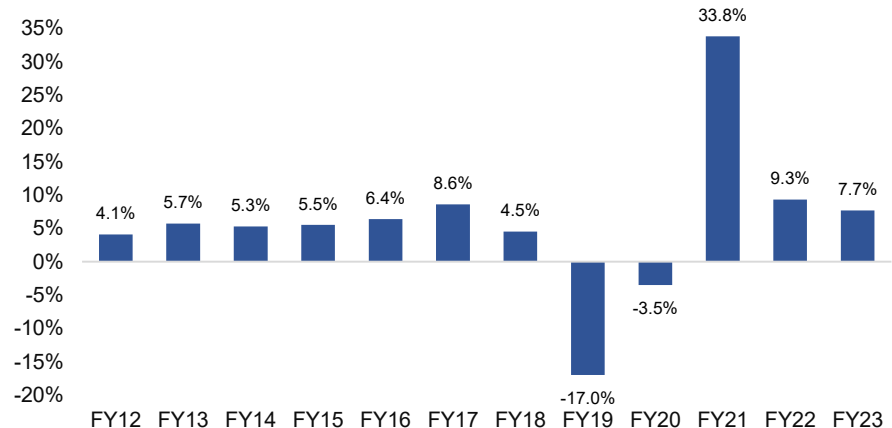
Source: Company, Nirmal Bang Institutional Equities Research

**Exhibit 19: Riken Vitamin operating margin for Overseas business**



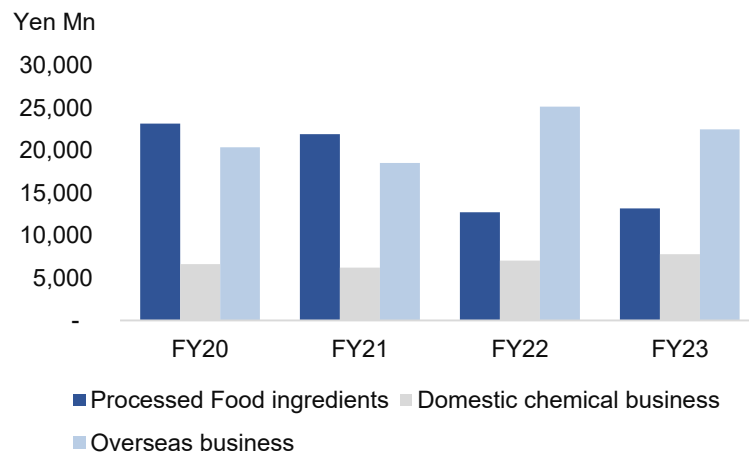
Source: Company, Nirmal Bang Institutional Equities Research

**Exhibit 20: Normalised ROE of Riken Vitamin in single digits over >10 years**



Source: Company, Nirmal Bang Institutional Equities

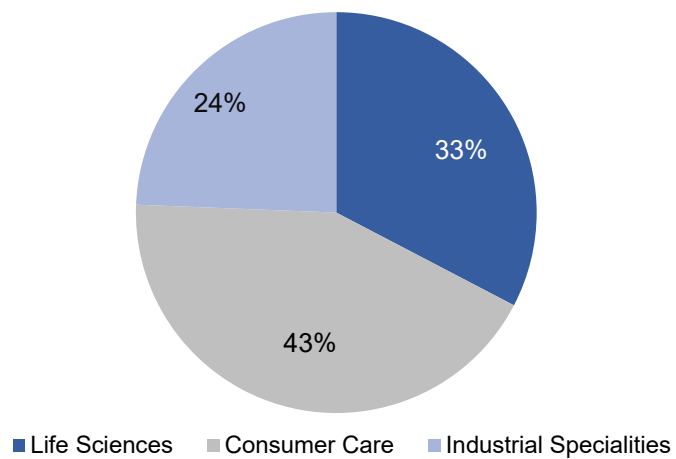
**Exhibit 21: Segmental revenue break-up of Riken Vitamin during FY20-FY23**



Source: Company, Nirmal Bang Institutional Equities

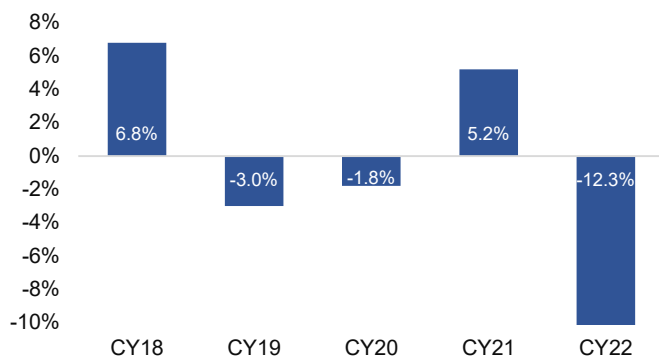
**Croda Plc**

**Exhibit 22: Segmental revenue break-up of Croda for year 2022**



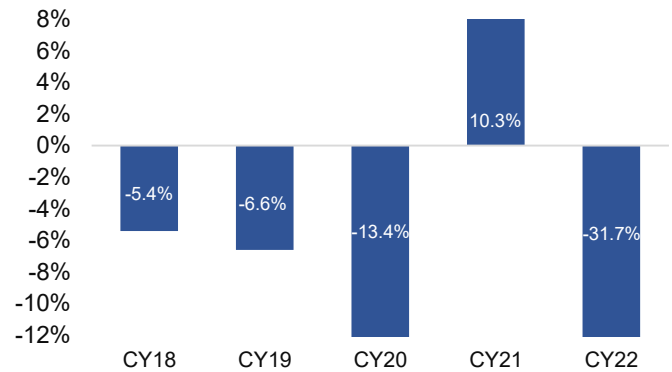
Source: Company, Nirmal Bang Institutional Equities

**Exhibit 23: Croda- Volume growth for Consumer Care down from peak in last 5 years**



Source: Company, Nirmal Bang Institutional Equities Research

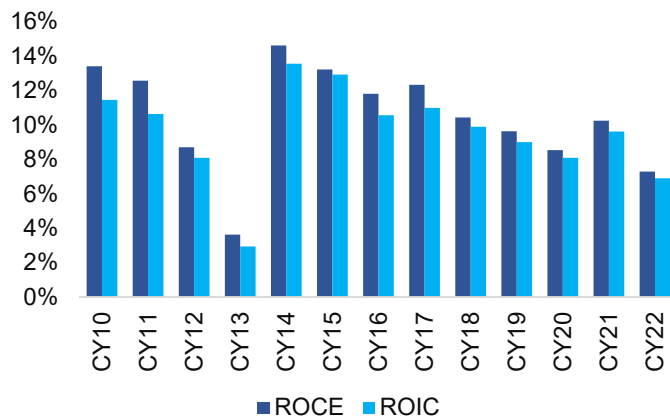
**Exhibit 24: Croda- Volume growth for industrial specialties down from peak in last 5 years**



Source: Company, Nirmal Bang Institutional Equities Research

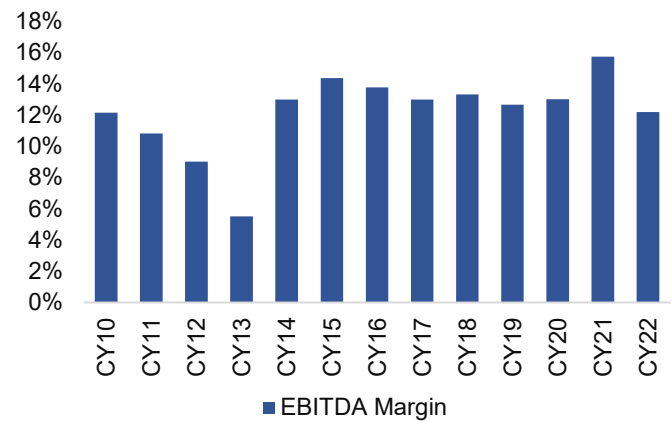
## Kerry Group

**Exhibit 25: ROCE Vs ROIC for Kerry group (CY10-CY22)**



Source: Company, Nirmal Bang Institutional Equities Research

**Exhibit 26: EBITDA margin for Kerry group (CY10-CY22)**



Source: Company, Nirmal Bang Institutional Equities Research

## Expansion announcements of peers not a cause for concern

Investors are increasingly concerned about the product concentration risk and aggressive expansion plans by all players. We have tracked the expansion plans of all global peers in detail and have concluded that expansions announced by them should not impact other incumbents to a large extent as these are product-specific capacities unlike generic ones. Also, a few announcements are basket announcements catering to flavour & fragrances, healthcare, industrial sector etc., which are not ideal for a like-for-like comparison.

**Following contains details of recently commissioned capacities and upcoming expansion projects of key global peers.**

### Palsgaard

- Globally, Palsgaard is the only like-for-like player for FINEORG in terms of products as well as end-user industries. While the company got delisted a couple of years back, as per news reports, Palsgaard's revenue during FY23/CY22 stood at ~Rs28bn (USD343mn), a tad lower than FINEORG.
- In terms of future expansion, Palsgaard is expanding spray cooling tower, storage facilities, distillation and esterification units in Denmark along with adding >5,000 tonnes high grade PGPR emulsifiers capacity in the Netherlands. PGPR (polyglycerol polyricinoleate) is a co-emulsifier primarily used in chocolate production to control flow, reduce viscosity and optimize moulding & enrobing. It also reduces fat content in margarine spreads and is a highly effective, plant-based colour-dispersing aid that replaces petrol-based waxes in plastics. With this expansion, Palsgaard is going to double its PGPR capacity by 2024. Palsgaard is the market leader in PGPR.
- Our research also suggests that Palsgaard could become more aggressive in India as a new subsidiary company has been incorporated in Feb'23 and the company is aggressively scouting for Head of Sales in India.

### Croda Group

- Croda India is planning to invest Rs5bn in the first phase of expansion at Dahej. The new capacity will cater to regional demand of its Consumer Care products, Pharma and Crop Care. Croda is present in India for over two decades and reported a topline of Rs9bn in FY23 i.e. 1/3<sup>rd</sup> of FINEORG.
- As per press reports, Croda opened its Global Technical Centre at Genome Valley, Hyderabad. This investment is mainly dedicated to high performance pharma ingredients and technologies for Life Sciences.
- Croda has recently broken ground at a greenfield site in GuangZhou, China to make a multi-purpose production facility for fragrances and beauty active ingredients in China. This is mainly targeted at 'Made in China for China' initiative. For beauty actives, the focus will be predominantly on botanical extracts.

### Kerry Group

- Kerry Group has announced its largest ever expansion (USD125mn) at its Rome site in 2020. The project was expected to double the production capacity at Rome. The facility is expected to produce integrated taste and nutrition solutions aimed to meet growing demand for poultry, seafood and alternative protein markets.
- Kerry Group started its largest ever facility in the MENAT region in 2022 to produce great tasting, nutritious and sustainable food ingredients, which will be distributed

across the Middle East. Capex incurred over four previous years stood at Euro 80mn.

- In India, Kerry started a new facility in 2019 at Tumkur to cater to Kerry's regional and global clients in the food & nutrition segment. Capex outlay at that time was Euro 20mn

### **Riken Vitamin**

- Riken Vitamins' subsidiary in China (Tainjin Rikevita Food) has a production volume of 10,000 TPA for food improving agents. Post the upcoming expansion, production capacity available would be 19,000 TPA by 2028. Out of the existing production of food improving agent, 70% sales are made in China itself.
- The company has also announced expansion of Crocetin (derived from Saffron) capacity by 1.5x this year on the back of strong demand. Capex towards the same should be ~JPY 100mn. Riken expects Crocetin sales to reach JPY 1bn in the near future. Crocetin has major application in the healthcare space.
- Riken is also investing in pork extracts segment mainly targeting USA.

Danisco announced manufacturing capacities in India in 2013. No further expansion announcements are available in public domain.

## Application R&D is a key differentiator

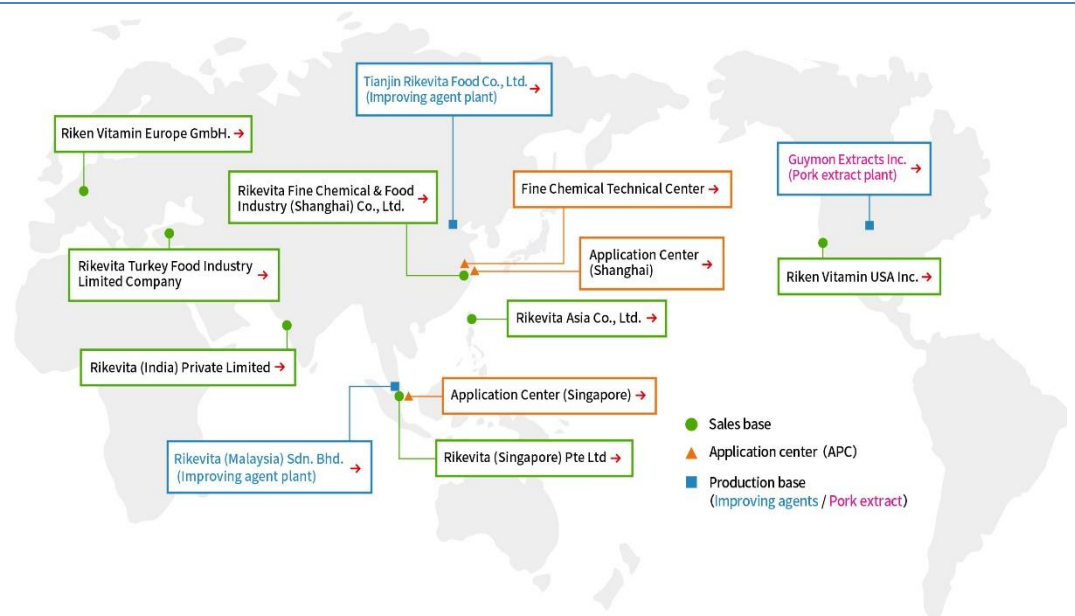
Application R&D is the key differentiating factor between base oleochemicals and downstream derivatives based business models. Application R&D takes care of identifying new applications for the existing products, improving the existing products and coming out with new variant(s) apart from new launches. Also, a lot of emphasis is given on process improvement and efficiency. FINEORG has one fully integrated R&D centre in India. Galaxy has two R&D units (India and USA). All other peers such as Palsgaard (Denmark), Riken Vitamin (multiple locations) and Croda (multiple locations) have similar set up in terms of R&D.

**Exhibit 27: Functions of an integrated application R&D unit**



Source: Fine Organic, Nirmal Bang Institutional Equities

**Exhibit 28: Details of Application R&D centres of Riken Vitamin outside of Japan**



Source: Riken Vitamin, Nirmal Bang Institutional Equities

## Exhibit 29: Location of Croda's existing and upcoming manufacturing set up (incl R&D)



Source: Croda Plc, Nirmal Bang Institutional Equities

## Base Oleochemicals from Malaysia & Indonesia not a threat

### Sourcing edge is not enough; a lot depends on intent

Investors invariably argue on the point that Indonesian and Malaysian Oleochemicals players have an edge over others mainly on account of sourcing advantage. While timely availability of RM and better sourcing practices benefit those companies, we see very few players (For example, Emery Oleochemicals) scaling up and focussing more on the downstream products, similar to FINEORG, Croda etc. We firmly believe that easy access to capital and/or RM sourcing edge are not enough for a plantation/base oleochemicals company to scale to downstream complex products. Application R&D is the key element which is missing in most of the base oleochemicals business models.

Since most players based out of Malaysia and Indonesia have their own plantations, they focus more on volume growth on the overall base by selling the same products. We highlight that the same behaviour has been observed in case of bromine chemistry, wherein global companies present in Jordan are not willing to go for 'low volume, high value products' and would rather prefer to focus mainly on 'the bottom of the pyramid' products where volume requirement is high. We present two examples of companies operating out of Malaysia and/or Indonesia in terms of their financial performance and overall volume.

#### KLK Oleo

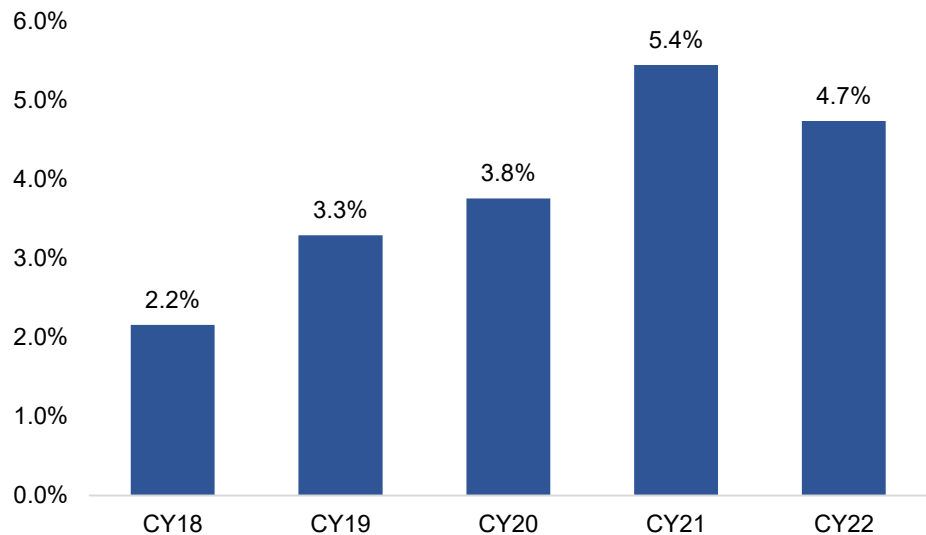
Kuala Lumpur Kepong Berhad (KLK) started as a plantation company in 1906. In order to optimise value across the supply chain, KLK diversified into resource-based manufacturing (oleochemicals, derivatives and specialty chemicals) in the 1990s by vertically integrating its upstream and downstream businesses. KLK OLEO has expanded its manufacturing operations resulting in global oleochemicals presence in China, Indonesia, Switzerland, Germany, the Netherlands and Belgium.

### Exhibit 30: KLK Oleo's segment performance

	2022	2021	2020	2019	2018
	RM'000	RM'000	RM'000	RM'000	RM'000
<b>REVENUE</b>					
Plantation	4,082,366	2,646,618	1,997,467	1,695,557	1,879,825
Manufacturing	22,605,225	16,828,378	13,208,870	13,406,080	16,086,491
Property development	195,199	195,070	154,884	170,359	177,676
Investment holding	95,222	96,088	145,071	117,765	135,059
Others	171,462	149,642	89,664	144,126	104,902
	<b>27,149,474</b>	<b>19,915,796</b>	<b>15,595,956</b>	<b>15,533,887</b>	<b>18,383,953</b>
<b>GROUP PROFIT</b>					
Plantation	2,139,058	1,350,960	632,248	339,079	860,576
Manufacturing	1,070,570	916,448	496,271	441,175	346,693
Property development	70,858	68,800	54,038	47,355	37,838
Investment holding	(48,138)	167,724	(37,008)	8,731	28,740
Others	35,729	26,788	(19,281)	25,783	1,585
Corporate	(48,599)	445,705	59,462	(38,195)	(286,644)
Profit before taxation	3,219,478	2,976,425	1,185,730	823,928	988,788
Tax expense	(781,121)	(524,373)	(328,681)	(173,195)	(328,471)
<b>Profit for the year</b>	<b>2,438,357</b>	<b>2,452,052</b>	<b>857,049</b>	<b>650,733</b>	<b>660,317</b>

Source: KLK Oleo, Nirmal Bang Institutional Equities

**Exhibit 31: Mid-low single digit operating margin for manufacturing segment (oleochemicals)**

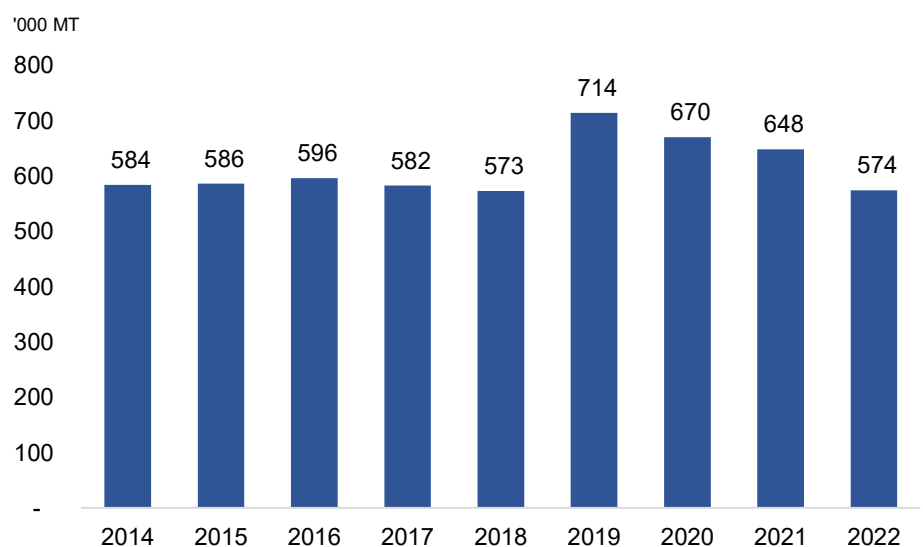


Source: Dow Chemicals PPT, Nirmal Bang Institutional Equities

### IOI Group – Largest producer of Fatty Acids in Malaysia

IOI Group is a leading global integrated & sustainable palm oil group with upstream and downstream operations. The company was incorporated in 1969 and is the largest fatty acids producer in Malaysia. It has total oleochemicals capacity of 890k MTPA. New oleochemicals plant of 110k MTPA was commissioned during 2023. The company has mentioned that growth in Oleochemicals is its fifth and last priority as a part of its 5-year plan over 2020-2024.

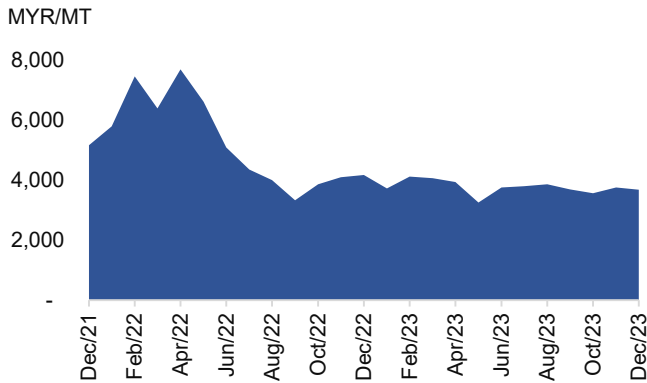
**Exhibit 32: IOI Group oleochemicals volume - growth is missing**



Source: IOI Group, Nirmal Bang Institutional Equities (FY is Jun ending)

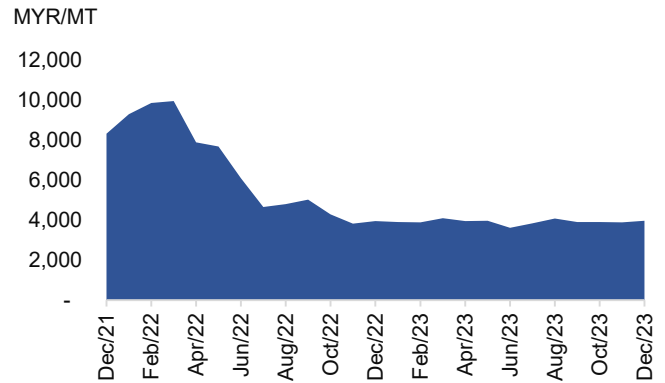
**Key RM Price movements in last 2 years**

**Exhibit 33: Crude Palm Oil (Malaysia) down 52% from peak in last 2 years**



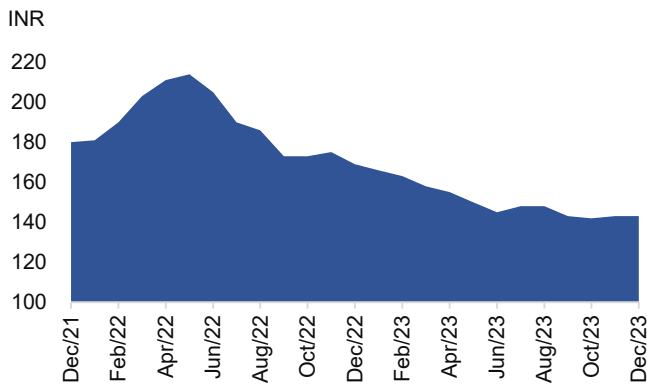
Source: Bloomberg, Nirmal Bang Institutional Equities Research

**Exhibit 34: Crude Palm Kernel Oil (Malaysia) down 60% from peak in last 2 years**



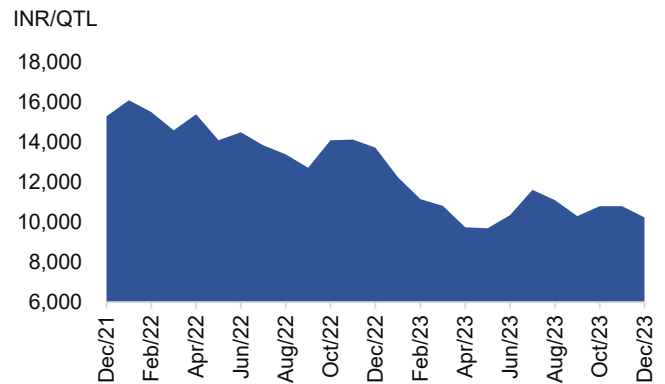
Source: Bloomberg, Nirmal Bang Institutional Equities Research

**Exhibit 35: India WPI Vegetable & Animal Oils and Fats (India) down 33% from peak in last 2 years**



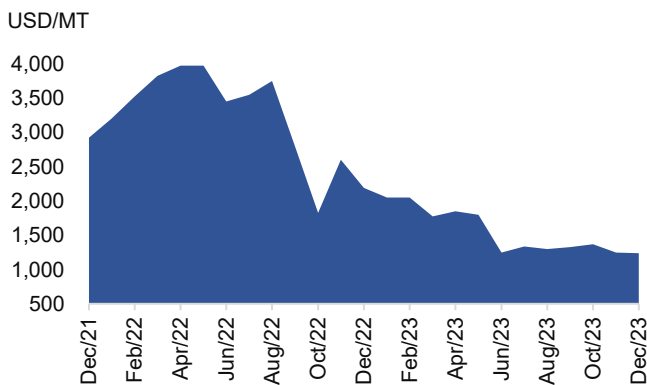
Source: Bloomberg, Nirmal Bang Institutional Equities Research

**Exhibit 36: NNS Mustard Oil (India) down 36% from peak in last 2 years**



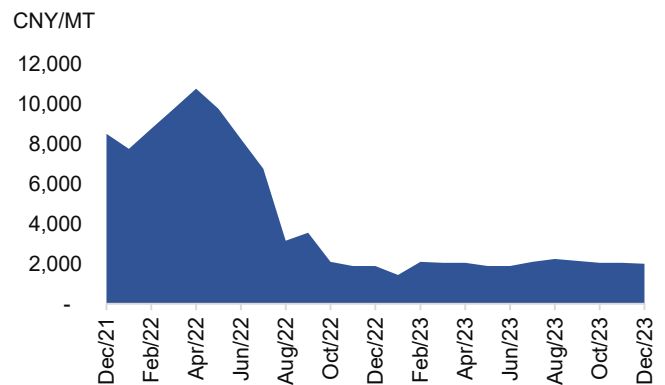
Source: Bloomberg, Nirmal Bang Institutional Equities Research

**Exhibit 37: Fatty Alcohol (SEA) down 69% from peak in last 2 years**



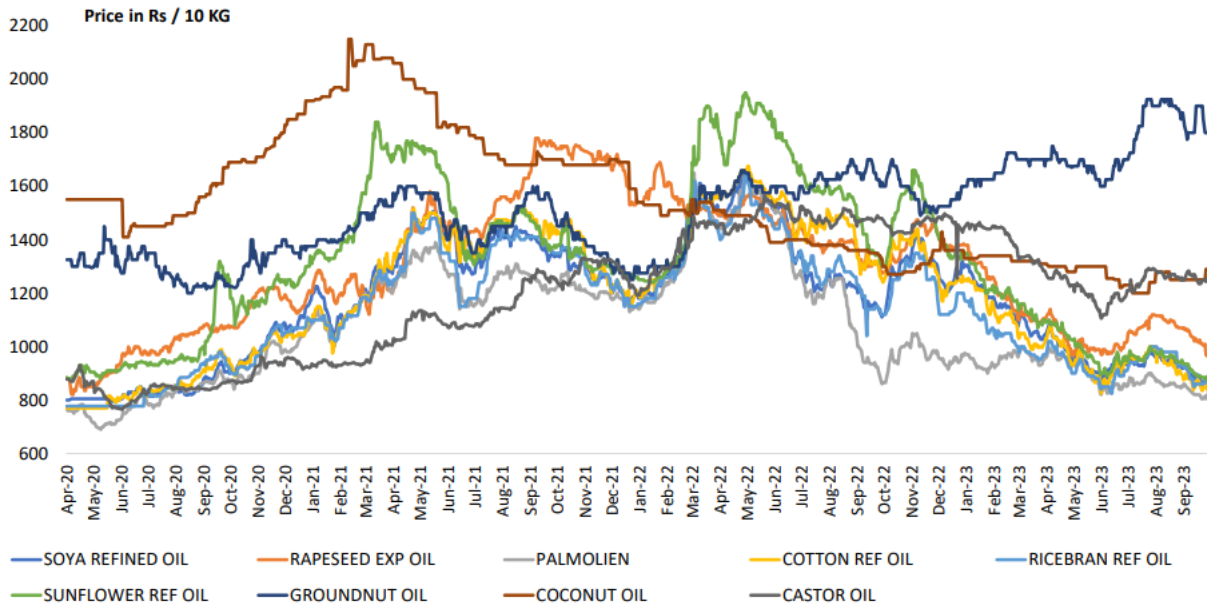
Source: Bloomberg, Nirmal Bang Institutional Equities Research

**Exhibit 38: Glycerine 80% (China) down 81% from peak in last 2 years**



Source: Bloomberg, Nirmal Bang Institutional Equities Research

**Exhibit 39: Key vegetable oils price trend**



Source: Fine Organic, Nirmal Bang Institutional Equities

Financial Summary																					
Company	Net sales (Rsmn)							EBITDA (Rsmn)							PAT (Rsmn)						
	FY20	FY21	FY22	FY23	FY24E	FY25E	FY26E	FY20	FY21	FY22	FY23	FY24E	FY25E	FY26E	FY20	FY21	FY22	FY23	FY24E	FY25E	FY26E
<b>Specialty Chemicals</b>																					
SRF Ltd	72,094	84,000	1,24,337	1,48,703	1,42,691	1,60,851	1,94,532	14,549	21,452	31,759	35,292	30,426	39,486	51,024	6,892	11,983	18,889	21,623	15,826	20,878	27,515
Navin Fluorine	10,616	11,794	14,534	20,774	24,657	31,665	36,888	2,635	3,093	3,548	5,503	5,306	7,548	9,077	1,819	2,468	2,631	3,752	3,205	4,939	5,681
Aarti Industries	41,863	45,061	54,745	66,186	61,744	79,502	98,158	9,773	9,815	11,091	10,890	10,106	14,529	18,715	5,361	5,352	5,749	5,452	3,991	6,583	8,980
Vinati Organics	10,289	9,543	16,155	20,847	19,425	27,061	34,337	4,149	3,525	4,342	5,954	4,876	7,063	8,996	3,338	2,693	3,467	4,580	3,588	4,907	6,242
Clean Science	4,193	5,124	6,849	9,358	7,846	9,874	13,377	1,853	2,590	3,000	4,026	3,190	4,041	5,448	1,397	1,984	2,286	3,035	2,347	3,061	4,127
Neogen Chemicals	3,061	3,364	4,873	6,862	7,599	10,020	12,034	581	644	866	1,116	1,254	1,733	2,142	288	313	446	500	500	782	904
Tatva Chintan	2,632	3,004	4,336	4,236	4,578	7,883	11,984	550	664	1,082	606	961	1,655	2,576	378	523	959	491	453	940	1,659
<b>Specialty Ingredients</b>																					
Fine Organic Industries	10,381	11,332	18,763	30,231	22,039	23,126	26,586	2,405	1,993	3,645	8,311	5,501	5,307	6,233	1,648	1,203	2,596	6,181	3,861	3,889	4,598
Rossari Biotech	6,001	7,093	14,830	16,559	19,246	22,257	26,728	1,047	1,235	1,834	2,230	2,604	3,114	3,855	653	800	977	1,073	1,315	1,590	2,013
Galaxy Surfactants	25,964	27,841	36,857	44,452	42,741	47,634	53,104	3,689	4,488	4,007	5,683	5,353	5,920	7,073	2,319	3,021	2,628	3,810	3,310	3,695	4,571
Camlin Fine Sciences	10,491	11,871	14,121	16,816	17,745	20,056	25,237	1,307	1,819	1,528	2,053	1,633	2,846	3,647	298	510	607	569	365	1,253	1,857
Advanced Enzyme	4,440	5,018	5,294	5,406	6,433	7,532	8,781	2,031	2,316	2,014	1,564	2,134	2,748	3,244	1,293	1,459	1,196	1,086	1,356	1,770	2,152

Financial Summary																					
Company	EBITDA Margin (%)							EPS							Capex (Rsmn)						
	FY20	FY21	FY22	FY23	FY24E	FY25E	FY26E	FY20	FY21	FY22	FY23	FY24E	FY25E	FY26E	FY20	FY21	FY22	FY23	FY24E	FY25E	FY26E
<b>Specialty Chemicals</b>																					
SRF Ltd	20.2	25.5	25.5	23.7	21.3	24.5	26.2	24.0	40.4	63.8	72.9	53.4	70.4	92.8	13,892	12,144	18,321	28,382	30,000	30,000	30,000
Navin Fluorine	24.8	26.2	24.4	26.5	21.5	23.8	24.6	36.8	49.9	53.2	75.7	64.7	99.7	114.7	1,077	987	5,789	7,577	8,000	5,000	5,000
Aarti Industries	23.3	21.8	20.3	16.5	16.4	18.3	19.1	15.4	15.4	15.9	15.0	11.0	18.2	24.8	11,533	13,148	11,654	13,263	12,031	12,232	12,000
Vinati Organics	40.3	36.9	26.9	28.6	25.1	26.1	26.2	32.5	26.2	33.7	44.6	34.9	47.7	60.7	3,101	493	1,620	608	4,153	2,000	2,000
Clean Science	44.2	50.5	43.8	43.0	40.7	40.9	40.7	13.1	18.7	21.5	28.6	22.1	28.8	38.8	503	844	1,297	1,355	2,000	2,000	1,500
Neogen Chemicals	19.0	19.1	17.8	16.3	16.5	17.3	17.8	12.3	13.4	17.9	20.0	19.0	29.6	34.3	265	231	1,701	785	3,342	5,100	5,450
Tatva Chintan	20.9	22.1	25.0	14.3	21.0	21.0	21.5	18.8	26.0	43.3	22.2	19.3	40.2	70.9	482	210	892	2,031	600	800	500
<b>Specialty Ingredients</b>																					
Fine Organic Industries	23.2	17.6	19.4	27.5	25.0	22.9	23.4	53.7	39.2	84.7	201.6	125.9	126.8	150.0	722	463	606	811	800	1,000	3,000
Rossari Biotech	17.5	17.4	12.4	13.5	13.5	14.0	14.4	12.9	15.4	17.7	19.4	23.9	28.8	36.5	760	581	382	329	1,300	1,300	1,000
Galaxy Surfactants	14.2	16.1	10.9	12.8	12.5	12.4	13.3	65.4	85.2	74.1	107.5	93.4	104.2	128.9	1,416	1,075	1,552	1,461	1,453	1,500	1,500
Camlin Fine Sciences	12.5	15.3	10.8	12.2	9.2	14.2	14.5	2.5	4.0	3.9	3.6	2.2	7.5	11.1	1,341	839	2,138	1,443	237	375	784
Advanced Enzyme	45.8	46.2	38.0	28.9	33.2	36.5	36.9	11.6	13.1	10.7	9.7	12.1	15.8	19.2	507	194	281	381	150	250	250

Source: Company, Nirmal Bang Institutional Equities

Valuation Summary																			
Company	CMP	Target Price	Current Rating	Market Cap (US\$m)	P/E (X)			EV/EBITDA (X)			P/BV (X)			RoE (%)			RoCE pre-tax(%)		
					FY24E	FY25E	FY26E	FY24E	FY25E	FY26E	FY24E	FY25E	FY26E	FY24E	FY25E	FY26E	FY24E	FY25E	FY26E
<b>Specialty Chemicals</b>																			
SRF Ltd	2,491	2,600	Acc	8,882	46.7	36.0	26.5	25.7	20.2	15.3	6.6	5.8	5.0	14.7	17.2	20.4	15.3	17.6	21.3
Navin Fluorine international	3,798	4,000	Buy	2,265	58.7	38.1	33.1	37.1	26.1	21.6	7.8	6.8	6.0	13.9	19.0	19.2	12.6	15.8	15.9
Aarti Industries	633	470	Sell	2,760	57.5	34.9	25.6	24.7	17.6	14.1	4.4	4.1	3.7	7.9	12.2	15.3	7.7	10.8	13.8
Vinati Organics	1,734	1,600	Sell	2,144	49.7	36.3	28.6	36.4	25.2	19.8	7.4	6.5	5.5	15.6	19.1	20.9	18.3	23.9	26.7
Clean Science & technology	1,544	1,400	Acc	1,973	69.9	53.6	39.7	50.2	39.4	28.7	13.1	10.5	8.3	20.7	21.8	23.4	24.5	25.0	27.1
Neogen Chemicals	1,488	1,600	Acc	472	78.5	50.2	43.4	30.5	24.5	21.4	5.0	4.6	4.2	8.0	9.6	10.3	8.9	8.9	9.2
Tatva Chintan	1,622	1,400	Acc	456	83.9	40.4	22.9	37.4	21.8	14.0	5.0	4.4	3.7	7.1	11.6	17.7	9.5	15.5	22.3
<b>Specialty Ingredients</b>																			
Fine Organic Industries	4,838	5,000	Buy	1,784	38.4	38.1	32.3	25.0	25.4	21.5	8.0	6.9	5.9	22.8	19.4	19.6	28.7	22.9	22.8
Rossari Biotech	796	820	Acc	529	33.4	27.6	21.8	15.5	12.9	10.2	4.2	3.7	3.2	13.5	14.3	15.6	17.6	18.3	20.3
Galaxy Surfactants	2,661	2,900	Acc	1,135	28.5	25.5	20.6	17.7	15.7	13.0	4.4	3.9	3.4	16.4	16.1	17.4	18.6	17.9	19.8
Camlin Fine Sciences	135	170	Buy	271	61.6	17.9	12.1	13.0	7.4	5.7	2.3	2.0	1.7	4.1	12.0	15.5	5.4	13.2	16.8
Advanced Enzyme	382	350	Acc	514	31.5	24.1	19.8	17.2	13.0	10.7	3.1	2.8	2.4	10.4	12.1	13.0	13.4	15.8	16.5

Source: Bloomberg, Nirmal Bang Institutional Equities

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## Company Section

# Fine Organic Industries (FINEORG)

Chemicals | Company Update

**BUY**
**CMP: Rs4,838 | Target Price (TP): Rs6,000 | Upside: 24%**
**December 27, 2023**

## Best in class

### Key Points

- Despite assuming equal R&D capability, intent and resources to grow for all global and domestic peers in Oleochemicals space, FINEORG emerges as a clear winner on operational parameters.
- We believe that balance sheet strength can play a pivotal role both during testing times like the current year and also while considering the expansion opportunities (organic and/or inorganic).
- While growth is constrained by capacity shortage over the next 2 years, we remain positive on the structural opportunity. Timely commissioning of Maharashtra capacity is the key. Maintain Buy with a revised TP of Rs6,000 after rolling forward valuation to Dec'25E earnings.

**FINEORG is clear winner in Indian Oleochemicals space:** We compared historical performance of leading Oleochemicals companies in India. Despite assuming equal R&D capability, intent and resources to grow for all peers, FINEORG emerges as a clear winner on operational parameters. We believe that balance sheet strength can play a pivotal role both during testing times like the current year and also while considering the expansion opportunities (organic and/or inorganic). MNCs having manufacturing presence in India also have elevated operating cost structure vis-à-vis Indian peers. Base oleochemicals businesses in India have no 'right to win' on account of lack of R&D intent, RM price fluctuations and absence of pricing power. Investors invariably argue on the point that Indonesian and Malaysian Oleochemicals players have a sourcing edge and could be threat for existing players. We believe that easy access to capital and/or sourcing edge are not enough for base oleochemicals companies to scale up the downstream products. Application R&D is missing in base oleochemicals business models.

**Update on expansion:** The allotment letter from Gujarat Government is still awaited and hence FINEORG has decided to set up capacity in Maharashtra SEZ (through a new subsidiary). The allotment letter from Maharashtra Govt. is expected in Dec'23, post which the commissioning of the capacity should take 24 months (including EC). Therefore, post demand recovery, there could be supply constraints till the end of FY26. Any inorganic expansion in the meantime could lead to earnings upgrade over the next two years.

**2QFY24 performance update:** FINEORG's revenue declined by ~41%/~1% YoY/QoQ. Overall volume reduction was mainly on account of weakness in the US and Europe markets. Underlying demand in the domestic market is strong and is expected to partially offset the softness in overseas markets in the next two quarters. Gross margin improvement of 355bps/212bps YoY/QoQ in 2QFY24 was a function of mix change and decline in RM prices, freight normalisation etc.

Est Change	No change
TP Change	Upward
Rating Change	No change

### Company Data and Valuation Summary

Reuters:	FINO.BO
Bloomberg:	FINEORG IN
Mkt Cap (Rsbn/US\$bn):	148.3 / 1.8
52 Wk H / L (Rs):	5,809 / 4,040
ADTV-3M (mn) (Rs/US\$):	176.7 / 2.1
Stock performance (%) 1M/6M/1yr:	14.3 / (0.6) / (14.4)
Nifty 50 performance (%) 1M/6M/1yr:	8.4 / 9.0 / 18.2

Shareholding	4QFY23	1QFY24	2QFY24
Promoters	75.0	75.0	75.0
DII's	12.1	12.2	12.2
FII's	4.8	3.8	3.8
Others	8.1	9.0	9.1
Pro pledge	0.0	0.0	0.0

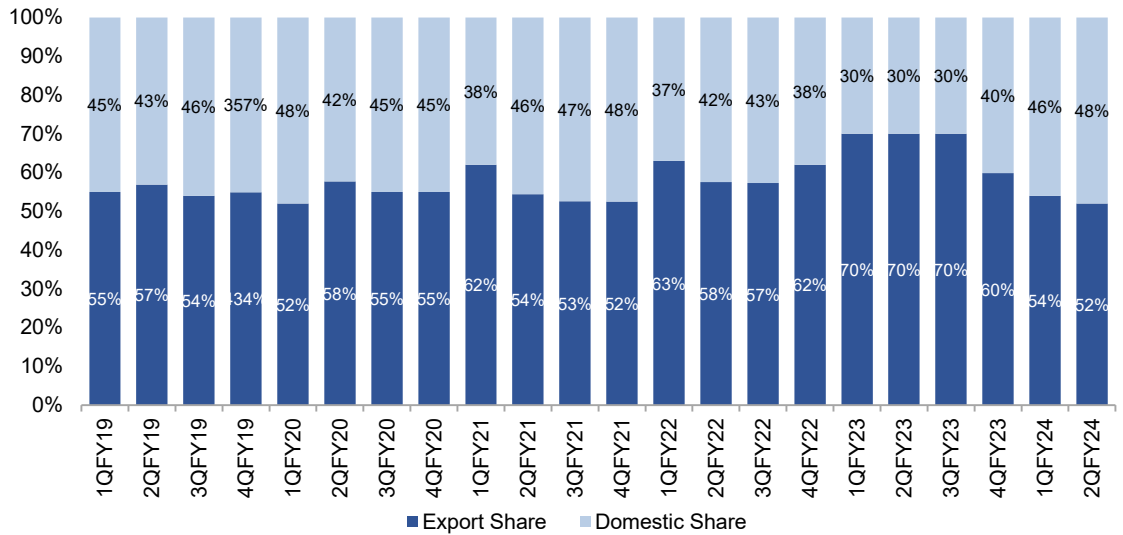
### Financial and Valuation Summary

Particulars (Rsmn)	FY23	FY24E	FY25E	FY26E
Net Sales	30,231	22,039	23,126	26,586
Growth YoY%	61.1	-27.1	4.9	15.0
Gross margin %	41.0	41.9	39.9	39.8
EBITDA	8,311	5,501	5,307	6,233
EBITDA margin %	27.5	25.0	22.9	23.4
Adj PAT	6,181	3,861	3,889	4,598
Growth YoY%	138.1	-37.5	0.7	18.2
Adj. EPS	201.6	125.9	126.8	150.0
RoCE (pre-tax)	60.6	28.7	22.9	22.8
RoCE	44.5	20.4	16.3	16.3
RoE	49.4	22.8	19.4	19.6
P/E	24.0	38.4	38.1	32.3
EV/EBITDA	17.3	25.0	25.4	21.5
P/BV	9.6	8.0	6.9	5.9

Source: Bloomberg, Company, Nirmal Bang Institutional Equities Research

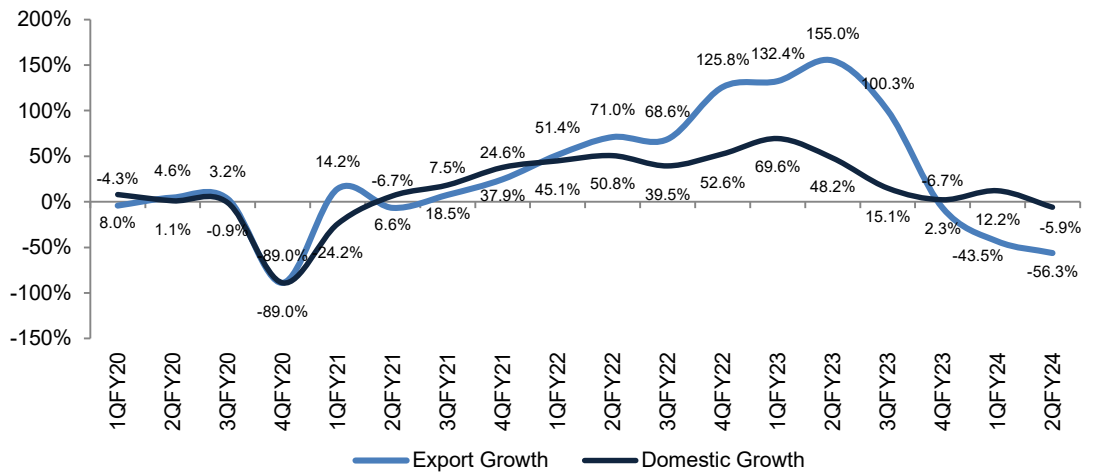
Please refer to the disclaimer towards the end of the document.

**Exhibit 1: Domestic revenue share continues to increase in 2QFY24**



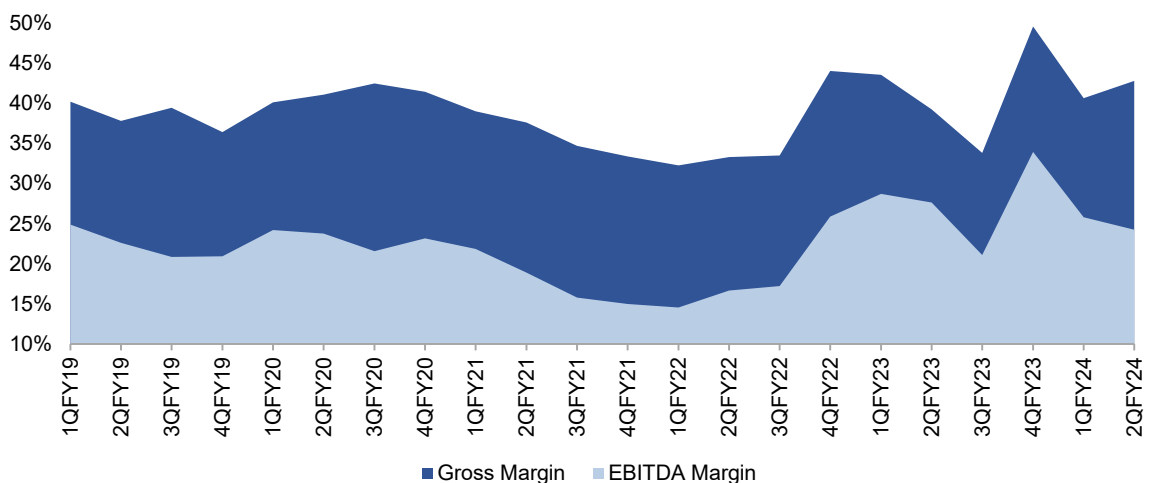
Source: Company, Nirmal Bang Institutional EquitiesResearch

**Exhibit 2: Decline in exports since 4QFY23**



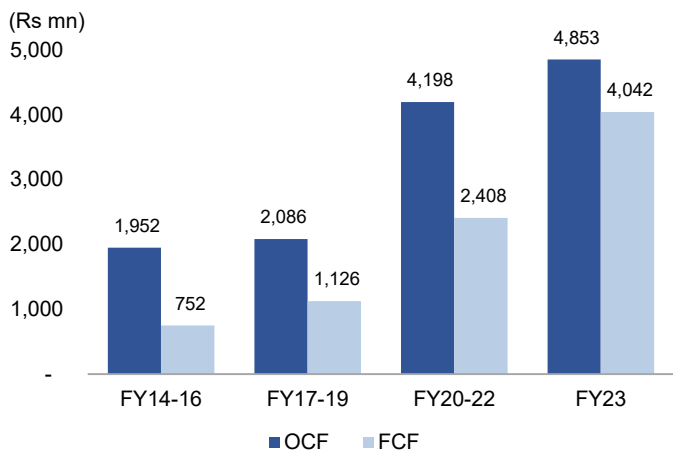
Source: Company, Nirmal Bang Institutional EquitiesResearch

**Exhibit 3: Gross margin and EBITDA margin quarterly trend**



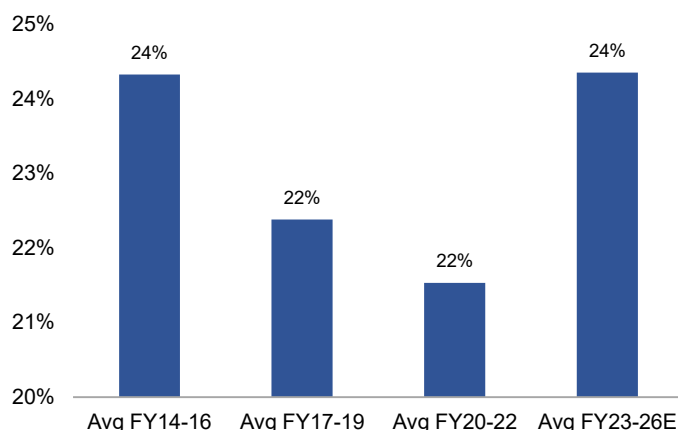
Source: Company, Nirmal Bang Institutional EquitiesResearch

**Exhibit 4: Significant increase in FCF generation in FY23 (nearly equal to cumulative FCF of last 9 years)**



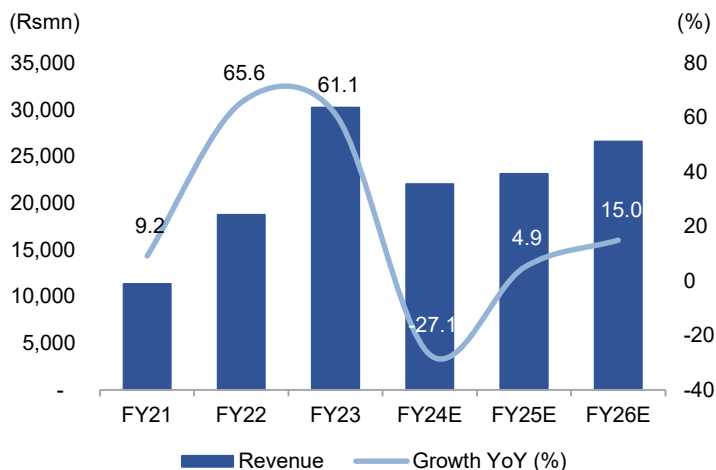
Source: Company, Nirmal Bang Institutional Equities Research

**Exhibit 5: Average ROCE (post-tax)**



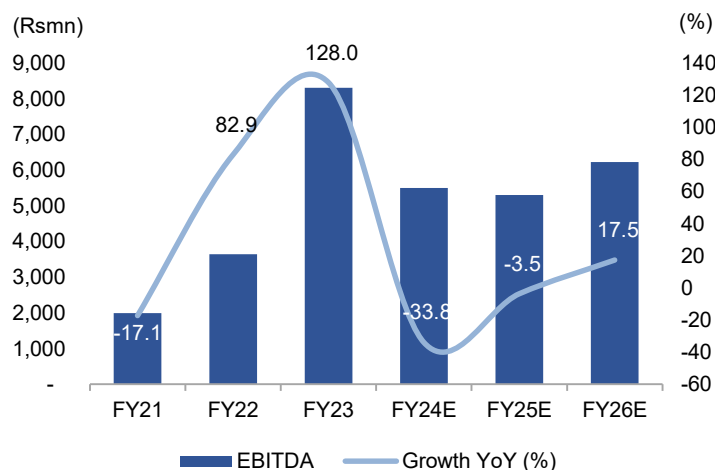
Source: Company, Nirmal Bang Institutional Equities Research

**Exhibit 6: Revenue growth - we are building in ~9% CAGR over FY22-FY26E**



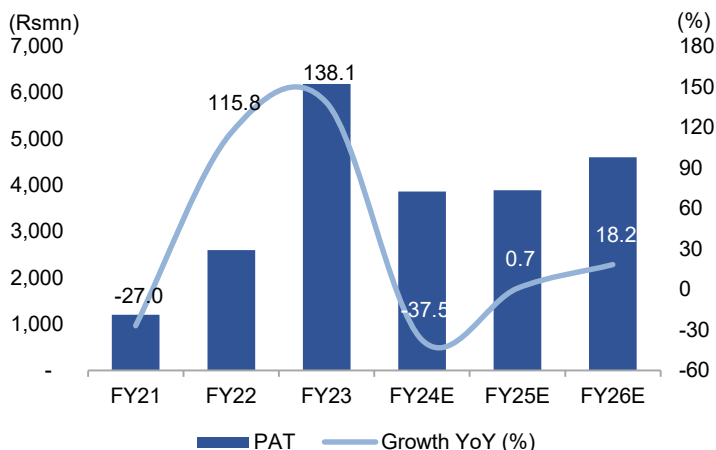
Source: Company, Nirmal Bang Institutional Equities Research

**Exhibit 7: EBITDA growth - we are building in ~14% CAGR over FY22-FY26E**



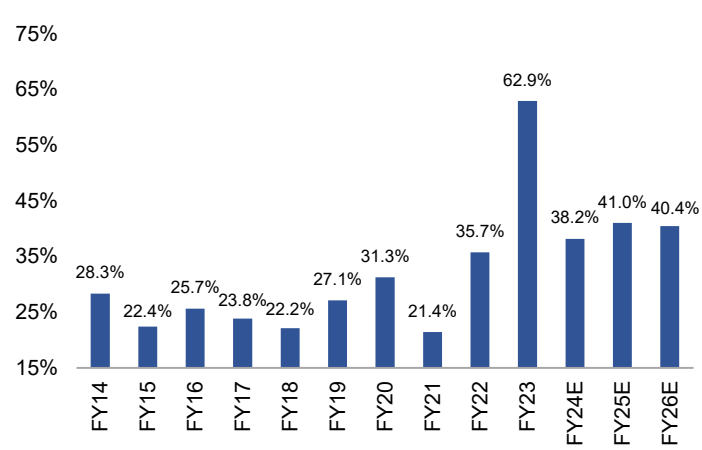
Source: Company, Nirmal Bang Institutional Equities Research

**Exhibit 8: APAT growth we are building in ~15% CAGR over FY22-FY26E**



Source: Company, Nirmal Bang Institutional Equities Research

**Exhibit 9: ROIC trend – expect average ROICs to be in excess of 40% over next 2 years**



Source: Company, Nirmal Bang Institutional Equities Research

**Exhibit 10: Change in earnings estimates**

Consolidated (Rsmn)	Old Estimates			New estimates			Change (%)		
	FY24E	FY25E	FY26E	FY24E	FY25E	FY26E	FY24E	FY25E	FY26E
Revenue	22,039	23,126	26,586	22,039	23,126	26,586	0.0%	0.0%	0.0%
EBITDA	5,501	5,307	6,233	5,501	5,307	6,233	0.0%	0.0%	0.0%
<i>EBITDA margin</i>	<i>25.0%</i>	<i>22.9%</i>	<i>23.4%</i>	<i>25.0%</i>	<i>22.9%</i>	<i>23.4%</i>	-	-	-
APAT	3,861	3,889	4,598	3,861	3,889	4,598	0.0%	0.0%	0.0%

Source: Nirmal Bang Institutional Equities Research

## Financials

### Exhibit 11: Income statement

Y/E March (Rsmn)	FY22	FY23	FY24E	FY25E	FY26E
Net Sales	<b>18,763</b>	<b>30,231</b>	<b>22,039</b>	<b>23,126</b>	<b>26,586</b>
Growth YoY%	65.6	61.1	-27.1	4.9	15.0
COGS	11,879	17,842	12,809	13,910	15,995
Gross margin %	<b>36.7</b>	<b>41.0</b>	<b>41.9</b>	<b>39.9</b>	<b>39.8</b>
Staff costs	893	1,053	1,085	1,134	1,168
Other expenses	2,346	3,025	2,645	2,775	3,190
EBITDA	<b>3,645</b>	<b>8,311</b>	<b>5,501</b>	<b>5,307</b>	<b>6,233</b>
Growth YoY%	82.9	128.0	-33.8	-3.5	17.5
EBITDA margin %	<b>19.4</b>	<b>27.5</b>	<b>25.0</b>	<b>22.9</b>	<b>23.4</b>
Depreciation	399	479	558	643	833
EBIT	3,246	7,832	4,944	4,663	5,400
Interest	51	46	49	49	49
Other income	331	642	548	868	1,082
PBT (bei)	3,515	8,410	5,442	5,482	6,433
PBT	3,515	8,410	5,442	5,482	6,433
ETR	26.1	26.5	29.1	29.1	28.5
PAT	2,597	6,181	3,861	3,889	4,598
Adj PAT	<b>2,596</b>	<b>6,181</b>	<b>3,861</b>	<b>3,889</b>	<b>4,598</b>
Growth YoY%	<b>115.8</b>	<b>138.1</b>	<b>-37.5</b>	<b>0.7</b>	<b>18.2</b>

Source: Company, Nirmal Bang Institutional Equities Research

### Exhibit 12: Cash flow

Y/E March (Rsmn)	FY22	FY23	FY24E	FY25E	FY26E
PBT	<b>3,515</b>	<b>8,410</b>	<b>5,442</b>	<b>5,482</b>	<b>6,433</b>
Depreciation	399	479	558	643	833
Interest	37	46	49	49	49
Other adjustments	-294	-573	-548	-868	-1,082
Change in Working capital	-2,166	-1,227	2,778	71	-506
Tax paid	-825	-2,281	-1,582	-1,593	-1,835
Operating cash flow	<b>666</b>	<b>4,853</b>	<b>6,698</b>	<b>3,784</b>	<b>3,892</b>
Capex	-606	-811	-800	-1,000	-3,000
Free cash flow	<b>60</b>	<b>4,042</b>	<b>5,898</b>	<b>2,784</b>	<b>892</b>
Other investing activities	43	-36	548	868	1,082
Investing cash flow	<b>-563</b>	<b>-847</b>	<b>-252</b>	<b>-132</b>	<b>-1,918</b>
Issuance of share capital	-	-	-	-	-
Movement of Debt	-306	-357	-	-	-
Dividend paid (incl DDT)	-337	-276	-772	-778	-920
Other financing activities	-38	-54	32	-49	-49
Financing cash flow	<b>-682</b>	<b>-687</b>	<b>-740</b>	<b>-827</b>	<b>-969</b>
Net change in cash flow	<b>-579</b>	<b>3,319</b>	<b>5,705</b>	<b>2,825</b>	<b>1,005</b>
Opening C&CE	2,590	2,257	5,148	10,854	13,678
Closing C&CE	2,257	5,148	10,854	13,678	14,684

Source: Company, Nirmal Bang Institutional Equities Research

### Exhibit 13: Balance sheet

Y/E March (Rsmn)	FY22	FY23	FY24E	FY25E	FY26E
Share Capital	153	153	153	153	153
Reserves & Surplus	9,439	15,259	18,348	21,459	25,137
Net worth	<b>9,592</b>	<b>15,412</b>	<b>18,501</b>	<b>21,612</b>	<b>25,290</b>
MI	-	-	-	-	-
Long term debt	251	-	-	-	-
Short term debt	334	272	272	272	272
Total debt	<b>585</b>	<b>272</b>	<b>272</b>	<b>272</b>	<b>272</b>
Other non-current liabilities	9	8	8	8	8
Total Equity & Liabilities	<b>10,186</b>	<b>15,693</b>	<b>18,781</b>	<b>21,892</b>	<b>25,571</b>
Gross block	5,159	5,469	6,269	7,269	10,269
Accumulated depreciation	2,866	3,329	3,886	4,529	5,362
Net Block	<b>2,293</b>	<b>2,140</b>	<b>2,383</b>	<b>2,740</b>	<b>4,907</b>
CWIP	141	404	404	404	404
Intangible and others	-	-	-	-	-
Other non-current assets	744	935	935	935	935
Investments	306	388	388	388	388
Trade receivables	3,014	3,506	3,332	3,181	3,658
Inventories	2,356	4,450	1,406	1,527	1,756
Cash & Cash equivalents	2,257	5,148	10,772	13,596	14,602
Other current assets	1,253	1,094	1,094	1,094	1,094
Total current assets	<b>8,879</b>	<b>14,198</b>	<b>16,604</b>	<b>19,398</b>	<b>21,110</b>
Trade payables	1,536	1,758	1,454	1,527	1,756
Other current liabilities	642	615	479	447	418
Total current liabilities	<b>2,178</b>	<b>2,373</b>	<b>1,933</b>	<b>1,973</b>	<b>2,173</b>
Total Assets	<b>10,186</b>	<b>15,693</b>	<b>18,781</b>	<b>21,892</b>	<b>25,571</b>

Source: Company, Nirmal Bang Institutional Equities Research

### Exhibit 14: Key ratios

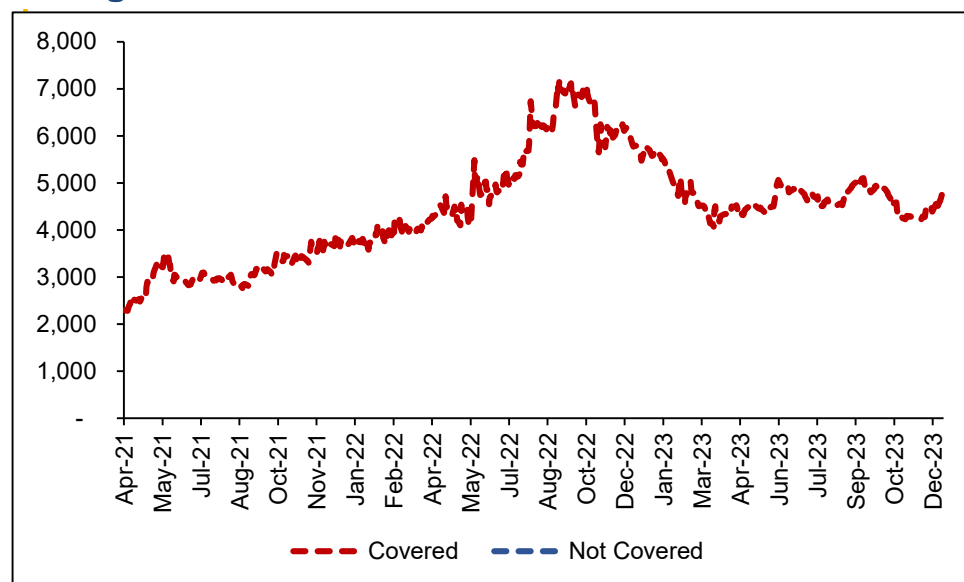
Y/E March	FY22	FY23	FY24E	FY25E	FY26E
<b>Per share (Rs)</b>					
Adj EPS	84.7	201.6	125.9	126.8	150.0
Book value	312.9	502.7	603.4	704.9	824.9
DPS	11.0	9.0	25.2	25.4	30.0
<b>Valuation (x)</b>					
P/Sales	7.9	4.9	6.7	6.4	5.6
EV/sales	7.8	4.7	6.3	5.8	5.0
EV/EBITDA	40.2	17.3	25.0	25.4	21.5
P/E	57.1	24.0	38.4	38.1	32.3
P/BV	15.5	9.6	8.0	6.9	5.9
<b>Return ratios (%)</b>					
RoCE	26.1	44.5	20.4	16.3	16.3
RoCE (pre-tax)	35.3	60.6	28.7	22.9	22.8
RoE	30.7	49.4	22.8	19.4	19.6
<b>Profitability ratios (%)</b>					
Gross margin	36.7	41.0	41.9	39.9	39.8
EBITDA margin	19.4	27.5	25.0	22.9	23.4
PAT margin	13.6	20.0	17.1	16.2	16.6
<b>Liquidity ratios (%)</b>					
Current ratio	3.5	5.4	7.5	8.6	8.6
Quick ratio	2.6	3.7	6.9	8.0	7.9
<b>Solvency ratio (%)</b>					
Debt to Equity ratio	0.1	0.0	0.0	0.0	0.0
Net Debt to Equity Ratio	-0.2	-0.3	-0.6	-0.6	-0.6
<b>Turnover ratios</b>					
Fixed asset turnover ratio (x)	8.8	13.6	9.7	9.0	7.0
Debtor days	45	39	57	51	47
Inventory days	35	41	48	23	23
Creditor days	24	20	27	24	23
Net Working capital days	56	61	79	51	47

Source: Company, Nirmal Bang Institutional Equities Research

## Rating track

Date	Rating	Market price (Rs)	Target price (Rs)
1 April 2021	Buy	2,290	2,700
30 May 2021	Buy	3,003	3,500
19 August 2021	Buy	2,837	3,500
23 September 2021	Buy	3,161	3,700
18 November 2021	Buy	3,567	4,100
15 February 2022	Buy	3,734	4,300
31 May 2022	Accumulate	4,968	4,800
13 August 2022	Accumulate	6,204	6,000
19 September 2022	Accumulate	7,000	6,800
13 November 2022	Accumulate	6,200	6,800
13 February 2023	Buy	4,613	5,500
25 May 2023	Buy	4,462	5,300
27 July 2023	Buy	4,460	5,300
6 November 2023	Buy	4,242	5,000
27 December 2023	Buy	4,838	6,000

## Rating Chart



# Galaxy Surfactants (GALSURF)

Chemicals | Company Update

**BUY**
**CMP: Rs2,661 | Target Price (TP): Rs3,100 | Upside: 16%**
**December 27, 2023**

## Developed markets' recovery expected in FY25

### Key Points

- GALSURF has consistently delivered double-digit volume growth in India and continues to gain market share in the HPC space.
- The management expects demand revival early next year in the Developed Market; AMET is already showing some signs of recovery.
- Upgrade to Buy with a revised TP of Rs3,100 post roll-forward of valuation to Dec'25E earnings. Implied target PE 25x is backed by DCF.

**GALSURF has consistently outperformed peers in HPC:** We compared historical performance of leading Oleochemicals companies in India. Despite assuming equal R&D capability, intent and resources to grow for all peers, GALSURF's earnings CAGR is consistently ahead of the peers in the HPC space. We believe that balance sheet strength can play a pivotal role both during testing times like the current year and also while considering the expansion opportunities (organic and/or inorganic). GALSURF continues to gain market share in HPC space in India. MNCs having manufacturing presence in India also have elevated operating cost structure vis-à-vis Indian peers.

### India continues to be an outlier; other markets yet to be back on track:

The Indian market continued its double-digit volume growth momentum in 2QFY24. While Speciality volume in India is on a lower side, it is continuously gaining traction. After multiple quarters of underperformance, AMET has shown some promise in 2QFY24 and the management believes that the worst is over. Currently, it does not see the ongoing ME situation impacting business or supply chain in any way. RoW markets are witnessing down-trading by consumers. The management expects de-stocking in the US to get over by the end of FY24 and has indicated EBITDA/kg to be ~Rs19-20/kg for FY24 (Rs22 envisaged earlier) as DM recovery is likely to get pushed further to FY25.

**Update on Fatty Alcohol prices:** Fatty Alcohol prices declined by ~5% YoY but rose by ~10% QoQ. Fatty Alcohol prices in 2QFY24 stood at US\$1,415/MT vs average price of US\$1,490/MT in 2QFY23. The same stood at US\$1,240/MT in 1QFY24. This forms ~60% of the overall RM basket.

**2QFY24 performance update:** Overall volume grew by 9.8% YoY in 2QFY24. Consistent volume-led growth in India and early signs of recovery in the AMET region led to an overall improvement. EBITDA/kg for 2QFY24 stood at Rs19.20. Consolidated EBITDA declined by ~5% YoY mainly on account of pressure in Specialty Care volume. Demand for Premium products such as Mild Surfactants and Preservatives has been weak for the last four quarters, as per the management. It sees early signs of recovery in AMET. Sequentially, AMET volume grew in double digits in 2QFY24.

Est Change	No change
TP Change	Upward
Rating Change	Upward

### Company Data and Valuation Summary

Reuters:	GALX.BO
Bloomberg:	GALSURF IN Equity
Mkt Cap (Rsbn/US\$bn):	104.7 / 1.1
52 Wk H / L (Rs):	3,010 / 2,222
ADTV-3M (mn) (Rs/US\$):	68.2 / 0.9
Stock performance (%) 1M/6M/1yr:	(5.5) / (1.6) / 7.3
Nifty 50 performance (%) 1M/6M/1yr:	(0.4) / (0.0) / 5.9

Shareholding	4QFY23	1QFY24	2QFY24
Promoters	70.9	70.9	70.9
DII's	12.7	12.7	12.6
FII's	2.9	3.0	3.1
Others	13.5	13.4	13.4
Pro pledge	0.0	0.0	0.0

### Financial and Valuation Summary

Particulars (Rsmn)	FY23	FY24E	FY25E	FY26E
Net Sales	44,452	42,741	47,634	53,104
Growth YoY%	20.6	-3.8	11.4	11.5
Gross margin %	30.3	32.6	34.4	35.3
EBITDA	5,683	5,353	5,920	7,073
EBITDA margin %	12.8	12.5	12.4	13.3
Adj PAT	3,810	3,310	3,695	4,571
Growth YoY%	45.0	-13.1	11.6	23.7
Adj EPS	107.5	93.4	104.2	128.9
RoCE (pre-tax)	23.7	18.6	17.9	19.8
RoCE	19.1	14.8	14.3	15.8
RoE	22.0	16.4	16.1	17.4
P/E	24.8	28.5	25.5	20.6
EV/EBITDA	16.6	17.7	15.7	13.0
P/BV	5.0	4.4	3.9	3.4

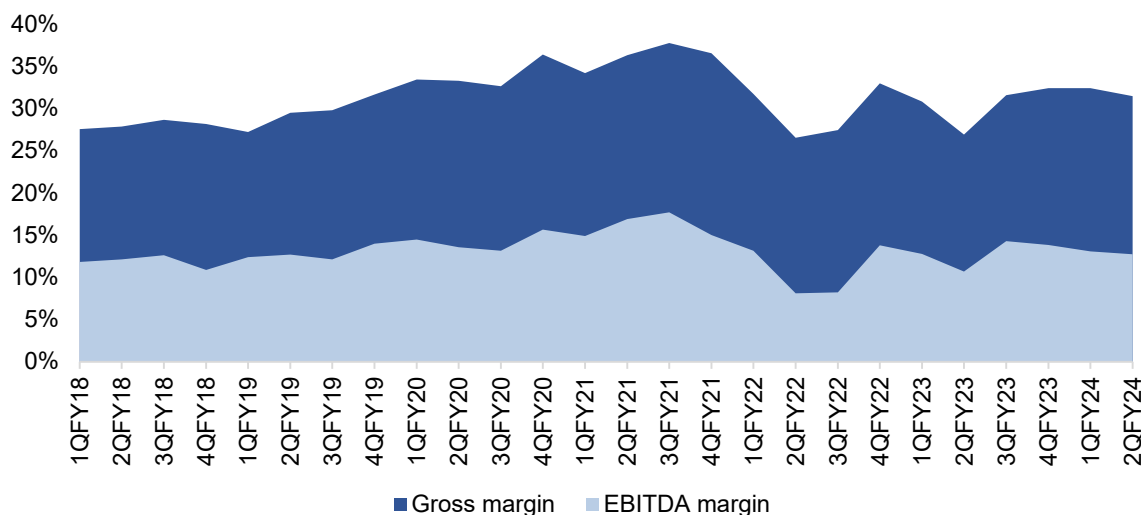
Source: Bloomberg, Company, Nirmal Bang Institutional Equities Research

Please refer to the disclaimer towards the end of the document.

**Abhishek Navalgund**  
 Research Analyst

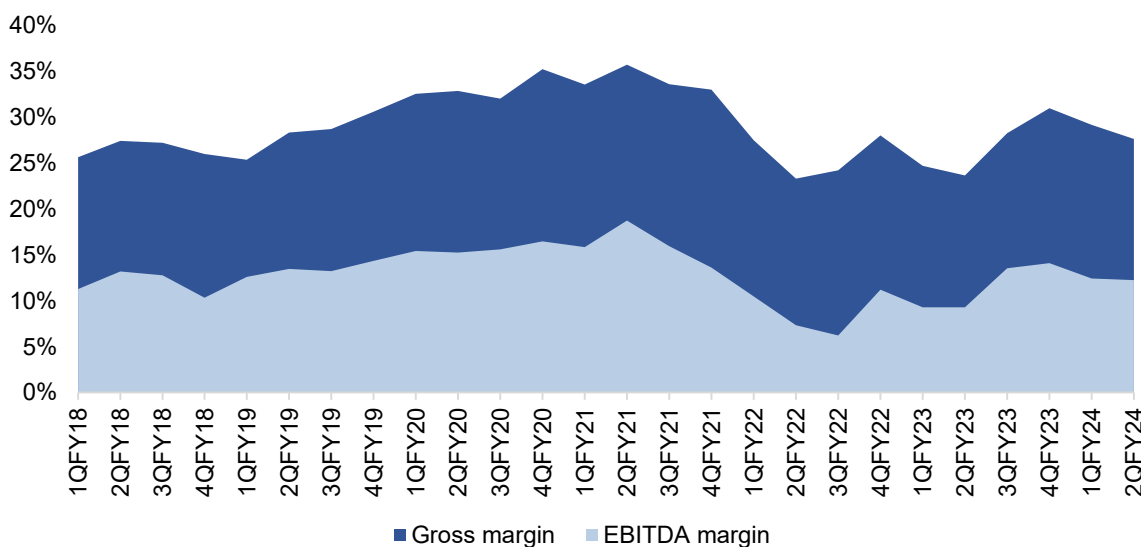
abhishek.navgund@nirmalbang.com  
 +91-22-6273-8089

**Exhibit 1: Consolidated gross margin & EBITDA margin quarterly trend**



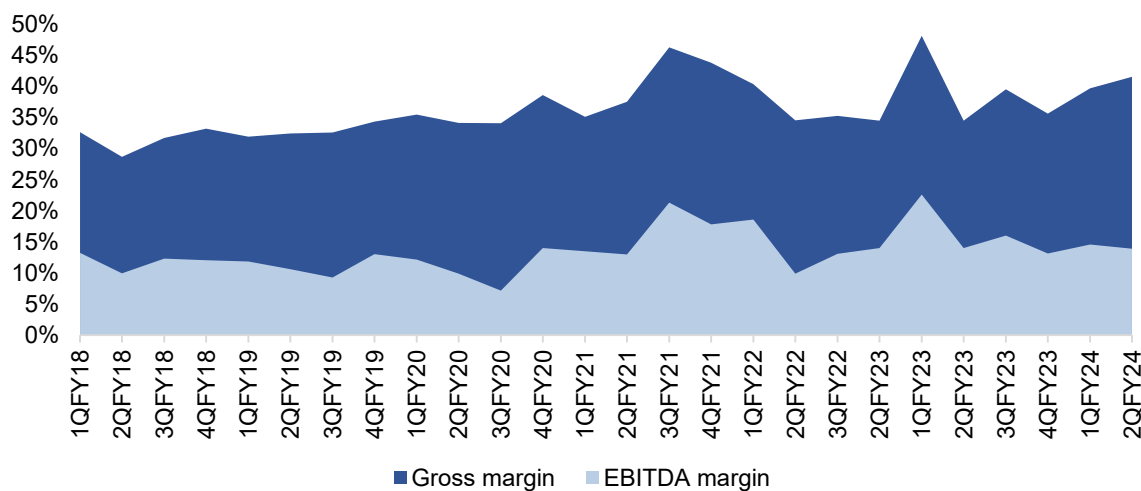
Source: Company, Nirmal Bang Institutional EquitiesResearch

**Exhibit 2: Standalone gross margin & EBITDA margin quarterly trend**



Source: Company, Nirmal Bang Institutional EquitiesResearch

**Exhibit 3: Subsidiaries gross margin & EBITDA margin quarterly trend**



Source: Company, Nirmal Bang Institutional EquitiesResearch

**Exhibit 4: Annual Segment Information**

Particulars	FY18	FY19	FY20	FY21	FY22	FY23	FY24E	FY25E	FY26E
<b>Volume Mix</b>									
Performance surfactants	66%	63%	64%	66%	64%	66%	67%	67%	66%
Speciality Care	34%	37%	36%	34%	36%	34%	33%	33%	34%
<b>Revenue Mix</b>									
Performance surfactants	66%	63%	61%	64%	61%	65%	66%	65%	64%
Speciality Care	34%	37%	39%	36%	39%	35%	34%	35%	36%
<b>Volume sales ('000/MT)</b>									
Performance surfactants	130,596	135,337	143,521	156,153	149,195	153,126	165,376	181,914	200,105
YoY (%)	13%	4%	6%	9%	-4%	3%	8%	10%	10%
Speciality Care	66,833	79,374	80,716	80,011	85,023	77,659	80,765	90,457	101,312
YoY (%)	8%	19%	2%	-1%	6%	-9%	4%	12%	12%
<b>Overall sales volume</b>	<b>197,429</b>	<b>214,711</b>	<b>224,237</b>	<b>236,164</b>	<b>234,218</b>	<b>230,785</b>	<b>246,141</b>	<b>272,371</b>	<b>301,417</b>
YoY (%)	11%	9%	4%	5%	-1%	-1%	7%	11%	11%
<b>Segment Revenue (Rsmn)</b>									
Performance surfactants	16,130	17,410	15,872	17,780	22,560	28,960	28,149	30,964	34,060
YoY (%)	14%	8%	-9%	12%	27%	28%	-3%	10%	10%
Speciality Care	8,310	10,270	10,148	10,170	14,420	15,590	14,592	16,670	19,044
YoY (%)	9%	24%	-1%	0%	42%	8%	-6%	14%	14%
<b>Total</b>	<b>24,440</b>	<b>27,680</b>	<b>26,020</b>	<b>27,950</b>	<b>36,980</b>	<b>44,550</b>	<b>42,741</b>	<b>47,634</b>	<b>53,104</b>
YoY (%)	13%	13%	-6%	7%	32%	20%	-4%	11%	11%
<b>Realisation/kg</b>									
Performance surfactants	124	129	111	114	151	189	170	170	170
YoY (%)	1%	4%	-14%	3%	33%	25%	-10%	0%	0%
Speciality Care	124	129	126	127	170	201	181	184	188
YoY (%)	2%	4%	-3%	1%	33%	18%	-10%	2%	2%
<b>Total</b>	<b>124</b>	<b>129</b>	<b>116</b>	<b>118</b>	<b>158</b>	<b>193</b>	<b>174</b>	<b>175</b>	<b>176</b>
YoY (%)	1%	4%	-10%	2%	33%	22%	-10%	1%	1%
<b>Consolidated EBITDA/kg</b>	<b>14.6</b>	<b>16.5</b>	<b>16.5</b>	<b>19.0</b>	<b>17.1</b>	<b>24.6</b>	<b>21.7</b>	<b>21.7</b>	<b>23.5</b>
YoY (%)	-5%	13%	0%	16%	-10%	44%	-12%	0%	8%

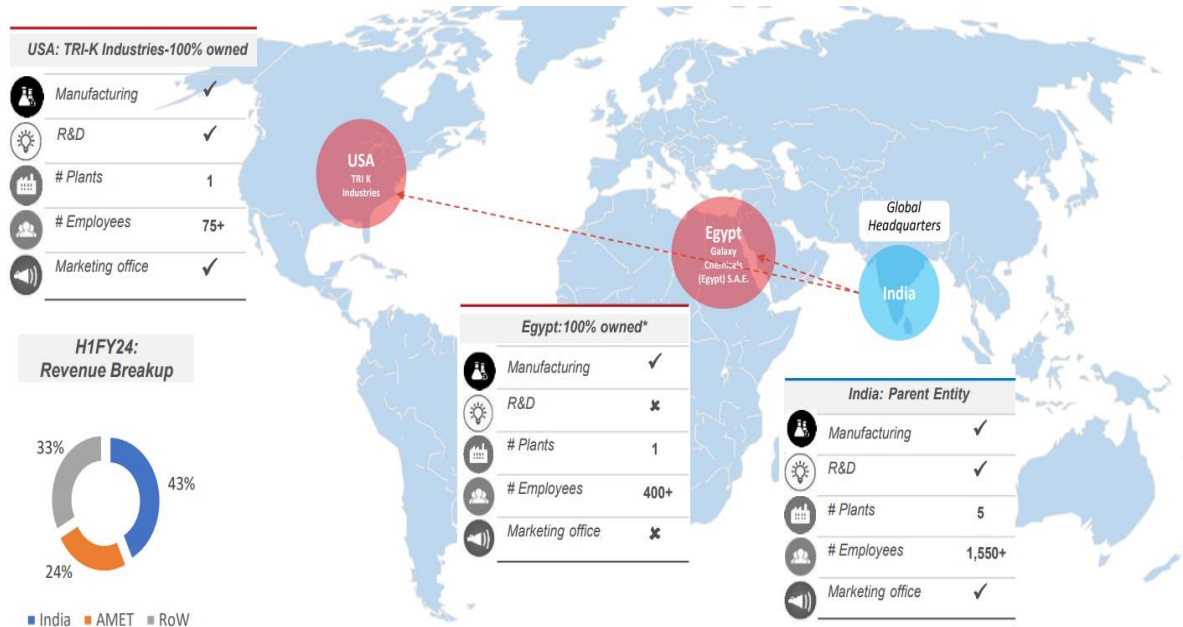
Source: Company, Nirmal Bang Institutional Equities Research

## Exhibit 5: Raw Material Pricing Trend

Commodity	Unit	Avg 1Q24	Avg 2Q24	QoQ%	Avg 2Q23	YoY%	Oct '23	2QFY24 vs Oct' 23
Crude Palm Oil Future	MYR/MT	3,648	3,780	4%	3,895	-3%	3,564	-6%
China Ethylene Oxide Price	CNY/Ton	6,508	6,326	-3%	6,913	-8%	6,633	5%
Phenol CFR SEA Physical Spot	USD/MT	938	1,015	8%	1,327	-23%	1,045	3%
Benzene (Aromatics) fob India Spot Price	USD/MT	837	925	11%	1,033	-10%	925	0%

Source: Company, Bloomberg, Nirmal Bang Institutional EquitiesResearch

## Exhibit 6: Global manufacturing footprint of GALSURF



Source: Company, Nirmal Bang Institutional EquitiesResearch

## Exhibit 7: Change in earnings estimates

Consolidated (Rsmn)	Old Estimates			New estimates			Change (%)		
	FY24E	FY25E	FY26E	FY24E	FY25E	FY26E	FY24E	FY25E	FY26E
Revenue	42,741	47,634	53,104	42,741	47,634	53,104	0%	0%	0%
EBITDA	5,353	5,920	7,073	5,353	5,920	7,073	0%	0%	0%
EBITDA %	12.5%	12.4%	0	12.5%	12.4%	13.3%	-	-	-
APAT	3,310	3,695	4,571	3,310	3,695	4,571	0%	0%	0%

Source: Nirmal Bang Institutional Equities Research

## Financials

### Exhibit 8: Income statement

Y/E March (Rsmn)	FY22	FY23	FY24E	FY25E	FY26E
<b>Net Sales</b>	<b>36,857</b>	<b>44,452</b>	<b>42,741</b>	<b>47,634</b>	<b>53,104</b>
Growth YoY%	32.4	20.6	-3.8	11.4	11.5
COGS	25,885	31,001	28,803	31,266	34,337
<b>Gross margin %</b>	<b>29.8</b>	<b>30.3</b>	<b>32.6</b>	<b>34.4</b>	<b>35.3</b>
Staff costs	2,118	2,481	2,863	3,127	3,843
Other expenses	4,847	5,288	5,722	7,321	7,851
<b>EBITDA</b>	<b>4,007</b>	<b>5,683</b>	<b>5,353</b>	<b>5,920</b>	<b>7,073</b>
Growth YoY%	-10.7	41.8	-5.8	10.6	19.5
<b>EBITDA margin %</b>	<b>10.9</b>	<b>12.8</b>	<b>12.5</b>	<b>12.4</b>	<b>13.3</b>
Depreciation	711	835	1,027	1,193	1,285
EBIT	3,297	4,848	4,326	4,727	5,788
Interest	129	217	260	293	253
Other income	125	99	100	200	200
PBT (bei)	3,293	4,730	4,166	4,635	5,735
PBT	3,293	4,730	4,166	4,635	5,735
ETR	20.2	19.4	20.6	20.3	20.3
PAT	2,628	3,810	3,310	3,695	4,571
<b>Adj PAT</b>	<b>2,628</b>	<b>3,810</b>	<b>3,310</b>	<b>3,695</b>	<b>4,571</b>
<b>Growth YoY%</b>	<b>-13.0</b>	<b>45.0</b>	<b>-13.1</b>	<b>11.6</b>	<b>23.7</b>

Source: Company, Nirmal Bang Institutional Equities Research

### Exhibit 10: Balance sheet

Y/E March (Rsmn)	FY22	FY23	FY24E	FY25E	FY26E
Share capital	355	355	355	355	355
Reserves	15,389	18,471	21,119	24,075	27,731
<b>Net worth</b>	<b>15,744</b>	<b>18,826</b>	<b>21,473</b>	<b>24,429</b>	<b>28,086</b>
Long term debt	796	891	1,673	1,550	770
Short term debt	2,864	1,827	1,827	1,827	1,827
<b>Total debt</b>	<b>3,660</b>	<b>2,718</b>	<b>3,501</b>	<b>3,377</b>	<b>2,597</b>
Other non-current liabilities	812	829	829	829	829
<b>Total Equity &amp; Liabilities</b>	<b>20,215</b>	<b>22,372</b>	<b>25,802</b>	<b>28,635</b>	<b>31,512</b>
Gross block	14,081	16,640	18,640	20,140	21,640
Accumulated depreciation	6,477	7,405	8,432	9,625	10,911
<b>Net Block</b>	<b>7,604</b>	<b>9,235</b>	<b>10,208</b>	<b>10,515</b>	<b>10,729</b>
CWIP	2,055	1,392	845	845	845
Intangible and others	-	-	-	-	-
Other non-current assets	645	698	767	388	312
Investments	5	-	-	-	-
Trade receivables	6,380	6,148	5,693	6,342	7,073
Inventories	7,118	6,458	7,896	8,815	9,816
C&CE and others	638	2,319	3,059	4,216	4,430
Other current assets	1,556	1,089	1,634	2,451	3,676
<b>Total current assets</b>	<b>15,697</b>	<b>16,019</b>	<b>18,289</b>	<b>21,831</b>	<b>25,003</b>
Trade payables	5,189	4,302	3,669	4,078	4,555
Other current liabilities	525	609	578	810	769
<b>Total current liabilities</b>	<b>5,790</b>	<b>4,972</b>	<b>4,306</b>	<b>4,943</b>	<b>5,377</b>
<b>Total Assets</b>	<b>20,215</b>	<b>22,372</b>	<b>25,802</b>	<b>28,635</b>	<b>31,512</b>

Source: Company, Nirmal Bang Institutional Equities Research

### Exhibit 9: Cash flow

Y/E March (Rsmn)	FY22	FY23	FY24E	FY25E	FY26E
<b>PBT</b>	<b>3,293</b>	<b>4,730</b>	<b>4,166</b>	<b>4,635</b>	<b>5,735</b>
Depreciation	711	835	1,027	1,193	1,285
Interest	129	217	260	293	253
Other adjustments	-39	-3	-100	-200	-200
Change in Working capital	-3,450	903	-2,117	-1,631	-2,348
Tax paid	-594	-953	-857	-940	-1,164
<b>Operating cash flow</b>	<b>49</b>	<b>5,730</b>	<b>2,380</b>	<b>3,350</b>	<b>3,562</b>
Capex	-1,552	-1,461	-1,453	-1,500	-1,500
<b>Free cash flow</b>	<b>-1,502</b>	<b>4,269</b>	<b>927</b>	<b>1,850</b>	<b>2,062</b>
Other investing activities	711	-25	188	580	276
<b>Investing cash flow</b>	<b>-841</b>	<b>-1,486</b>	<b>-1,265</b>	<b>-920</b>	<b>-1,224</b>
Issuance of share capital	-	-	-	-	-
Movement of Debt	941	-1,039	783	-123	-780
Dividend paid (incl DDT)	-142	-1,275	-662	-739	-914
Other financing activities	-207	-328	-260	-293	-253
<b>Financing cash flow</b>	<b>592</b>	<b>-2,643</b>	<b>-139</b>	<b>-1,155</b>	<b>-1,947</b>
<b>Net change in cash flow</b>	<b>-200</b>	<b>1,601</b>	<b>976</b>	<b>1,275</b>	<b>391</b>
Opening C&CE	815	638	2,319	3,295	4,569
Closing C&CE	638	2,319	3,295	4,569	4,960

Source: Company, Nirmal Bang Institutional Equities Research

### Exhibit 11: Key ratios

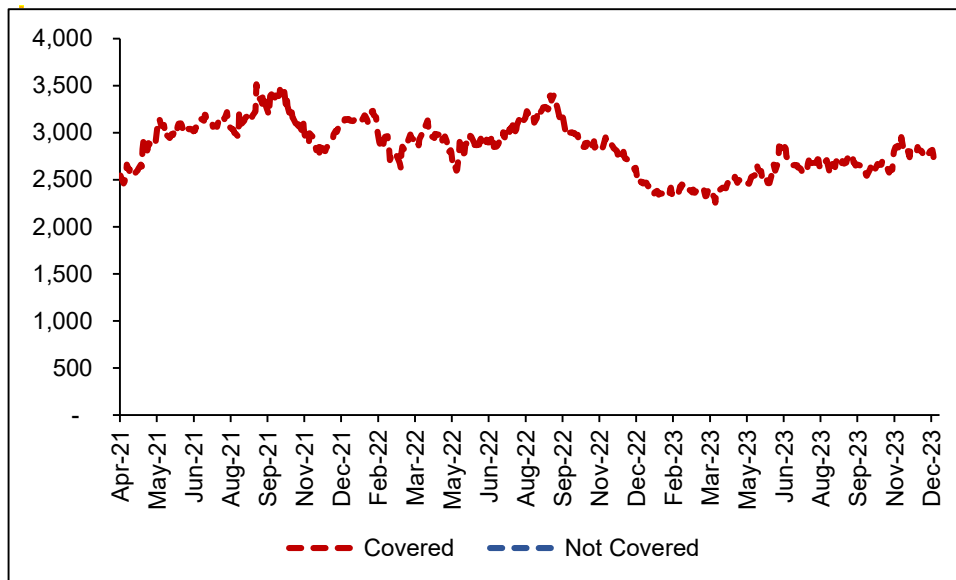
Y/E March	FY22	FY23	FY24E	FY25E	FY26E
<b>Per share (Rs)</b>					
Adj EPS	74.1	107.5	93.4	104.2	128.9
Book value	444.1	531.0	605.7	689.1	792.3
DPS	18.0	4.0	18.7	20.8	25.8
<b>Valuation (x)</b>					
P/Sales	2.6	2.1	2.2	2.0	1.8
EV/sales	2.6	2.1	2.2	2.0	1.7
EV/EBITDA	24.3	16.7	17.7	15.8	13.1
P/E	35.9	24.8	28.5	25.5	20.6
P/BV	6.0	5.0	4.4	3.9	3.4
<b>Return ratios (%)</b>					
RoCE	15.0	19.1	14.8	14.3	15.8
RoCE (pre-tax)	18.8	23.7	18.6	17.9	19.8
RoE	18.3	22.0	16.4	16.1	17.4
<b>Profitability ratios (%)</b>					
Gross margin	29.8	30.3	32.6	34.4	35.3
EBITDA margin	10.9	12.8	12.5	12.4	13.3
PAT margin	7.1	8.6	7.7	7.7	8.6
<b>Liquidity ratios (%)</b>					
Current ratio	1.8	2.4	3.0	3.2	3.5
Quick ratio	1.0	1.4	1.7	1.9	2.1
<b>Solvency ratio (%)</b>					
Debt to Equity ratio	0.2	0.1	0.2	0.1	0.1
Net Debt to Equity ratio	0.2	0.0	0.0	-0.0	-0.1
<b>Turnover ratios</b>					
Fixed asset turnover ratio (x)	2.7	2.9	2.4	2.5	2.5
Debtor days	55	51	55	55	55
Inventory days	56	56	48	48	48
Creditor days	44	39	41	41	41
Net Working capital days	67	68	62	62	62

Source: Company, Nirmal Bang Institutional Equities Research

## Rating track

Date	Rating	Market price (Rs)	Target price (Rs)
1 April 2021	ACCUMULATE	2,546	2,800
9 June 2021	ACCUMULATE	3,023	3,200
11 August 2021	ACCUMULATE	3,075	3,200
23 September 2021	BUY	3,383	4,000
11 November 2021	BUY	3,033	3,800
14 February 2022	BUY	2,810	3,300
18 May 2022	BUY	2,688	3,100
10 August 2022	BUY	3,152	3,700
19 September 2022	ACCUMULATE	3,160	3,500
23 September 2022	ACCUMULATE	3,159	3,500
10 November 2022	ACCUMULATE	2,820	3,000
13 February 2023	ACCUMULATE	2,316	2,500
22 March 2023	ACCUMULATE	2,404	2,500
24 May 2023	ACCUMULATE	2,593	2,500
14 August 2023	ACCUMULATE	2,709	2,800
12 November 2023	ACCUMULATE	2,952	2,900
26 December 2023	BUY	2,661	3,100

## Rating Chart



## Appendices

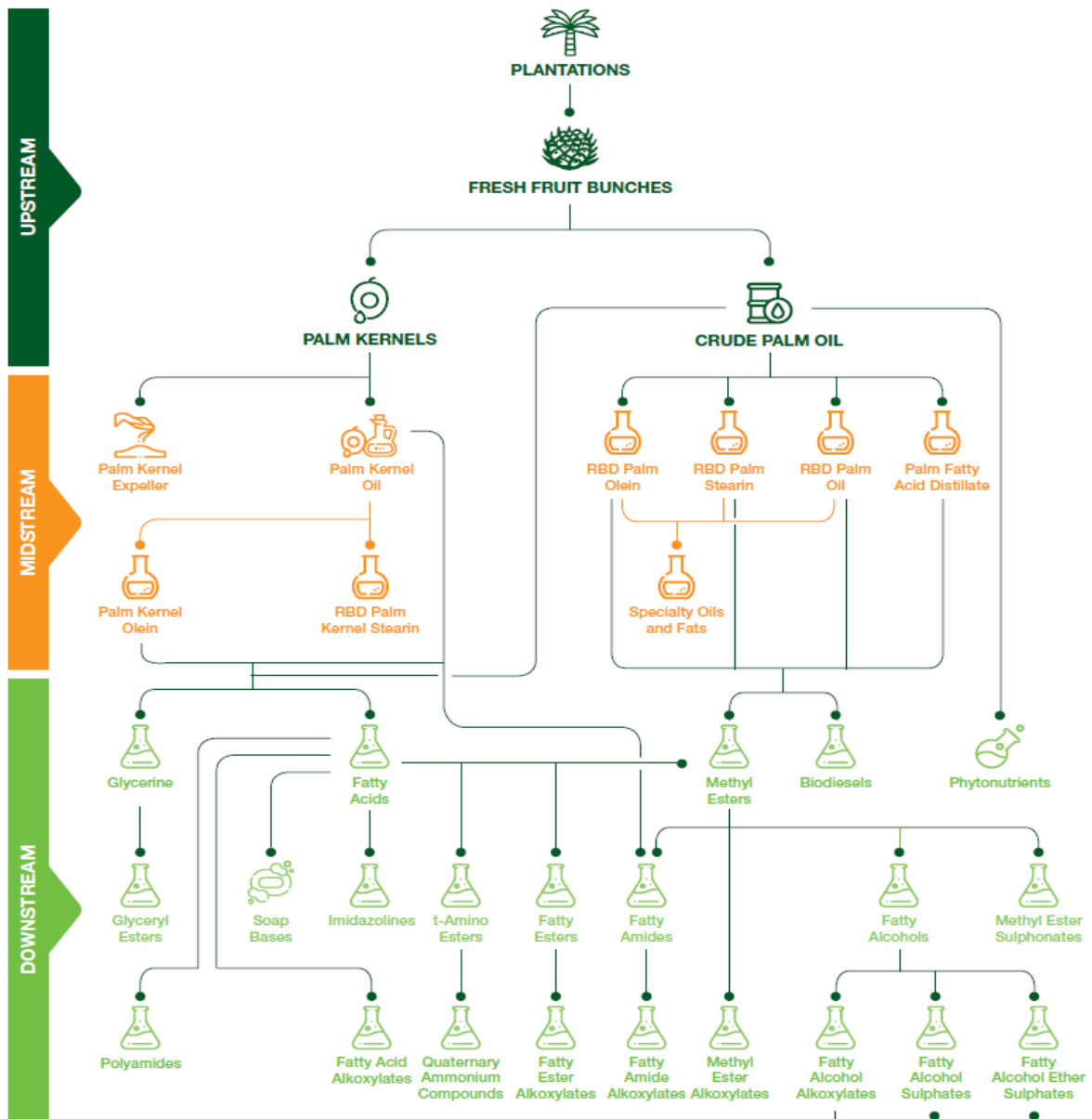
### Oleochemicals- brief description

Oleochemicals are obtained from fats and oils, both vegetable as well as animal. Oleochemicals are predominantly sourced from palm oil, which accounts for than 60% of worldwide production. In the marketing year 2021-2022, global palm oil production reached 72mn tonnes, a slight increase from the previous year's 71mn. Palm oil is obtained from the fruit of the oil palm tree, which is mainly cultivated in Southeast Asia and Africa. They find use across diverse industries and are gaining popularity owing to their eco-friendly and sustainable characteristics. Oleochemicals are renewable and sustainable, which make them an eco-friendly substitute for petrochemicals. They are also biodegradable and decompose in the environment without causing pollution. Finally, they have a wide range of applications in industries such as cosmetics, food and pharmaceuticals, making them a versatile ingredient for various products. Apart from palm oil, soybean oil is widely used in the production of Oleochemicals, making up ~20% of the global output. In 2022, India manufactured more than 1.3mn tonnes of soybean oil. This type of oil is extracted from soybeans, which are predominantly cultivated in the US, Brazil and Argentina. Rapeseed oil, also referred to as canola oil, makes up ~5% of Oleochemicals production. In 2019, Canada, China and India were the largest producers of rapeseed oil, contributing to a total production of 23mn tonnes worldwide.

Oleochemicals are widely used in personal care products. The primary application here is in soap and detergents, which account for ~31% market share for fatty acids and 53% for fatty alcohols. In the F&B industry, Oleochemicals serve as emulsifiers, stabilisers and thickening agents. They also play a role in enhancing flavours in the manufacturing of food packaging materials. In Pharmaceuticals, Oleochemicals are used to produce capsules, creams and ointments while serving as excipients that facilitate the delivery of ingredients to the body. Oleochemicals are gaining greater significance in the general advance of Green Chemistry. Substituting petrochemicals with vegetable oils is a breakthrough in this area. Vegetable oils have a smaller ecological footprint compared to petrochemicals. This advance has resulted in the creation of new Oleochemicals products, including biodegradable plastics and surfactants.

Fatty acids make up the largest portion of the Oleochemicals market. They find applications in products like soaps, detergents and personal care items. Glycerol finds applications in sectors such as F&B, Personal Care and Pharmaceuticals. The growing need for bio fuels is anticipated to be a driving force behind the expansion of this particular segment. The demand for environmentally friendly products in industries like Personal Care, Pharmaceuticals and F&B is also fuelling the growth of Oleochemicals in North America. The US holds the largest share in this region's market, with Canada and Mexico following closely behind.

**Exhibit 40: Oleochemicals integrated value chain**



Source: KLK Oleo, Nirmal Bang Institutional Equities

**Oil data tables**
**Exhibit 41: Oils and Fats ending stocks – India (MT)**

Month	India (Mt)					Total
	Palm Oil	Soybean Oil	Sunflower Oi	Rapeseed Oil	Other Oils	
Jan-20	6,57,547	1,53,082	1,91,371	-	41	10,02,041
Feb-20	6,72,605	2,34,376	2,33,285	1,552	-	11,41,818
Mar-20	5,33,094	2,37,014	2,48,085	2,015	-	10,20,208
Apr-20	4,97,435	1,19,136	2,51,697	452	-	8,68,720
May-20	3,15,101	99,678	1,73,397	1,075	-	5,89,251
Jun-20	3,30,207	1,00,256	1,83,899	173	-	6,14,535
Jul-20	4,60,302	1,47,634	1,98,013	-	-	8,05,949
Aug-20	4,20,613	2,06,444	1,78,975	-	-	8,06,032
Sep-20	3,04,957	2,10,691	81,048	16,552	-	6,13,248
Oct-20	3,53,361	1,51,280	93,783	7,640	-	6,06,064
Nov-20	3,03,123	1,71,356	1,41,032	1,232	-	6,16,743
Dec-20	3,76,317	1,42,401	1,57,091	15	-	6,75,824
Jan-21	4,01,695	1,18,327	1,75,553	-	-	6,95,575
Feb-21	3,17,878	1,81,820	1,19,470	-	-	6,19,168
Mar-21	2,13,162	1,38,090	1,41,126	-	-	4,92,378
Apr-21	2,44,644	81,977	1,91,293	-	-	5,17,914
May-21	3,14,760	1,25,738	1,62,190	-	-	6,02,688
Jun-21	3,16,770	1,86,535	2,56,980	-	-	7,60,285
Jul-21	2,19,568	2,23,333	1,85,517	-	-	6,28,418
Aug-21	3,20,267	2,15,574	1,06,523	5,641	-	6,48,005
Sep-21	6,02,429	1,75,852	1,31,559	10,417	-	9,20,257
Oct-21	4,20,691	1,08,025	87,185	15,233	-	6,31,134
Nov-21	4,37,789	2,06,160	80,978	14,083	-	7,39,010
Dec-21	3,44,886	1,61,001	97,338	9,801	-	6,13,026
Jan-22	3,98,777	1,54,598	1,54,647	3,637	-	7,11,659
Feb-22	3,36,270	1,07,166	83,065	43	-	5,26,544
Mar-22	3,49,212	1,27,988	1,19,115	-	-	5,96,315
Apr-22	2,51,594	1,01,105	80,225	-	-	4,32,924
May-22	2,40,865	1,66,426	1,00,435	-	-	5,07,726
Jun-22	1,34,513	1,43,163	1,517	-	-	2,79,193
Jul-22	40,450	1,68,593	249	-	-	2,09,292
Aug-22	3,32,225	1,90,479	1,16,228	-	-	6,38,932
Sep-22	4,84,369	1,81,360	1,03,486	-	-	7,69,215
Oct-22	4,34,677	1,19,851	64,049	-	-	6,18,577
Nov-22	5,80,515	61,140	1,10,552	-	-	7,52,207
Dec-22	7,06,996	3,44,886	1,00,165	-	-	11,52,047
Jan-23	6,67,054	1,69,253	2,29,212	-	-	10,65,519
Feb-23	6,23,359	1,13,401	1,94,138	-	-	9,30,898
Mar-23	5,67,775	1,38,644	1,69,358	-	-	8,75,777
Apr-23	4,48,951	1,32,989	1,75,111	-	-	7,57,051
May-23	3,26,338	1,38,245	2,67,748	-	-	7,32,331
Jun-23	3,87,948	2,31,114	1,74,656	-	-	7,93,718
Jul-23	4,45,774	2,74,344	2,00,860	-	-	9,20,978
Aug-23	7,58,003	2,91,994	2,81,153	-	-	13,31,150
Sep-23	6,81,161	3,48,967	3,45,494	-	-	13,75,622
Oct-23	4,64,129	2,60,621	2,22,473	-	-	9,47,223
Nov-23	4,98,092	2,46,522	1,30,077	-	-	8,74,691

Source: USDA, Nirmal Bang Institutional Equities

**Exhibit 42: Oils and Fats ending stocks – USA (MT)**

Particular	USA (Mt)					Total
	Palm Oil	Soybean Oil	Sunflower Oil	Rapeseed Oil	Other Oils	
Jan-20	1,55,000	6,89,000	38,300	72,300	55,400	10,10,000
Feb-20	1,61,500	6,90,000	27,000	82,000	79,500	10,40,000
Mar-20	1,68,000	8,30,000	25,000	73,000	54,000	11,50,000
Apr-20	1,60,000	8,53,000	27,000	83,000	1,07,000	12,30,000
May-20	1,64,500	8,80,000	23,000	85,000	97,500	12,50,000
Jun-20	1,60,000	9,16,000	24,000	66,000	1,14,000	12,80,000
Jul-20	1,78,000	9,35,000	34,000	65,000	98,000	13,10,000
Aug-20	1,60,000	9,41,000	33,000	64,000	22,000	12,20,000
Sep-20	1,71,000	8,44,000	28,000	75,000	1,12,000	12,30,000
Oct-20	1,65,000	7,96,000	31,000	61,000	2,37,000	12,90,000
Nov-20	1,60,000	8,57,000	34,000	87,000	1,13,000	12,51,000
Dec-20	1,60,000	8,57,000	34,000	87,000	1,13,000	12,51,000
Jan-21	1,70,000	8,23,000	34,000	1,06,000	1,13,000	12,46,000
Feb-21	1,70,000	7,77,000	34,000	71,000	1,13,000	11,65,000
Mar-21	1,70,000	7,86,000	30,000	71,000	1,17,000	11,74,000
Apr-21	1,70,000	7,79,000	34,000	71,000	1,13,000	11,67,000
May-21	1,70,000	6,86,000	23,000	67,000	1,10,000	10,56,000
Jun-21	1,70,000	6,75,000	23,000	60,000	1,13,000	10,41,000
Jul-21	1,70,000	6,59,000	23,000	60,000	1,13,000	10,25,000
Aug-21	1,70,000	6,70,000	23,000	62,900	1,13,000	10,38,900
Sep-21	1,70,000	8,15,000	23,000	60,000	1,13,000	11,81,000
Oct-21	1,54,000	8,67,000	23,000	58,000	1,13,000	12,15,000
Nov-21	1,54,000	8,69,000	23,000	52,000	1,13,000	12,11,000
Dec-21	1,54,000	8,69,000	23,000	52,000	1,13,000	12,11,000
Jan-22	1,54,000	9,42,000	23,000	52,000	1,13,000	12,84,000
Feb-22	1,54,000	9,42,000	23,000	52,000	1,13,000	12,84,000
Mar-22	1,54,000	8,96,000	23,000	77,000	1,13,000	12,63,000
Apr-22	1,59,000	7,74,000	23,000	88,000	1,13,000	11,57,000
May-22	1,59,000	7,63,000	23,000	88,000	1,13,000	11,46,000
Jun-22	1,59,000	7,54,000	23,000	71,000	1,13,000	11,20,000
Jul-22	1,59,000	8,22,000	23,000	71,000	1,13,000	11,88,000
Aug-22	1,59,000	8,28,000	23,000	67,000	1,13,000	11,90,000
Sep-22	1,59,000	8,37,000	23,000	73,000	1,13,000	12,05,000
Oct-22	1,59,000	8,43,000	23,000	81,000	1,16,000	12,22,000
Nov-22	1,59,000	8,62,000	23,000	79,000	1,16,000	12,39,000
Dec-22	1,59,000	8,62,000	23,000	86,000	1,16,000	12,46,000
Jan-23	1,59,000	8,78,000	26,000	1,02,000	1,16,000	12,81,000
Feb-23	1,59,000	8,78,000	26,000	1,02,000	1,16,000	12,81,000
Mar-23	1,59,000	8,78,000	26,000	1,31,000	1,16,000	13,10,000
Apr-23	1,59,000	8,78,000	26,000	1,31,000	1,16,000	13,10,000
May-23	1,59,000	8,31,000	29,000	1,20,000	1,16,000	12,55,000
Jun-23	1,59,000	8,33,000	29,000	94,000	1,16,000	12,31,000
Jul-23	1,59,000	8,31,000	29,000	79,000	1,16,000	12,14,000
Aug-23	1,59,000	8,26,000	29,000	86,000	1,16,000	12,16,000
Sep-23	1,59,000	7,88,000	29,000	87,000	1,16,000	11,79,000
Oct-23	1,59,000	7,15,000	29,000	79,000	1,16,000	10,98,000

Source: USDA, Nirmal Bang Institutional Equities

**Exhibit 43: Oils and Fats ending stocks – China (MT)**

Month	China (Mt)					Total
	Palm Oil	Soybean Oil	Sunflower Oil	Rapeseed Oil	Other Oils	
Jan-20	10,24,200	7,62,500	-	2,97,400	-	20,84,100
Feb-20	10,53,100	10,92,000	-	3,00,600	-	24,45,700
Mar-20	8,78,800	9,52,800	-	2,62,800	-	20,94,400
Apr-20	6,07,000	7,00,200	-	1,46,800	-	14,54,000
May-20	5,27,100	7,35,200	-	1,79,300	-	14,41,600
Jun-20	4,82,900	8,84,000	-	1,72,500	-	15,39,400
Jul-20	4,28,400	9,98,900	-	1,99,600	-	16,26,900
Aug-20	4,79,100	10,57,800	-	1,76,500	-	17,13,400
Sep-20	4,09,500	10,56,600	-	2,24,200	-	16,90,300
Oct-20	4,70,500	10,22,200	-	2,21,100	-	17,13,800
Nov-20	6,00,500	9,00,100	-	1,57,400	-	16,58,000
Dec-20	7,14,000	7,52,900	-	1,24,500	-	15,91,400
Jan-21	7,32,000	6,74,800	-	1,65,900	-	15,72,700
Feb-21	7,39,200	7,28,900	-	1,62,800	-	16,30,900
Mar-21	5,48,800	6,17,800	-	1,88,600	-	13,55,200
Apr-21	5,07,800	6,26,400	-	2,19,400	-	13,53,600
May-21	4,47,900	7,44,200	-	3,25,400	-	15,17,500
Jun-21	3,41,500	8,42,200	-	3,54,900	-	15,38,600
Jul-21	3,39,100	9,03,600	-	4,18,000	-	16,60,700
Aug-21	4,50,300	8,50,100	-	4,23,100	-	17,23,500
Sep-21	3,98,300	8,26,300	-	4,13,600	-	16,38,200
Oct-21	4,90,400	7,90,700	-	3,87,200	-	16,68,300
Nov-21	5,59,400	7,61,900	-	3,07,100	-	16,28,400
Dec-21	5,77,500	7,14,600	-	3,08,800	-	16,00,900
Jan-22	4,07,800	7,45,000	-	3,03,900	-	14,56,700
Feb-22	3,69,100	6,99,600	-	3,27,000	-	13,95,700
Mar-22	3,45,400	6,80,800	-	3,04,400	-	13,30,600
Apr-22	2,90,900	7,91,300	-	2,89,000	-	13,71,200
May-22	2,38,200	8,61,400	-	2,77,500	-	13,77,100
Jun-22	1,93,000	8,88,800	-	2,21,400	-	13,03,200
Jul-22	2,72,300	7,84,100	-	1,65,100	-	12,21,500
Aug-22	3,05,600	7,04,800	-	1,39,900	-	11,50,300
Sep-22	5,14,700	7,06,600	-	1,26,900	-	13,48,200
Oct-22	6,75,300	6,70,700	-	1,12,400	-	14,58,400
Nov-22	8,74,300	6,11,500	-	1,69,800	-	16,55,600
Dec-22	9,69,600	6,24,800	-	1,07,000	-	17,01,400
Jan-23	9,18,000	6,77,300	-	1,47,500	-	17,42,800
Feb-23	9,43,400	5,96,900	-	2,00,500	-	17,40,800
Mar-23	9,11,800	5,41,100	-	2,40,600	-	16,93,500
Apr-23	7,62,400	6,31,900	-	3,59,600	-	17,53,900
May-23	5,43,500	7,09,400	-	4,73,500	-	17,26,400
Jun-23	4,53,500	8,91,200	-	4,52,400	-	17,97,100
Jul-23	6,34,200	9,83,200	-	4,04,500	-	20,21,900
Aug-23	6,27,500	9,76,300	-	4,30,400	-	20,34,200
Sep-23	7,19,500	9,66,400	-	3,94,100	-	20,80,000
Oct-23	8,67,100	8,77,400	-	3,67,500	-	21,12,000
Nov-23	9,04,700	9,30,600	-	3,89,500	-	22,24,800

Source: USDA, Nirmal Bang Institutional Equities

**Exhibit 44: Major Vegetable Oils: World Supply and Distribution (Commodity View) in million metrics tonne**

Particulars (MnMT)	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	Nov 2023/24	Dec 2023/24
<b>Production</b>									
Oil, Coconut	3.41	3.56	3.63	3.46	3.44	3.59	3.71	3.76	3.76
Oil, Cottonseed	4.38	5.10	4.97	5.15	4.81	4.99	4.91	4.96	4.94
Oil, Olive	2.49	3.29	3.17	3.12	2.92	3.29	2.49	2.89	2.89
Oil, Palm	65.25	70.58	74.21	73.00	73.07	76.96	77.56	79.46	79.46
Oil, Palm Kernel	7.64	8.25	8.59	8.53	8.39	8.85	8.79	9.03	9.03
Oil, Peanut	5.69	5.89	5.86	6.22	6.44	6.51	6.29	6.34	6.34
Oil, Rapeseed	27.54	28.13	27.79	28.09	29.13	28.52	32.84	33.06	33.2
Oil, Soybean	53.77	55.23	56.04	58.50	59.16	59.43	59.03	61.93	61.93
Oil, Sunflower seed	18.22	18.58	19.60	21.14	19.11	19.52	21.6	22.05	22.05
<b>Total</b>	<b>188.39</b>	<b>198.46</b>	<b>203.75</b>	<b>207.21</b>	<b>206.41</b>	<b>211.64</b>	<b>217.21</b>	<b>223.49</b>	<b>223.6</b>
<b>Imports</b>									
Oil, Coconut	1.54	1.75	1.85	1.84	1.83	2.01	1.93	1.94	1.94
Oil, Cottonseed	0.05	0.08	0.09	0.09	0.10	0.1	0.1	0.08	0.08
Oil, Olive	0.93	1.09	1.11	1.30	1.22	1.17	1.08	1.06	1.06
Oil, Palm	46.43	46.60	50.21	47.21	47.47	45.02	47.27	48.56	48.4
Oil, Palm Kernel	2.72	2.89	3.01	3.03	3.18	2.93	2.91	3.03	3.03
Oil, Peanut	0.23	0.25	0.30	0.31	0.45	0.33	0.39	0.41	0.41
Oil, Rapeseed	4.55	4.82	5.17	5.79	6.23	5.26	6.86	6.73	6.88
Oil, Soybean	11.21	9.99	10.96	11.52	11.76	11.51	10.65	10.79	10.75
Oil, Sunflower seed	9.31	9.15	9.65	11.74	9.77	8.72	12.44	12.23	12.23
<b>Total</b>	<b>76.97</b>	<b>76.61</b>	<b>82.33</b>	<b>82.72</b>	<b>81.89</b>	<b>77.05</b>	<b>83.64</b>	<b>84.83</b>	<b>84.78</b>
<b>Exports</b>									
Oil, Coconut	1.79	1.77	2.14	1.87	1.79	1.9	2.15	1.99	1.99
Oil, Cottonseed	0.08	0.10	0.11	0.11	0.10	0.11	0.11	0.11	0.1
Oil, Olive	0.96	1.12	1.18	1.47	1.37	1.3	1.18	1.14	1.14
Oil, Palm	49.07	48.83	51.91	48.45	48.05	46.38	49.39	50.71	50.55
Oil, Palm Kernel	3.09	3.11	3.39	3.29	3.17	3.1	2.98	3.16	3.16
Oil, Peanut	0.28	0.29	0.32	0.31	0.49	0.39	0.41	0.45	0.45
Oil, Rapeseed	4.63	4.83	5.26	5.87	6.38	5.43	6.46	6.97	7.1
Oil, Soybean	11.45	10.75	11.47	12.36	12.56	12.35	11.42	11.5	11.51
Oil, Sunflower seed	10.76	10.32	11.50	13.47	11.24	10.22	14.05	13.82	13.82
<b>Total</b>	<b>82.11</b>	<b>81.12</b>	<b>87.26</b>	<b>87.14</b>	<b>84.94</b>	<b>81.18</b>	<b>88.15</b>	<b>89.85</b>	<b>89.82</b>
<b>Domestic Consumption</b>									
Oil, Coconut	3.23	3.32	3.44	3.50	3.45	3.67	3.61	3.75	3.75
Oil, Cottonseed	4.33	5.03	4.97	5.13	4.88	4.98	4.88	4.96	4.95
Oil, Olive	2.76	2.87	2.93	3.04	3.08	3.12	2.73	2.81	2.81
Oil, Palm	61.41	65.96	71.13	71.41	73.25	74.43	74.55	78.28	78.13
Oil, Palm Kernel	7.22	7.80	8.28	8.16	8.38	8.56	8.78	8.86	8.86
Oil, Peanut	5.52	5.71	5.96	6.26	6.48	6.42	6.22	6.31	6.31
Oil, Rapeseed	28.89	28.97	28.21	28.14	28.38	29.03	32.53	32.6	32.6
Oil, Soybean	53.48	54.38	55.09	57.11	58.68	59.4	58.11	60.85	60.79
Oil, Sunflower seed	16.38	17.46	18.11	18.93	18.46	17.72	19.54	20.49	20.54
<b>Total</b>	<b>183.22</b>	<b>191.51</b>	<b>198.19</b>	<b>201.72</b>	<b>205.19</b>	<b>207.33</b>	<b>210.95</b>	<b>218.92</b>	<b>218.75</b>
<b>Ending Stocks</b>									
Oil, Coconut	0.41	0.65	0.56	0.50	0.53	0.72	0.74	0.69	0.69
Oil, Cottonseed	0.12	0.17	0.15	0.15	0.08	0.13	0.18	0.15	0.15
Oil, Olive	0.26	0.72	0.89	0.81	0.50	0.59	0.33	0.32	0.32
Oil, Palm	10.01	12.55	13.94	14.29	13.53	15.46	17.01	16.07	16.19

Oil, Palm Kernel	0.70	0.93	0.86	0.97	1.01	1.09	0.89	0.95	0.94
Oil, Peanut	0.39	0.52	0.41	0.38	0.30	0.33	0.39	0.37	0.37
Oil, Rapeseed	4.20	3.37	2.86	2.74	3.33	2.75	3.25	3.53	3.63
Oil, Soybean	4.06	4.18	4.63	5.18	4.86	4.32	5.01	5.24	5.39
Oil, Sunflower seed	2.36	2.45	2.09	2.56	1.74	2.25	3.1	3.02	3.01
<b>Total</b>	<b>22.51</b>	<b>25.30</b>	<b>25.92</b>	<b>26.99</b>	<b>25.15</b>	<b>27.65</b>	<b>30.89</b>	<b>30.34</b>	<b>30.7</b>

Source: USDA, Nirmal Bang Institutional Equities

## Exhibit 45: Major Vegetable Oils: World Supply and Distribution (Country View) in million metrics tonne

Particulars (MnMT)	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	Nov 2023/24	Dec 2023/24
<b>Production</b>									
Indonesia	41.10	45.08	47.21	48.32	49.50	51.75	52.15	53.25	53.25
China	26.76	27.77	26.43	27.39	27.96	27.5	29.23	29.81	29.81
Malaysia	21.13	22.02	23.24	21.53	19.95	21.22	20.59	21.27	21.27
European Union	17.11	17.97	17.84	17.46	17.90	18.52	18.3	18.99	18.99
United States	11.43	12.11	12.20	12.64	12.70	13.11	13.27	13.61	13.58
Brazil	8.73	9.60	9.50	10.40	10.29	10.71	11.62	12.28	12.28
Argentina	9.87	8.79	9.61	8.98	9.43	9.52	8.69	9.17	9.18
Other	52.26	55.27	57.85	60.49	58.75	59.31	63.37	65.1	65.24
<b>Total</b>	<b>188.39</b>	<b>198.46</b>	<b>203.75</b>	<b>207.21</b>	<b>206.41</b>	<b>211.64</b>	<b>217.21</b>	<b>223.49</b>	<b>223.6</b>
<b>Imports</b>									
India	15.43	14.47	15.25	13.73	13.81	13.68	17.12	15.44	15.44
China	8.00	8.65	11.41	12.62	13.26	8.61	11.41	11.26	11.36
European Union	10.63	10.49	11.42	12.04	9.94	9.98	9.52	9.45	9.25
United States	4.73	4.78	4.70	4.91	4.95	5.24	6.27	6.58	6.62
Pakistan	3.25	3.15	3.28	3.40	3.51	3.6	3.87	4.08	4.08
Bangladesh	2.18	2.50	2.59	2.20	1.95	2.12	2.29	2.43	2.43
Egypt	2.23	1.85	1.58	1.94	1.77	1.89	2.75	2.24	2.24
Turkey	1.58	1.29	1.37	1.83	1.71	1.97	1.56	1.97	1.97
Malaysia	1.13	1.12	1.65	1.44	2.20	1.51	1.57	1.79	1.79
Iran	1.31	1.13	1.52	1.13	1.90	1.24	1.21	1.64	1.64
Other	26.50	27.19	27.58	27.62	27.00	27.21	26.06	27.96	27.96
<b>Total</b>	<b>76.97</b>	<b>76.61</b>	<b>82.33</b>	<b>82.72</b>	<b>81.89</b>	<b>77.05</b>	<b>83.64</b>	<b>84.83</b>	<b>84.78</b>
<b>Exports</b>									
Indonesia	29.86	29.28	30.78	28.60	28.98	26.96	30.25	30.4	30.3
Malaysia	17.47	17.70	19.75	18.66	17.32	17.53	16.74	17.94	17.84
Ukraine	6.28	5.07	6.26	6.06	7.01	6.47	6.05	6.22	6.3
Argentina	6.11	5.60	6.55	7.21	5.61	4.64	6.09	6.28	6.28
Russia	2.98	3.26	3.84	5.16	4.56	4.51	5.22	5.51	5.51
European Union	3.29	3.22	2.98	3.26	3.57	3.35	3.17	3.36	3.43
Canada	3.03	3.34	3.33	3.58	3.57	2.76	3.64	3.33	3.31
Other	13.08	13.67	13.78	14.66	14.52	14.95	17	16.82	16.86
<b>Total</b>	<b>82.10</b>	<b>81.12</b>	<b>87.26</b>	<b>87.14</b>	<b>84.94</b>	<b>81.18</b>	<b>88.15</b>	<b>89.84</b>	<b>89.82</b>
<b>Domestic Consumption</b>									
China	35.73	36.87	38.36	39.57	40.69	37.89	38.96	40.39	40.39
European Union	24.79	25.18	25.43	25.53	25.56	25.26	24.66	25.1	24.95
India	21.48	21.68	22.12	22.05	22.38	22.71	23.81	24.65	24.68
Indonesia	11.89	14.68	16.87	18.01	19.08	22.27	23.27	24.56	24.56
United States	14.72	15.54	15.89	16.00	16.52	17.33	19.36	19.88	19.89
Brazil	7.91	8.44	8.91	9.67	9.91	9.53	9.62	10.57	10.57

Pakistan	4.22	4.51	4.68	4.74	4.82	5.05	5.46	5.37	5.37
Malaysia	4.45	4.89	5.17	5.00	4.94	5.02	4.79	4.92	4.92
Russia	3.39	3.44	3.52	3.49	3.58	3.69	3.77	3.81	3.81
Thailand	2.72	2.83	3.19	3.26	3.05	3.17	3.19	3.35	3.35
Bangladesh	2.57	2.77	2.99	3.03	2.98	2.98	3.15	3.24	3.24
Mexico	2.81	2.89	2.89	2.87	2.88	2.99	3.09	3.09	3.09
Argentina	3.74	3.64	3.27	2.83	2.70	2.92	2.75	3.07	3.07
Nigeria	2.40	2.06	2.20	2.42	2.48	2.59	2.71	2.79	2.78
Egypt	2.41	2.41	2.46	2.50	2.53	2.55	2.65	2.75	2.75
Other	37.99	39.69	40.17	40.70	40.95	41.39	39.71	41.38	41.33
<b>Total</b>	<b>183.22</b>	<b>191.51</b>	<b>198.19</b>	<b>201.72</b>	<b>205.19</b>	<b>207.33</b>	<b>210.94</b>	<b>218.92</b>	<b>218.75</b>
<b>Ending Stocks</b>									
Indonesia	3.52	3.68	3.40	5.19	6.74	8.86	6.61	4.96	5.06
China	2.50	2.83	2.81	2.12	2.00	2.16	4.44	3.88	4.1
India	2.68	2.80	2.02	2.25	2.71	1.57	3.13	3.57	3.67
Malaysia	2.29	2.68	3.26	2.39	1.64	1.9	2.74	2.68	2.78
United States	1.53	1.6	2.45	3.16	1.87	1.51	2.17	2.32	2.15
Other	10.00	11.96	12.45	12.47	10.91	11.64	11.8	12.93	12.95
<b>Total</b>	<b>22.52</b>	<b>25.30</b>	<b>25.92</b>	<b>26.99</b>	<b>25.15</b>	<b>27.65</b>	<b>30.89</b>	<b>30.34</b>	<b>30.7</b>

Source: USDA, Nirmal Bang Institutional Equities

## Exhibit 46: Major Vegetable Oils: World Oilseeds and Products Supply and Distribution in million metrics tonne.

Date	Area Harvested	Beginning Stocks	Production	Imports	Total Supply	Exports	Food Use Dom.	Domestic Consumption	Ending Stocks
2008/09	15.64	14.91	135.11	53.54	203.56	56.65	103.17	131.05	15.86
2009/10	16.49	15.86	142.4	55.66	213.92	58.85	107.77	138.38	16.68
2010/11	17.51	16.68	149.17	57.19	223.05	60.79	110.01	142.6	19.65
2011/12	18.5	19.65	157.93	61.87	239.45	64.81	115.78	151.52	23.13
2012/13	19.19	23.13	161.2	65.29	249.62	68.36	120.59	158.03	23.23
2013/14	20.11	23.23	171.52	67.16	261.91	70.23	125.49	166.27	25.41
2014/15	20.94	25.41	177.22	70.77	273.41	76.64	130.65	170.12	26.65
2015/16	21.92	26.65	176.34	71	273.99	73.9	134.95	177.31	22.78
2016/17	22.67	22.77	188.49	76.67	287.93	82.12	138.9	182.86	22.96
2017/18	23.44	22.96	198.6	76.61	298.17	81.12	142.95	191.5	25.55
2018/19	24.02	25.55	203.87	82.35	311.76	87.26	145.72	198.11	26.39
2019/20	24.73	26.39	207.21	82.85	316.44	87.2	148.92	201.67	27.57
2020/21	25.11	27.57	206.48	81.99	316.05	85.15	152.21	205.03	25.87
2021/22	25.63	25.87	211.44	82.95	320.25	87	155.16	209.08	24.17

Source: USDA, Nirmal Bang Institutional Equities

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Team Details:			
Name		Email Id	Direct Line
Rahul Arora	CEO	rahul.arora@nirmalbang.com	-
Krishnan Sambamoorthy	Head of Research	krishnan.s@nirmalbang.com	+91 22 6273 8017 / 18
Dealing			
Ravi Jagtiani	Dealing Desk	ravi.jagtiani@nirmalbang.com	+91 22 6273 8230, +91 22 6636 8833
Michael Pillai	Dealing Desk	michael.pillai@nirmalbang.com	+91 22 6273 8102/8103, +91 22 6636 8830

## Nirmal Bang Equities Pvt. Ltd.

### Correspondence Address

B-2, 301/302, Marathon Innova,

Nr. Peninsula Corporate Park,

Lower Parel (W), Mumbai-400013.

Board No. : 91 22 6273 8000/1; Fax. : 022 6273 8010