India I Equities 27 September, 2022

Specialty Chemicals Annual Report Analysis

Promoters still bullish; Indian chemicals story strong

Bhawana Israni | Research Analyst

Anand Rathi Share and Stock Brokers Limited (hereinafter "ARSSBL") is a full-service brokerage and equities research firm and the views expressed therein are solely of ARSSBL and not of the companies which have been covered in the Report. This report is intended for the sole use of the Recipient. Disclosures are present in the Appendix.

AnandRathi

Contents

Contents	Page no
Indian Specialty Chemicals Sector	3-4
Valuation	5
SRF	6
Vinati	7
Fine Organic	8
Navin Fluorine	9
Deepak Nitrite	10
Atul	11
Revenue Analysis	12-14
Gross Margin Analysis	15-16
Power & Fuel cost	17
Freight and Forwarding expenses	18
Employee and other expenses Analysis	19
EBITDA	20
Depreciation	21
Other Income	22
Finance Cost	23
Profit after Tax	24-25
Debt	26
Capex to OCF	27-28

to OCF	27-28	
Complete data in this report taken from	FY15-FY22 annual reports	

Source:-

Contents	Page no
Capex Plan	29
Cash-Conversion cycle	30-31
Inventory Analysis	32-33
Receivables (Provision for Doubtful Debts)	34-35
OCF Analysis	36
FCF Analysis	37
Cash, Bank and Investments, as % of capital employed	38-39
R&D	40-41
Remuneration to Directors, KMP	42-47
Navin's MDA	48-52
Vinati's MDA	53-56
Deepak Nitrite's MDA	57-65
Fine Organic's MDA	66-71
SRF's MDA	72-77
Atul's MDA	78-84
Contingent Liabilities	85
Focus on ESG	86-89
Dividend Pay-out	90
Promoters' Holdings	92
Related-Party Transactions	93-95

Indian Specialty Chemicals

We analyzed the FY22 annual reports of six chemicals companies (SRF, Vinati Organics, Fine Organic, Navin Fluorine, Deepak Nitrite and Atul). The Covid-19 pandemic impact, widespread supply bottlenecks, non-availability of key raw materials, higher energy and raw material prices were key challenges in FY22. The companies' strong revenue growth came from higher realizations and volumes on the low base. Despite the topline growth, EBITDA margins were hurt by lower gross margins (higher raw material costs not fully absorbed), higher power &fuel costs (energy crisis) and higher freight &forwarding expenses (logistic challenges and container non-availability). Ahead, the companies are positive on the long-term structural growth of the Indian chemicals sector on the back of the China+1 strategy, focus on reducing chemical imports, R&D capabilities, and its leading and strong position with favourable government policies.

Supply diversification from China; growth trigger for Indian chemicals companies. With supply-chain disruptions and uncertainty in China, global manufacturers are seeking to diversify their sourcing. India provides strong alternatives with scale, technology, raw materials and supportive government policies. India's chemicals sector is in a good position to profit from this change and capture a sizable share of the market. Indian chemicals manufacturers are poised to emerge as a credible alternative and, in some cases, primary suppliers to global firms. While all in the Indian chemicals sector would benefit from this shift, specialty chemicals manufacturers could gain the most due to higher entry barriers and potential for value-added niche products.

Navin and SRF in a sweet spot in fluorine chemistry. The fluorochemicals sub-segment is expected to record a 5.2% CAGR to \$25.1bn between now and 2026. Fluorinated organic compounds are of interest in the pharmaceutical and agrochemical sectors. Navin intends to deepen its R&D capabilities, in the development process of a new product around the fluoropyridine platform, expecting to emerge as the first such producer in India with multi-year revenue possibilities. Further, is targeting approval of its R22 PTFE samples. SRF will continue to invest in its chemicals business to sustain healthy growth rates over the next few years. Collaboration with major global innovators for process development, commercialisation, and production of complex, new-age molecules with downstream applications in agro and pharma would support growth. With huge capex in polytetrafluoroethylene (PTFE), chloromethane, etc. likely to be capitalised in the next few quarters, it is looking forward to exciting times ahead in fluorochemicals.

Vinati and Deepak; focus on import substitution. Vinati, a market leader in key specialty chemicals, is on track to further expand its niche range of products, enabling import substitution. Deepak Nitrite, from its first product 'sodium nitrate' to its latest foray into 'phenol and acetone, aligned its focus on products where domestic demand was largely import-dependent. Import substitution has always been a major driver of the company's overall business plan. Deepak continues to focus on launching value-added downstream products with the goal of substituting imports primarily to capitalize on the more favourable demand context.

Indian Specialty Chemicals

Fine Organic's focus on growth and sustainability. Demand for oleochemicals-derived additives is increasing as consumers want more environment-friendly and "green" products. Fine Organic's green additives have been effectively replacing potentially hazardous chemicals in a wide range of industries such as plastics, packaging, foods, cosmetics, rubbers and coatings. Minimized waste generation, effluent management through effective production processes, use of natural gas and stringent compliance with regulations continue to be focus areas of sustainability. The company is intending to expand operations in Gujarat, focusing on expanding facilities for new and present product lines with process improvements and technology upgrades.

Atul is focusing more on improving manufacturing and working-capital efficiencies, adding capacity through de-bottlenecking existing capacities. Further, it aims to add more products in different sub-segments and widen its market reach in new regions. It is looking at inorganic growth opportunities in aromatics and evaluating investment opportunities in vertical integration.

Our View. In the last 2-3 years, Indian chemicals companies have been re-rated 2-3x on strong earnings growth given better pricing, stable crude oil prices and benefits from the China+1 policy. Long term outlook is positive on the sector as the fundamentals remains strong. Companies are guiding to huge capex (Aarti Rs12bn-15bn annually for the coming years), Navin (~Rs15bn over FY22-FY23), SRF (Rs15bn-20bn annually), Atul (~Rs15bn), Deepak Nitrite (~Rs20bn in FY23) and many more. For supplies, international manufacturers are preferring India to China considering the latter's R&D abilities, compliance with environment norms and better products. These are the prime factors for the bright outlook. Companies are entering new product lines focusing on import substitution. Hence, despite near-term headwinds, we are structurally bullish on the long-term growth of Indian chemicals companies.

Risk and concerns. Disrupted recovery, higher inflation, rise in energy cost, fluctuation in raw material prices, and supply-chain bottlenecks are key short-term concerns.

Valuation

Newson	Dation	СМР	ТР	M Cap		EPS (Rs)			P/E (x)		E١	//EBITDA (x)	RoE(%)			
Names	Rating	(R s)	(Rs)	(Rs bn)	FY22	FY23e	FY24e	FY22	FY23e	FY24e	FY22	FY23e	FY24e	FY22	FY23e	FY24e	
SRF *	NR	2,514	NR	744	63.7	77.4	89.3	39.5	32.5	28.2	24.9	20.6	17.8	24.5	22.2	21.1	
Aarti	Buy	812	960	294	19.1	25.1	32.0	42.6	32.4	25.3	16.4	20.0	15.9	27.8	14.4	16.2	
Deepak Nitrite *	NR	2,087	NR	284	78.2	79.1	93.2	27.0	26.4	22.4	17.7	17.4	14.9	37.5	27.9	25.9	
Atul	Βυγ	8,953	10,145	264	204.8	271.8	338.1	43.7	32.9	26.5	27.8	21.7	17.1	14.6	16.9	18.0	
Navin	Hold	4,388	4,650	217	53.1	71.6	110.5	82.6	61.2	39.7	61.1	41.1	27.8	15.1	17.9	23.3	
Vinati	Hold	2,047	2,350	210	33.7	45.7	58.3	60.7	44.8	35.1	48.3	34.4	26.8	20.6	23.2	24.2	
Fine organic	Sell	7,009	5,145	215	84.7	136.7	114.3	82.8	51.3	61.3	58.5	37.3	43.3	30.7	36.7	23.6	
Galaxy Surfactants	Hold	3,051	3,500	108	74.1	76.8	99.8	41.2	39.7	30.6	27.9	24.8	19.6	16.7	15.3	17.2	
Nocil	Hold	249	296	41	10.6	13.6	16.2	23.5	18.3	15.4	14.2	11.6	9.6	12.9	14.8	15.7	
Neogen	Hold	1,441	1,572	36	17.8	25.1	33.5	80.7	57.5	43.1	42.7	32.6	25.7	14.3	13.4	15.8	
Sudarshan	Buy	414	585	29	18.8	16.7	29.3	22.0	24.7	14.1	13.3	12.0	8.2	16.5	13.3	20.6	

Source:- Company, Bloomberg, Anand Rathi Research

*Note:- SRF and Deepak Nitrite data from bloomberg

- Revenue grew 48% y/y to Rs124bn, supported by strong performances of each business category. Despite the Covid-19 pandemic, widespread supply bottlenecks and increasingly higher energy & RM prices, operational and financial performances were robust.
- Revenue from its chemicals business grew 44% y/y to Rs52.4bn. Specialty chemicals did remarkably well, driven by strong demand in export and domestic markets. The wider product range helped strengthen and increase customers. Sales of the pharma propellant under the brand Dymel® HFA 134a/P significantly increased, expanding to new regions and consolidating customers across the globe.
- The packaging films business grew 45% y/y to Rs48bn. Domestic and international plants delivered strong performances and contributed to overall growth.
- The technical textiles business revenue grew 68% y/y to Rs21bn on highest sales volumes from belting fabrics and polyester industrial yarn. This partially offset weak demand for nylon tyre-cord fabrics.
- Margin and profits. SRF maintained its gross and EBITDA margins at 51.2% and 25% respectively vs 52.2% and 25.4% in FY21. Its technical textiles and chemicals business EBIT margins improved a strong ~834bps and 668bps y/y respectively to 22.6% and 26.7% on the better pricing, demand and product mix. The margin in its packaging film business declined 748bps y/y to 19.8%. Profit growth (63.5% y/y to Rs18.9bn) was higher than revenue growth (48% y/y to Rs124bn) as it had a Rs727m forex gain (Rs119m in FY21), maintained its EBITDA margin, had lower interest expense (on capitalisation of debt cost on capex), though partially hurt by higher tax expenses. The net profit margin improved ~100bps to 15%.
- Balance sheet. SRF's cash-conversion cycle lengthened to 55 days due to fewer payable days (126 in FY22 vs 144 in FY21). Further, its inventory days shortened by four to 129 while receivable days were 53 vs 55 in FY21. The net D/E ratio improved to 0.3x (vs 0.4x in FY21) despite adding Rs1.9bn debt in the year. Cash, bank and investments as percent of capital employed was 6% (having averaged 5% in the last eight years). Contingent liabilities were Rs10.2bn (12% of net worth; FY21: Rs8.1bn, 12%) including capital commitments.
- Cash-flow. Consolidated operating cash-flow increased to Rs21bn, from Rs17.7bn in FY21, due to greater profitability and better working capital. Free cash-flow was Rs2.9bn (Rs5.6bn in FY21) due to Rs18bn capex in FY22.

Vinati

- Revenue grew 69% y/y to Rs16.1bn supported by strong volume growth in H2 FY22. The company reported negative revenue growth in FY20 and FY21. The volume growth on low base and better pricing supported strong revenue growth.
- Margin and profits. In H2 FY22, most businesses' operating margins declined in industry. China cut production due to energy prices and non-availability of major RMs due to supply-chain constraints. Gross margins contracted and operating costs jumped significantly. All of this impacted operating margins of businesses. Besides, operating costs were hit by higher freight costs because of the shortage of containers and higher power and fuel costs on the significant jump in coal and gas prices. Overall, EBITDA margin was down 1,007bps y/y to 26.9%.
- Balance sheet. The cash-conversion cycle shortened to 130 days (from 158 in FY21) due to fewer inventory days (75 in FY22 vs 115 in FY21), partially hurt by a decline in payable days (49 in FY22 vs 63 in FY21). The balance sheet was healthy with the net-debt-to-equity ratio of -0.04x (-0.2x in FY21). Working capital as percent of sales increased to 56.6% during the year vs 54% a year ago (mainly due to loans to related parties). Vinati's cash, bank and investments were 5% of capital employed, compared to 18% in FY21 and an average of 13% in the last seven years as it sold current investments of Rs1.8bn in FY22.
- □ Loan to Veeral Additives Pvt. Ltd. Vinati gave unsecured loans of Rs1.2bn in FY22 (Rs1.3bn in FY21) to a promoter group company Veeral Additives Pvt. Ltd. at 6.25% interest p.a. to meet the latter's capital/operational expenditure and working capital. Veeral Additives set up a plant to manufacture anti-oxidants for petrochemicals such as HDPE, PP, PS, etc. It will manufacture three products, AO1010, AO1076 and AO168, combined capacity: 24,000 tonnes a year. These are value-added products for Vinati and will constitute forward integration of its products, di-tertiary butyl phenols. While the plant was completed in May'22 and commercial production expected by Sep'22, Veeral Additives will be amalgamated with Vinati. In view of the delay in securing approval from the NCLT for the proposed scheme, Veeral has requested additional funding of up to Rs1bn in FY23; accordingly, the lending limit needs to be raised to Rs3.5bn, from the present approved Rs2.5bn limit.
- Cash-flow and Capex, Despite higher profits, consolidated operating cash-flow declined to Rs1.3bn (from Rs2.2bn in FY21) due to more working capital investments and increased tax rat. Free cash-flow was a negative Rs347m (against Rs1.7bnin FY21) as capex increased to Rs1.6bn in FY22 vs Rs490m in F21.

Fine Organic

- Revenue growth was 66% y/y. Supply-chain disruptions and input-price volatility hit the H1 FY22 performance, but H2 growth was exceptional as the company revised its long-term contracts to short-term, coupled with better realization across segments and strong increase in volumes. Further, global supply-chain disruptions, inadequately available raw materials, container shortages and other challenges threw up opportunities, which resulted in surging export demand.
- Margins and profit. Fine Organic's gross margin improved to 36.7% (up 76bps y/y) and its EBITDA margin expanded to 19.4%, up 184bps y/y, driven by better absorption of fixed and power & fuel costs, though more exports led to higher freight and forwarding expenses. PAT growth was exceptional, up 116% y/y, to Rs2.6bn (revenue growth 66%) supported by a higher EBITDA margin (19.4%, vs 17.6% in FY21), lower depreciation expenses 15% y/y to Rs399m (diminishing-value method), lower interest expenses (down 17% y/y to Rs51m) and higher other income, up 93% y/y (forex gain).
- Balance sheet. The cash-conversion cycle lengthened to 84 days (up 17) due to increase in inventory days (72, vs 63 in FY21) and receivable days (59 vs 52 in FY21). Payable days were 47 in FY22 vs 49 in FY21. Fine Organic's net D/E ratio was -0.18x in FY22 vs-0.24x in FY21 due to decline in debt and strong profit growth. Cash, bank and investments as percent of capital employed declined to 23% compared to 32% in FY21 and an average 14% in the last seven years. Contingent liabilities were Rs285m (3% of net worth; FY21: Rs360m, 4.9%) including capital commitments of Rs225m in FY22.
- □ Cash-flow. Consolidated operating cash-flow declined to Rs670m (from Rs1.3bn in FY21) despite strong profit growth. This was chiefly due to higher working capital. Free cash-flow was Rs59m only (vs Rs880m FY21) due to Rs611m capex in FY22. However, Fine Organic has generated positive average annual FCF of Rs479m over FY15-FY22.

Navin Fluorine

- Revenue growth. On its strong performance in its high-value business, Navin's revenue grew 23% y/y to Rs14.5bn in FY22. Its high-value specialty chemicals and CRAMS business was up 18% y/y. The past refrigerant-gases and inorganic-fluorides business grew 35%, mainly on better price realisation.
- CRAMS revenue grew 6% y/y, to Rs2.9bn, supported by a strong order-pipeline with added customers and projects. The cGMP3 plant ran at optimum capacity utilisation as the company's ability to handle larger projects and complex chemistries significantly improved. Project-flows from customers was strong as Navin continued to widen its reach across global pharma majors.
- Specialty chemicals revenue grew 25% y/y to Rs5.6bn, driven by a mix of new customers & products, and market-share gains. This business saw strong new-project flows from the life-science and crop-science segments and on optimal utilisation of the plant.
- Inorganic fluorides revenue shot up 42% y/y to Rs1.9bn, supported by the low base, better realisations and higher volumes in FY22. The performance had been impacted in H1 and picked up in H2FY22.
- Refrigerant business revenue grew 28% y/y to Rs2.7bn despite phasing out of HCFC-22 (R22) for emissive purposes under the Montreal Protocol.
 Robust growth was seen due to better price realisation and growth in non-emissives.
- Margin and profits. The EBITDA margin contracted 181bps to 24.4%, from 26.2% a year ago, mainly due to higher utility expenses and employee costs, though partially supported by the stable gross margin. Profit growth (9% y/y to Rs2.6bn) was lower than revenue growth (23% y/y to Rs14.5bn) due to the lower EBITDA margin (higher power and fuel costs, freight and forwarding expenses), and to lower other income (Rs346m interest on an income-tax refund in FY21, Rs53m in FY22), though partially supported by a lower tax rate (23.6% in FY22 vs 31% in FY21).
- Balance sheet. The cash-conversion cycle lengthened to 151 days (137 in FY21) mainly due to more inventory days (up 19 to 141). It was partially supported by higher payable days at 80 (vs 73 in FY21). Navin has taken Rs1bn long-term debt to fund capex, taking the D/E ratio to 0.07x (netD/E -0.04x). In FY22, only 11% of capital employed was lying in the bank (including cash) and in investments (38% in FY21). Contingent liabilities shrank to Rs2.2bn (12% of net worth; FY21: Rs3.9bn, 23.9%) including capital commitments.
- Cash-flow. Consolidated operating cash-flow slipped from Rs2.4bn to Rs748m chiefly due to higher working capital. Free cash-flow for the year was a negative Rs5bn (Rs1.5bn in FY21) due to Rs5.8bn capex and lower OCF.

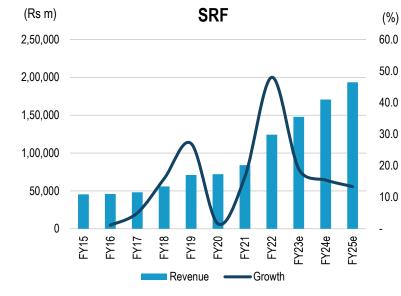
Deepak Nitrite

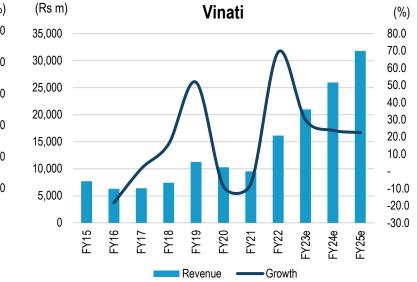
- Revenue growth. Supported by higher realisations and a better product mix, Deepak Nitrite's revenue grew 56% y/y, to Rs68bn. Its domestic revenue grew 71% y/y to Rs52.7bn. Revenue from exports was Rs15.3bn, up 20%. Its (standalone) domestic-export mix was 58:42.
- Basic Intermediates (BI). Despite the adverse macro-economic situation and temporary disruption of raw materials, Deepak met its delivery commitments. Its BI revenue and EBIT grew 66% and 61% respectively to Rs12.6bn and Rs3.1bn.
- Fine and Specialty Chemicals (FSC) revenue rose 10% to Rs8.5bn while EBIT was down 23%, impacted by logistic disruptions, elevated RM costs and utilities. Due to the nature of contracts in this sub-segment, prices are not immediately passed on, but with a time lag. Deepak Nitrite expects good demand from end-user segments that would drive further gains in years to come.
- Performance Products (PP) revenue grew 74% y/y to Rs5.3bn. EBIT rocketed 335% y/y to Rs1bn. Better DASDA demand resulted to higher realisations. Overall PP volumes rose 26%.
- Phenolics revenue grew 68% to Rs42.9bn. The EBITDA was Rs9.7bn with a 23% EBITDA margin. IPA brought 7% to phenolics revenue.
- Margin and profit. The reported lower margin in BI, FSC and phenolics was hit by logistic disruptions, high raw-material costs, temporary disruption in availability and higher utilities. PP margins however expanded on better pricing and favorable demand. The EBITDA margin was down 503bps y/y to 23.6% due to the lower gross margin, more power & fuel expenses, utility and freight & forwarding expenses. Profit was up 37.5% y/y to Rs10.6bn against 56% revenue growth to Rs68bn, hurt by the lower gross margin (33.1% in FY22 vs 42% in FY21), higher depreciation expenses, and partially supported by other income up 98% y/y and interest expenses down 54% y/y.
- Balance sheet. Payable days declined substantially by 25, to 45 days. Further, inventory days shortened by 10, to 52 days. Management says revenue growth and efficient operations led to faster inventory churning, which resulted in fewer inventory days. The cash-conversion cycle lengthened to 67 days (55 in FY21). Deepak has been paying off debt in the last three years. It repaid Rs2.8bn in FY22, taking the net D/E ratio to -0.05x, vs 0.2x in FY21. Cash, bank and investments increased to 13% in FY22 vs 7% in FY21. Contingent liabilities were Rs1.6bn (5% of net worth; FY21: Rs1bn, 4% of net worth) including capital commitments.
- Cash flow. Consolidated operating cash-flow slipped from Rs10bn in FY21 to Rs8.2bn, chiefly due to higher working capital. Free cash-flow for the year was Rs6.4bn (Rs7.9bn in FY21) due to Rs1.8bn capex

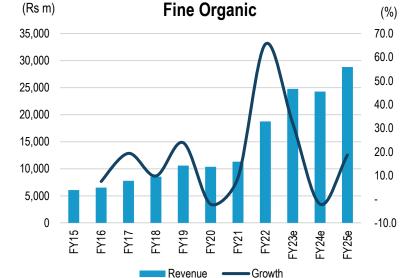
Atul

- Revenue growth. Better prices and higher sales volumes on a low base on account of the Covid-19 pandemic led to staanalone revenue growing 42% y/y to Rs49.3bn. Consolidated revenue grew 36.2% y/y to Rs50.1bn.
- **Domestic sales** increased 32% to Rs24.8bn while exports shot up \sim 56% to Rs24.5bn.
- Life-Science Chemicals revenue grew 29% to Rs14.5bn because of higher realizations and greater volumes of crop protection and pharmaceutical intermediates.
- Performance and Other Chemicals sales rose ~49% to Rs34.8bn because of greater sales volume in three sub-segments.
- Margin and profit. Higher raw-material costs, freight & forwarding and power & fuel expenses pulled the EBITDA down 668bps y/y to 17.9%, though it was partially supported by better absorption of employee and other expenses due to higher revenue. Despite 36% revenue growth in FY22, profit declined 8% to Rs6bn due to the lower gross margin, higher depreciation (Rs5.6bn capex) and lower other income (drop in dividend and interest income).
- Balance sheet. Debt was Rs1.4bn (Rs1.3bn in FY21) with the net D/E ratio at -0.25x. The cash-conversion cycle lengthened to 103 days (from 78 in FY21) mainly due to a huge reduction in payable days (down 32, to 89). While receivable days were similar (71 vs 72 in FY21), inventory days declined to 122 (128 in FY21). Of the Rs5.9bn capex, 60% was for the plant and equipment, 4% for land and buildings, and 33% constituted capital WIP. contingent liabilities (incl. guarantees & commitments) were Rs5.5bn (1% of net worth) vs Rs1.8bn in FY21 (5% of net worth).
- Cash-flow statement. Operating cash-flow slipped from Rs7.2bn to Rs2.3bn chiefly due to lower profits and more working capital. FCF was a negative Rs3.6bn (vs Rs3.9bn in FY21) due to higher capex of Rs5.9bn in FY22 and lower OCF.

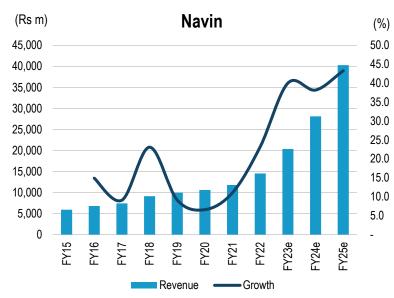
U-shaped revenue recovery unsustainable (outlier, Navin Fluorine)

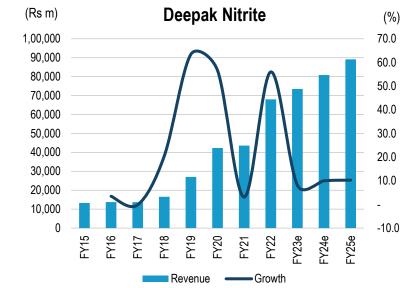


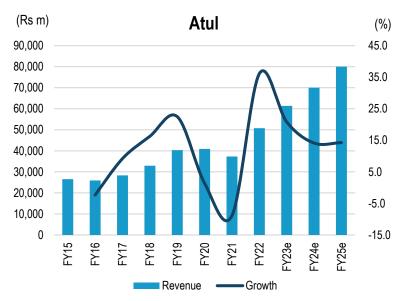




ANANDRATHI







Source:- Company, Anand Rathi Research

Note: SRF and Deepak Nitrite data from Bloomberg

ANANDRATHI

U-shaped revenue recovery unsustainable (outlier, Navin Fluorine)

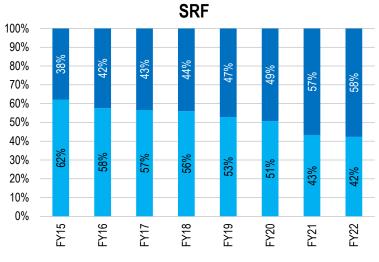
During FY22, major chemicals companies reported strong revenue growth, up from the Covid'19-impacted FY21 and macro-economic challenges globally, which resulted in higher prices of raw materials and finished goods. FY22 revenue growth averaged ~50% for our basket of six companies: SRF, Vinati, Fine Organic, Navin Fluorine, Deepak Nitrite, and Atul.

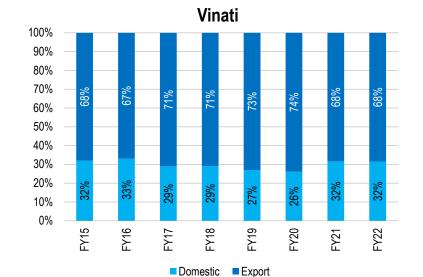
- ❑ Vinati Organic reported the highest revenue of our six companies, 69% y/y, supported by strong volume growth in H2 FY22 It reported negative revenue growth in FY20 and FY21. The high volume growth on low base and better pricing supported strong revenue growth.
- □ Fine Organic' revenue growth was 66% y/y. Supplychain disruptions and input-price volatility hit the H1 FY22 performance. However H2 growth was exceptional as the company revised its long-term contracts to shortterm, coupled with better realisations in all product segments and some increase in volumes. Further, global supply-chain disruptions, inadequate availability of raw materials, shortage of containers and other challenges have thrown up opportunities and resulted in surging export demand.
- SRF's revenue grew 48% y/y to Rs124bn, supported by strong performances in all businesses. Management said that despite the Covid-19 pandemic, widespread supply bottlenecks and increasingly higher energy and raw material prices, it achieved robust operational and financial performances.

- Deepak Nitrite's revenue grew 56% y/y to Rs68bn, supported by higher realisations and a better productmix across product categories.
- Navin Fluorine's revenue grew 23% y/y to Rs14.5bn, supported by strong performance continuing in its highvalue business and mainly supported by higher volumes than pricing. Specialty chemicals and CRAMS was up 18% y/y. The past business (ref. gases and inorganic fluorides) grew 35% on account of better realisations.
- ❑ Atul's standalone revenue grew 42% to Rs49.3bn due to higher prices of inputs and finished goods and low sales in Q1 FY21 hit by the Covid-19 pandemic. Domestic sales increased 32% to Rs24.8bn while exports grew ~56% to Rs24.5bn. Revenue of the Lifescience Chemicals segment grew 29% to Rs14.5bn because of higher sale prices and volumes in cropprotection and pharma. Sales of performance chemicals and other chemicals rose ~49% to Rs34.8bn due to higher sales volume in three sub-segments.

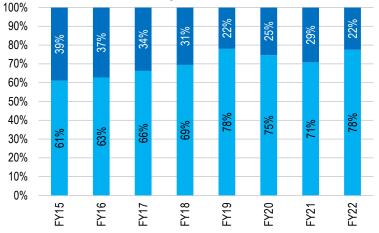
ANANDRATHI

Exports vs domestic sales

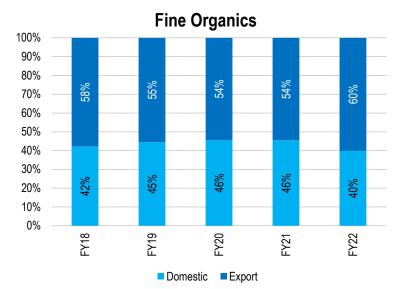


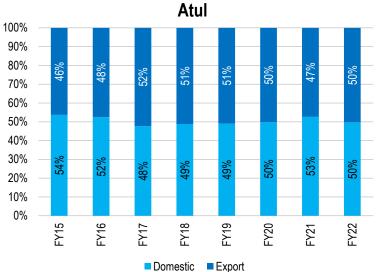


Deepak Nitrite



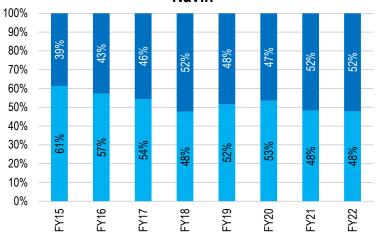
Domestic Export





Navin

Domestic Export



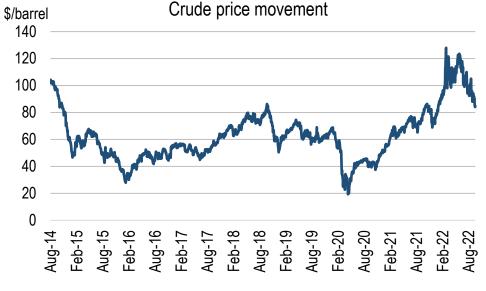
Domestic Export

Gross margins of companies with greater exposure to crude oil severely contracted

The Indian chemicals sector has been faced with challenges related to

- Non-availability of raw materials due to container shortages, logistic challenges, supply issues due to the Russo-Ukraine war, Covid'19triggered lockdowns and the global challenging environment generally. This resulted in the steep increase in raw material prices
- All these factors resulted in gross margins contracting due to price volatility and the lag in passing them on. The contractions averaged 453bps in FY22 to 46.2%, vs 50.8% in FY21.
- On analysing data, we found that, generally, companies' gross margins declined when revenue growth was driven by higher realisations.
- ❑ Vinati, GM down 1,265bps to 46.7%. Non-availability of major raw materials due to supply-chain constraints and China cutting production due to energy prices resulted in the steep rise in raw material prices.
- Deepak Nitrite, GM down 855bps to 39.5% The reported lower margins in Basic intermediates, Fine and Specialty Chemicals and phenolics were hit by logistics disruptions, high raw-material costs, an adverse macro-economic situation, temporary disruption in availability and higher utilities. Performance Product margins, however, expanded, supported by better pricing and favourable demand.
- ❑ Atul's GM down 552bps to 49% Prices of key raw materials were up 20% to 200% in FY22 on the non-availability of shipping containers, disrupting the global supply-chain and slashing the FY22 operating performance.
- SRF and Fine Organic maintained FY22 gross margins at 51.2% and 36.7% respectively (52.2% and 35.9% in FY21)

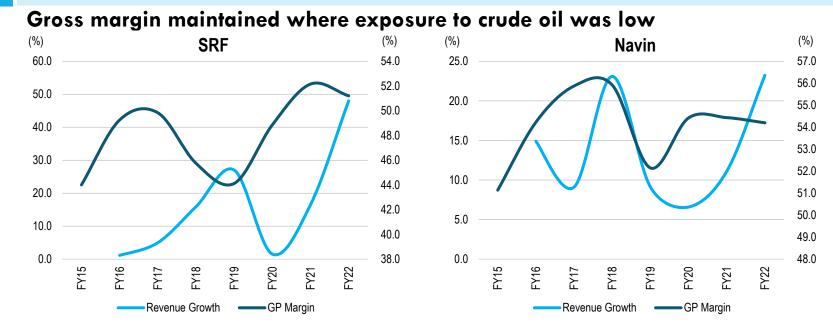
□ Navin maintained margins at 54.2% The rising share in revenue of the high-margin business and better demand in the legacy business after the weak FY21 helped the company maintain its 54.2% gross margin, vs 54.4% in FY21.

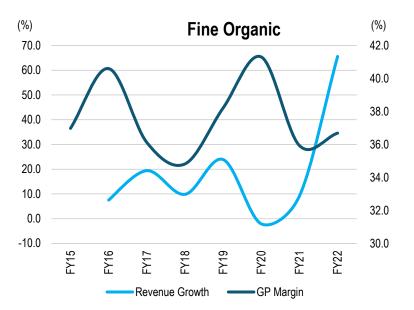


ANANDRATHI

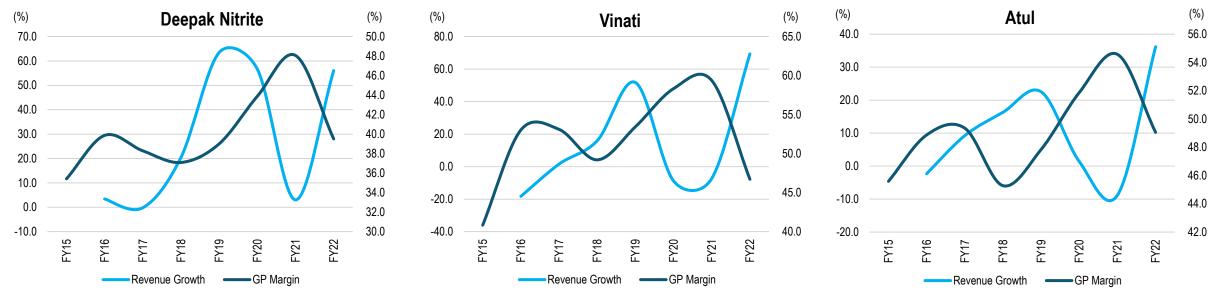
ANANDRATHI

Gross margins of companies with greater exposure to crude oil severely contracted





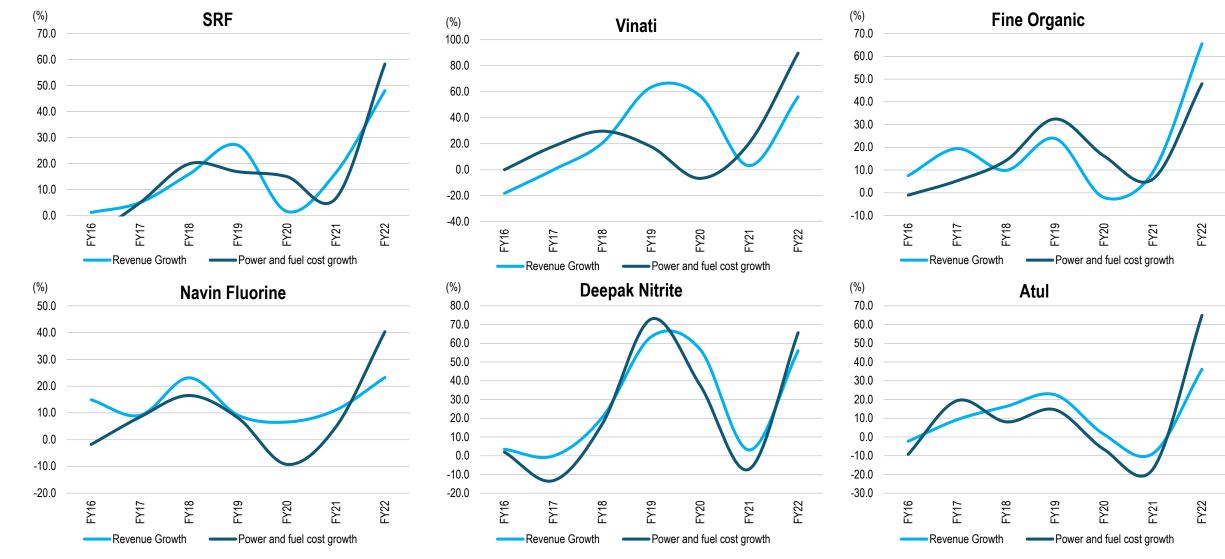
Sharp margin contraction with more exposure to crude oil



16

Economics of scale not playing out in power and fuel costs

On analysing power and fuel cost, we find that the percentage change in power and fuel costs was much higher than the change in revenue. Vinati's revenue grew 69% in FY22 while its power and fuel cost rose 90%. Similarly, Atul's revenue grew 36% in FY22 and its increase in power and fuel cost was 65%. For only Fine Organic it was lower than revenue growth.



Company

Source:-

ANANDRATHI

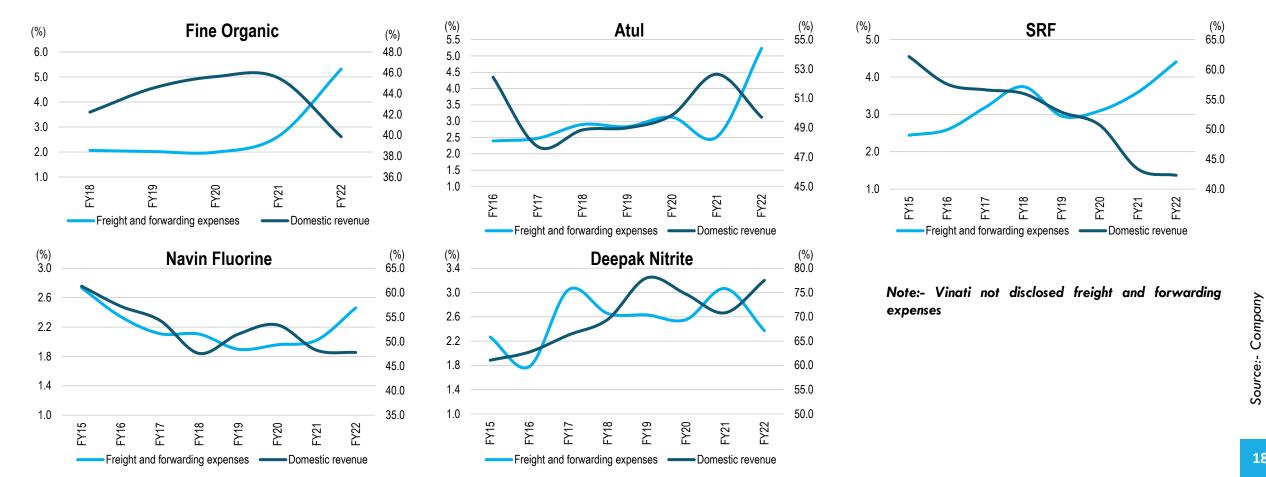
More exports resulted in more freight and forwarding expenses

As percent of sales, the average increase in freight and forwarding expenses was 99bps y/y to 3.3% due to challenges in shipping logistics, higher fuel costs and other issues. Further, the company whose business-mix change favored exports was faced with more challenges, resulting in higher freight and forwarding expenses.

Atul's export mix increased to 50%, from 47% in FY21. Its freight and forwarding expenses rose to 5.2%, vs 2.5% in FY21.

Fine Organic's export revenue share, too, grew to 60%, compared to 54% in FY21. Its freight and forwarding expenses rose 269bps y/y to 5.3%.

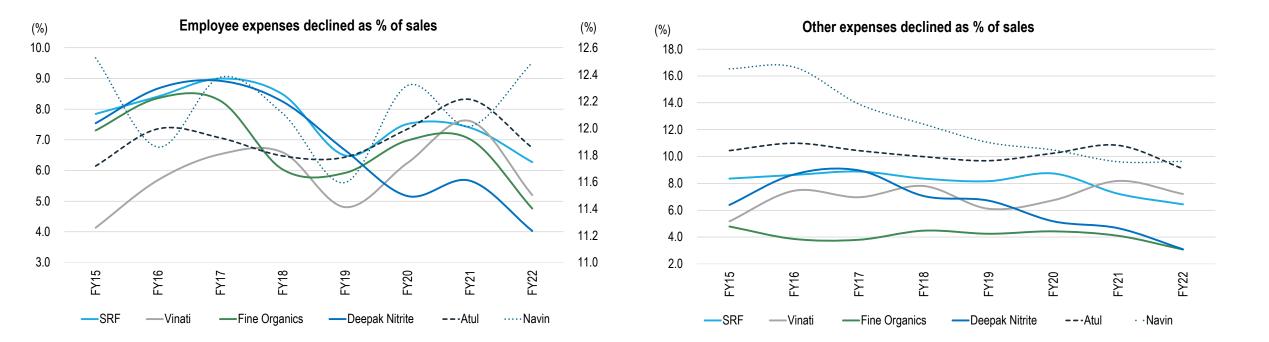
Deepak Nitrite's export mix declined to 22%, vs 29% a year ago. Its freight and forwarding expenses declined to 2.4%, vs 3.1% a year ago.



Source:-

Strong revenue growth helped better absorb employee costs and other expenses

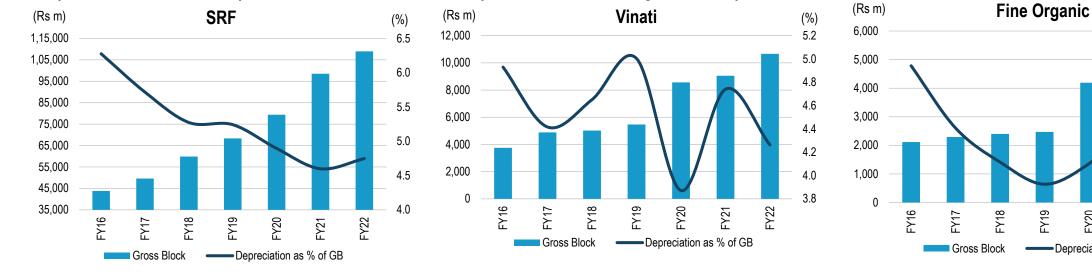
- As percent of sales, employee costs declined an average 142bps y/y to 6.6% due to strong revenue growth and better absorption of cost through greater capacity utilisation. Only Navin's employee costs rose to 12.5% (of sales) as it added employees in technology and design, R&D and business development for coming expansions.
- □ To save operating margins from higher RM and utility costs, companies worked on operating efficiencies and controlled operating expenses. As percent of sales other expenses contracted an average 101bps to 6.4%. The most reduction was seen in Atul Ltd (down 174bps to 9.1%) followed by Deepak Nitrite (157bps y/y to 3.1%), Fine Organic (102bps y/y to 3.1%), Vinati Organics (97bps y/y to 7.2%) and SRF (79bps y/y to 6.4%). Navin's other expenses, however, remained flat to 9.6%.

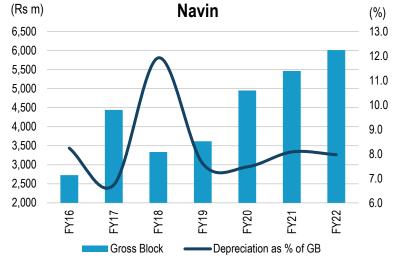


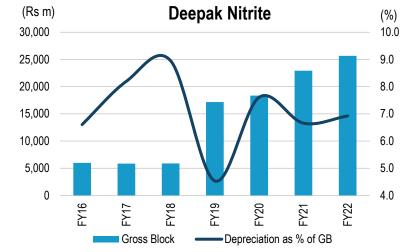
ANANDRATHI

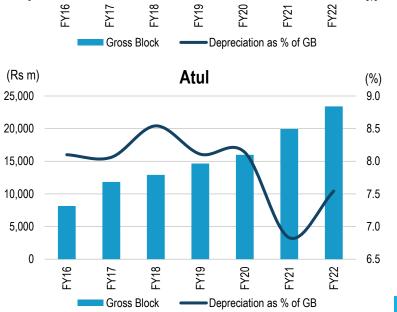
Deprecation was \sim 6-8% of gross block

The average depreciation rate (as percent of gross block) for the past eight years was 7.1%. The FY22 depreciation rate (as percent of gross block) was 6.5% vs 6.9% in FY21. There was no major change in the rate for SRF, Vinati, Navin and Deepak and Atul. For Fine Organic, however, it declined substantially to 7.7% (vs 10.5% in FY21) as the company used the written-down method of depreciation and capex capitalisation was on a pro-rata basis. All other companies use the straight-line depreciation method.









(%)

16.0

14.0

12.0

10.0

8.0

6.0

FY22

FY21

Company

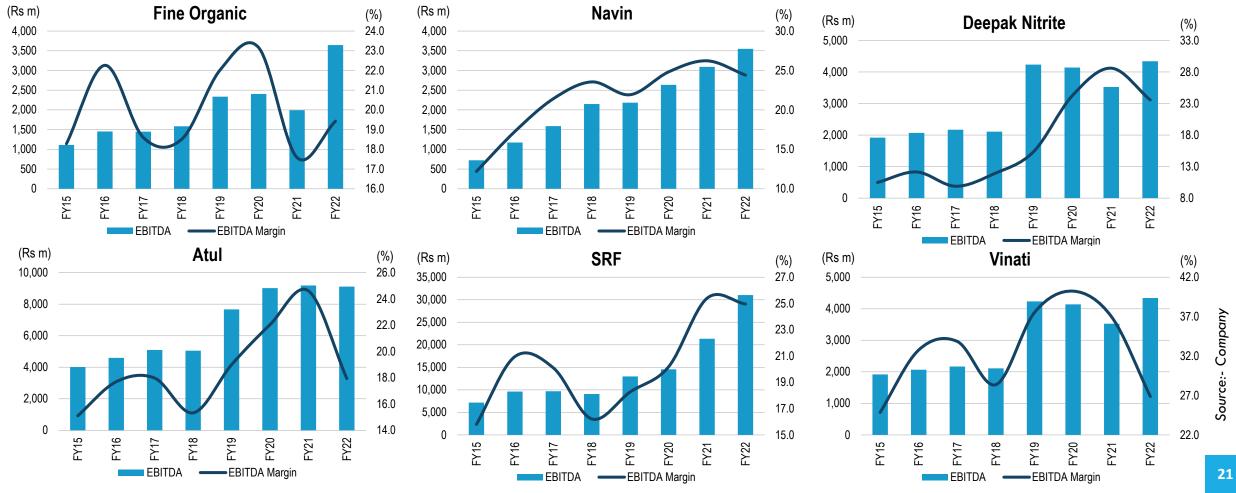
Source:-

Strong revenue growth not translating to operating performance

In the challenging business environment of FY22, chemicals companies' EBITDA margins contracted. Fine Organic improve its margin on the better absorption of employee cost, and higher gross margin, though partially hurt by higher operating expenses, mainly freight and forwarding expenses.

ANANDRATHI

Atul, Deepak Nitrite and Vinati's FY22 EBITDA margins contracted a severe 668bps, 503bps and 1,007bps to 17.9%, 23.6% and 26.9% respectively. Key reasons were lower gross margins, higher power & fuel expenses, utility and freight & forwarding expenses. The better absorption of employee costs on the good revenue partially supported their EBITDA margins. Navin's EBITDA margin contracted 181bps y/y to 24.4%, due to higher power & fuel and employee costs. SRF's EBITDA margin was retained at 25%, vs 25.4% a year ago.



Other income analysis

Particulars	FY15	FY16	FY17	FY18	FY19	FY20	FY21	EY22	Remarks
(Rs m)			1117		1112	1120	1121		Kellulk3
SRF	30	52	50	39	45	151	90	240	Increase in short-term deposits (3 months)
% of Cash and Investments	1.5	0.9	1.9	1.8	1.5	4.7	1.3	3.1	to Rs2bn, vs Rs1m in FY21
Vinati	39	49	33	76	61	95	21	140	Sharp rise on receiving interest on loans to
% of Cash and Investments	13.0	6.4	4.9	5.6	6.1	3.4	0.7	14.3	Veeral Additives Pvt. Ltd.
Fine Organic	2	12	10	5	17	80	68	61	No motorial change
% of Cash and Investments	6.6	2.9	5.7	3.7	1.5	3.8	2.6	2.6	No material change
Navin	52	55	56	156	15	33	176	157	, In absolute terms, no major change. Navin deployed FY21 cash to capex in
% of Cash and Investments	4.2	2.6	2.3	3.9	0.4	0.8	2.8	7.9	FY22 due to which in percent terms increased substantially
Deepak Nitrite	7	11	17	16	15	21	33	21	No material change in absolute terms; in percent, declined due to rise in short-term
% of Cash and Investments	21.3	1.2	1.3	2.0	5.7	6.8	1.5	0.4	investment to Rs4.4bn (Rs1.9bn in FY21)
Atul	28	99	124	153	118	253	745	238	~93% drop in dividend from equity
% of Cash and Investments	0.7	2.7	2.8	3.0	1.5	2.2	4.5	1.9	investments, to Rs42m, vs Rs570m in FY2

Note Other income includes only interest and dividend income.

Finance-cost analysis

Interest expenses	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Remarks
SRF	1,376	1,305	1,018	1,239	1,984	2,007	1,340	1,159	
% of debt	5.6	5.2	4.2	3.9	5.3	4.9	3.9	3.2	Capitalisation of interest expenses
Vinati	98	79	19	12	9	11	2	3	Not material; Short-term loan,
% of debt	14.9	18.6	80.4	8.0	25.6	315.2	10.5	1.4	payable on demand, taken in H2 FY22
Fine Organic	77	83	44	32	18	48	61	51	
% of debt	7.5	8.1	10.9	5.9	1.4	3.9	6.9	8.7	No major change
Navin	33	38	27	12	8	20	18	19	Long-term Rs1bn loan to be used for capex, taken later in FY22 and not
% of debt	5.4	7.3	14.6	9.4	20.0	8.8	7.3	1.6	shown in Sep'21 B/S. Interest expenses not reflected in the P&L due to capitalisation
Deepak Nitrite	380	397	341	451	832	1,149	742	340	Declined as long-term debt, repaid
% of debt	7.0	7.5	4.7	4.6	7.0	10.4	12.6	10.8	(Rs1.9bn in FY22, Rs5.2bn in FY21)
Atul	257	275	252	127	74	94	94	92	Long-term debt repaid.
% of debt	8.7	8.7	15.0	80.1	13.5	8.7	7.4	6.6	Short-term working-capital loan taken in H2 FY22

Profit growth in FY22, lower than revenue growth

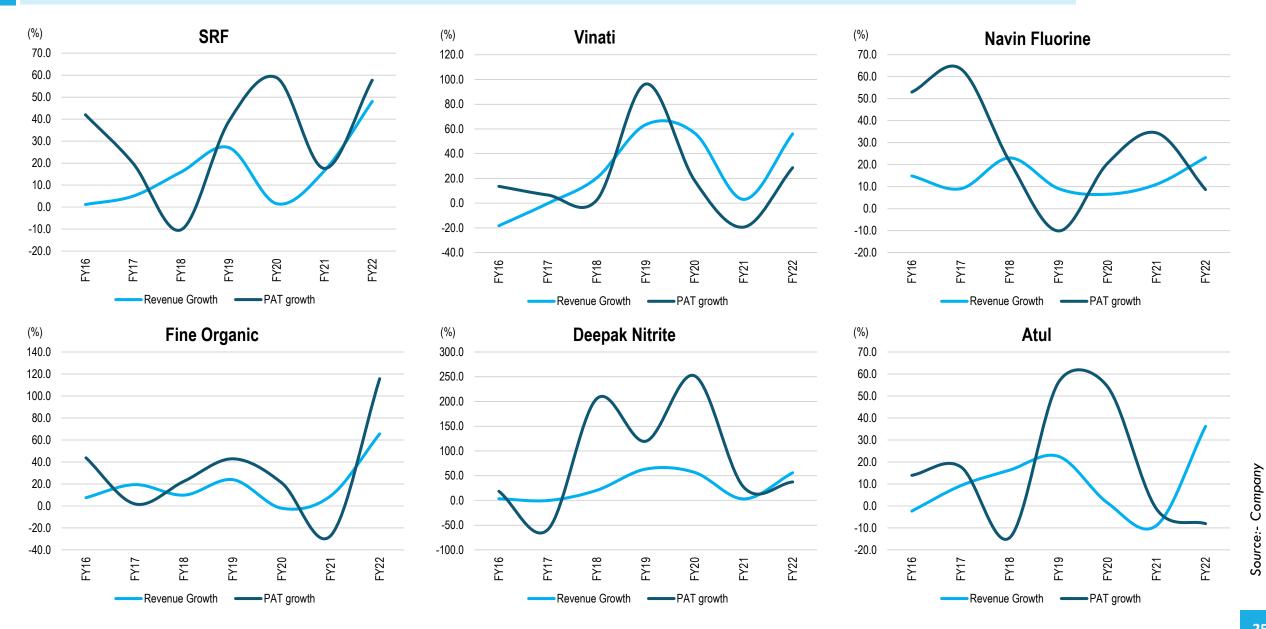
Profit growth (40% y/y) in the industry was lower than revenue growth (50% y/y) due to subdued operating performances.

- SRF Profit growth (58% y/y to Rs18.9bn) was higher than revenue growth (48% y/y to Rs124bn) as it had a Rs727m forex gain (Rs119m in FY21), maintained its EBITDA margin and reduced interest expenses (capitalising debt cost on capex), but was partially hurt by higher tax expenses. The net profit margin improved ~100bps to 15%.
- □ Vinati Profit growth (29% y/y to Rs3.5bn) was lower than revenue growth (69% y/y to Rs16bn) due to the lower gross margin (down 1,266bps y/y to 46.7%), a higher tax rate (22.8% vs 19.7% in FY21), but partially supported by higher other income (Rs137m interest income, including interest on inter-corporate deposits).
- □ Fine Organic PAT growth was exceptional, up 116% y/y to Rs1.2bn (revenue growth 66%) supported by the higher EBITDA margin (19.4% vs 17.6% in FY21), lower depreciation expenses down 15% y/y (diminishing-value method) and higher other income, up 93% y/y (on forex gains).

- ❑ Navin Fluorine Profit growth (9% y/y to Rs2.6bn) was lower than revenue growth (23% y/y to Rs14.5bn) due to the lower EBITDA margin as other expenses were high (mainly power & fuel cost), lower other income as it had Rs346m interest on an income-tax refund in FY21, just Rs53m in FY22, partially supported by a lower tax rate (23.6%, vs 31% in FY21)
- Deepak nitrite Profit was up 37% y/y to Rs10.6bn, against 56% revenue growth to Rs68bn, hurt by the lower gross margin (33.1%, vs 42% in FY21), higher depreciation expenses (gross block Rs25.7bn in FY22 vs Rs22.9bn in FY21), partially supported by higher other income (up 98% y/y) and lower interest expenses (down 54% y/y).
- ❑ Atul Despite 36% revenue growth, profit declined 8% y/y to Rs6bn, hurt by the lower gross margin (down 552bps y/y to 49.1%), higher depreciation (Rs5.6bn capex) and lower other income (drop in dividend and interest income).

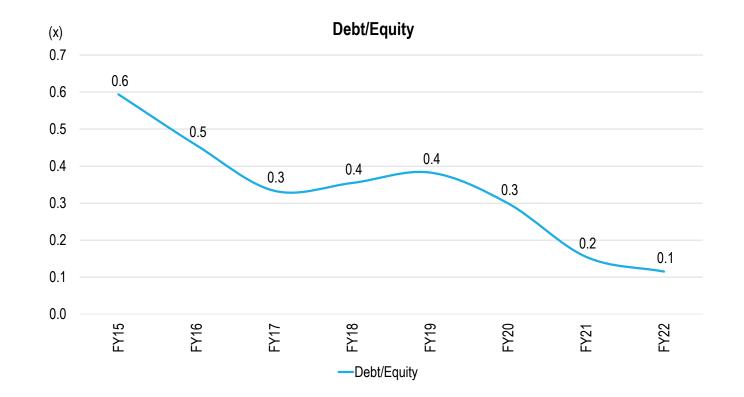
AnandRathi

Profit growth in FY22, lower than revenue growth



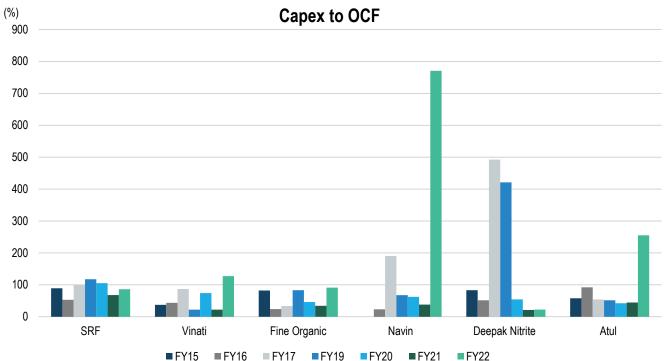
Debt structuring

- Generally, chemicals companies are debt free. In FY15, their debt-equity ratio averaged 0.6x, declining to 0.1x in FY22 despite huge capex over the years. Atul, Vinati and Navin are completely debt-free.
- Deepak Nitrite has been repaying debt for the last three years. It repaid Rs2.8bn in FY22 as major capex was completed over FY16-18.
- SRF's short-term debt rose to Rs18bn (Rs14.4bn in FY21) while Navin took Rs1bn debt to fund capex for long-term contracts. Over FY15-FY21, Navin's annual debt averaged Rs280m against Rs10.4bn net worth.



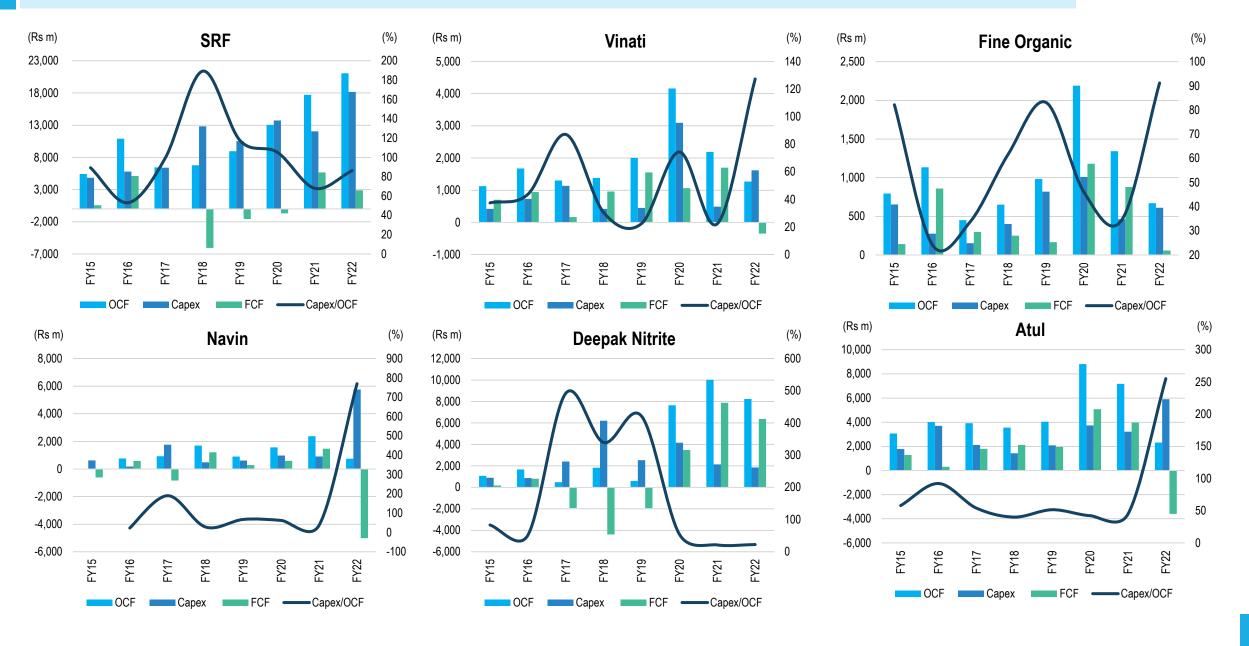
Capex-to-OCF has been over 100% in the last eight years

- Indian chemicals companies have been in an expansion mode for the last few years to become major global suppliers and reduce dependence. China is dominant in the industry. The shift has been seen in more exports from India in the last few years after factories in China have closed due to pollution issues, the Covid-19 outbreak and environment concerns.
- The Indian companies are focusing on exports, aiming to address local demand for import-substituted products. Deepak Nitrite entered phenolics a few years back and now has a near 50% market share in India.
- On analyzing last eight years' data, it can be seen that companies have invested ~108% of operating cash-flow in capex. This was the highest for Deepak Nitrite (186%) followed by Navin (169%) and SRF (101%). Navin's operating cash-flow to capex ratio increased considerably in FY22 as it invested in many long-term contracts.
- We expect this trend to continue as the Indian chemicals sector in a sweet spot, and recent challenges in China and shift of supplies would support Indian companies.



AnandRathi

Capex to OCF, over 100% in the last eight years



Ongoing capex plan

Vinati Organics

- Targeting Rs6bn capex in the next two years (ATBS expansion, new products in niche segments).
- On track to further expand niche portfolio of products that will enable import substitution.

Deepak Nitrite

Rs15bn capex, expected to be commissioned from FY23 in a phased manner in the next 1-2 years. Adding value-added products in phenol and acetone, adding chemistry platforms, investing in upstream and downstream projects. Working on new chemistries for expansion. Continuing to focus on launching value-added downstream products to substitute imports, primarily to capitalise on the more favourable demand situation.

Given States Fine Organic

 Capex amount not disclosed. In the process of acquiring land in Gujarat for greenfield expansion and focusing on expanding existing facilities for new and present product lines.

Navin Fluorine

Working on long-term contracts. Capex: Rs1.95bn in agro and pharma;Rs1.25 on agro-chemical fluoro-intermediates, Rs5.4bn to supply fluoro-specialty chemicals to capitalise in FY23 and FY24. R&D capabilities and deep fluorination expertise will continue to strengthen the newer-opportunities pipeline, while working on capacity expansion and enhancing its product portfolio in specialty chemicals. Aiming to explore overseas potassium fluoride demand. De-bottlenecking its hydrofluoric plants in FY23: Rs750m capex to de-bottleneck CGMP3. Further, it plans to set up a dedicated CGMP4 plant.

🛛 Atul

In an expansion phase tobackward integrate by adding chlorine and caustic soda.

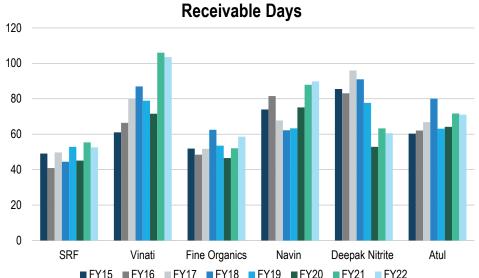
SRF

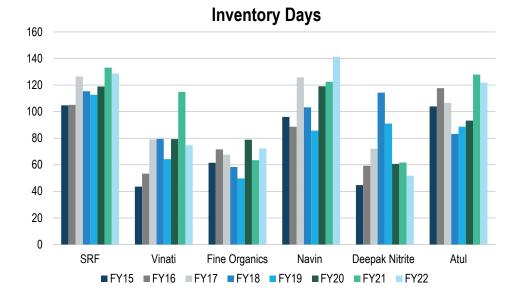
Many expansions in different business categories are ongoing; Intermediates for agrochemicals at Dahej (capex Rs1.15bn), pharma
products (capex Rs1.9bn) in the chemicals business, an aluminium-foil manufacturing facility in packaging films, capex Rs4.25bn; and
many more.

Cash-conversion cycle stretched due to fewer payable days

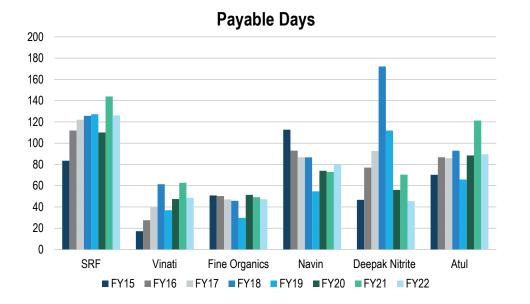
- Due to uncertain market conditions, supply-side issues, container unavailability and logistics issues, chemicals companies largely focused on maintaining higher stocks to supply customers timely. All companies' (except Vinati) cash-conversion cycles in FY22 lengthened on average by ~16 days mainly due to drops in payable days due to higher raw-material costs. Further, we believe that companies paid creditors earlier for better terms and timely supplies. Vinati was the exception. Its cash-conversion cycle shortened to 130 days (vs 158 in FY21) chiefly due to fewer inventory days. The companies' receivables days were maintainable because of their focus on efficient collection.
- SRF's cash-conversion cycle lengthened to 55 days vs 45 days in FY21 due to early payments to creditors (126 days in FY22 vs 144 in FY21).
- □ Vinati's cash-conversion cycle shortened to 130 days (from 158 in FY21 due to fewer inventory days (75 in FY22, vs 115 in FY21) partially hurt by fewer payable days (49 in FY22, vs 63 in FY21).
- □ Fine Organic's cash-conversion cycle lengthened 17 days to 84 days due to more inventory days (72, vs 63 in FY21) and receivables days (59, vs 52 in FY21).
- Deepak Nitrite's payable days declined substantially by 25 days, to 45. Further, its inventory days shortened by 10 days, to 52. Management says revenue growth and efficient inventory operations led to faster stock churning, which resulted in fewer inventory days
- Atul's cash-conversion cycle lengthened to 103 days (from 78 in FY21) chiefly due to a huge reduction in payables days (down 32, to 89). Receivables days were the similar (71, vs 72 in FY21) and inventory days declined to 122 (128 in FY21).
- Navin's cash-conversion cycle lengthened to 151 days (from 137 in FY21) chiefly due to more inventory days (up 19 to 141). Its payables days were 80, vs 73 in FY21.

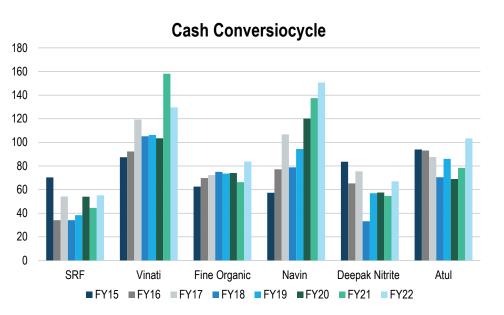
Cash-conversion cycle lengthened due to fewer payable days





■ FY15 ■ FY16 ■ FY17 ■ FY18 ■ FY19 ■ FY20 ■ FY21 ■ FY22



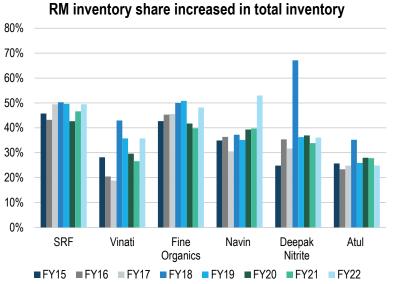


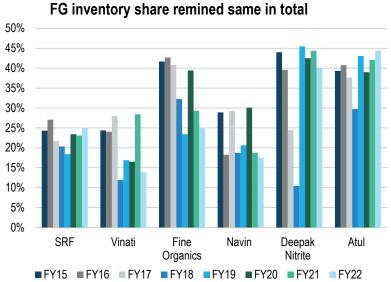
Inventory analysis

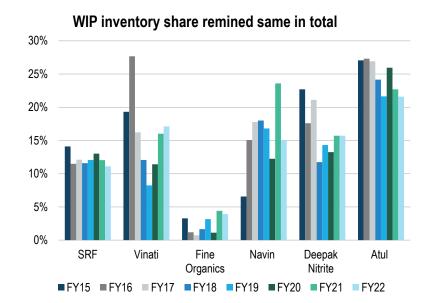
- After analyzing inventory break-ups, we find that companies maintained more raw-material stocks in FY22 than in previous years. Disruption in imports and logistics-related challenges impelled companies to focused more on maintaining high stocks to run production smoothly and serve customers on time.
- Fine Organic was the major beneficiary. It gained more business and market since it maintained higher raw-material stocks, which helped serve customers timely while competitors shuttered plants due to non-available raw materials. It maintained 48% of raw-material stocks (40% in FY21) to counter supply constraints (bans by Indonesia and Malaysia) and logistic challenges.
- Navin Fluorine. Raw material stocks as percent of total stocks rose to 53% (from 40% in FY21) and averaged 36% over FY15-21. (~68% of raw material required is imported as per past data (FY11-FY17)
- Vinati Organics. Raw material stocks increased to 36% of total stocks (from 27% in FY21) and averaged 29% over FY15-FY21.
- Companies such as Atul, Deepak Nitrite and SRF did not maintain high raw-material stocks.

ANANDRATHI

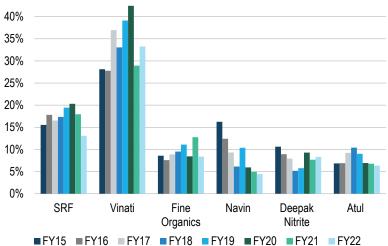
Inventory analysis



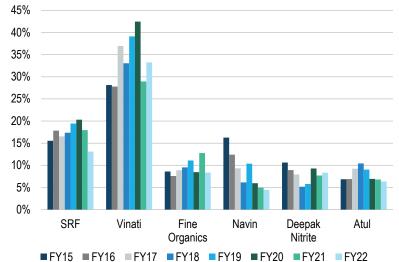




45%



Stock-in-trade share in total inventory



Provision for doubtful debts \sim 0.5-1.3% of receivables

SRF	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22	
Particulars				(Rs m	ı)			Remark	
Receivables	6,107	5,145	6,569	6,807	10,288	8,911	12,746	17,925 SRF's provision for doubtful debts fell s	substantially to an
Allowance for Expected Credit Loss	103	172	152	158	25	36	50	35 average of 0.3% over FY19-22, a	igainst a 2.4%
% of Receivables	1.7	3.3	2.3	2.3	0.2	0.4	0.4	0.2 average over FY15-1	3.

Vinati	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22
Particulars				(Rs m)				Remark
Receivables		1,148	1,405	1,771	2,440	2,018	2,772	4,584 In the past, Vinati made no allowance for bad and
Allowance for Expected Credit Loss		NA	NA	NA	NA	NA	NA	11 doubt full debts. In FY22, it made a Rs11m provision for
% of Receivables		0.0	0.0	0.0	0.0	0.0	0.0	this, 0.2% of receivables

Fine Organic	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22
Particulars				(Rs m)				Remark
Receivables			1,104	1,458	1,556	1,323	1,616	3,014 Fine Organic averaged 1.1% of total receivables
Allowance for Expected Credit Loss			20	21	12	16	14	10 charged as allowances for expected credit risk. It was
% of Receivables			1.8	1.4	0.8	1.2	0.8	the highest 1.8% in FY17 declining to 0.3% in FY22.

Provision for doubtful debts \sim 0.5-1.3% of receivables

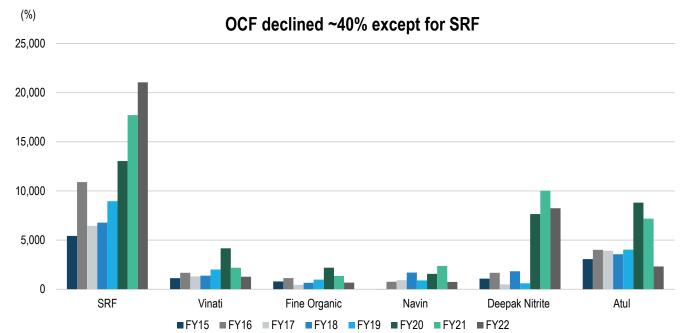
Navin Fluorine	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22	
Particulars				(Rs m)				Remark
Receivables	1,199	1,519	1,376	1,556	1,727	2,185	2,841	3,577	Navin's provision for bad and doubtful debts was less
Allowance for Expected Credit Loss	3	9	8	14	13	19	20	21	than 1% of receivables. It was 0.7% over the last eight
% of Receivables	0.2	0.6	0.6	0.9	0.8	0.9	0.7	0.6	years. In FY22, it was 0.6% vs 0.7% a year ago

Deepak Nitrite	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22
Particulars				(Rs m)			Remark
Receivables	3,110	3,125	3,603	4,118	5,750	6,127	7,563	11,291 Deepak Nitrite's provision for bad and doubtful debt
Allowance for Expected Credit Loss	23	44	33	66	72	146	315	has been constantly increasing in the last eight years. was 0.7% of receivables in FY15, increasing to 4.2%
% of Receivables	0.7	1.4	0.9	1.6	1.3	2.4	4.2	3.2 FY21 and 3.2% in FY22.

Atul	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22
Particulars				(Rs m)			Remark
Receivables	4,392	4,414	5,190	7,234	6,985	7,197	7,332	9,890 Atul's provision for bad and doubtful debts increased in
Allowance for Expected Credit Loss	27	38	32	26	76	103	122	127 the last four years to average 1.4% of receivables. It
% of Receivables	0.6	0.9	0.6	0.4	1.1	1.4	1.7	was ~0.6% over FY15-18. 1.3

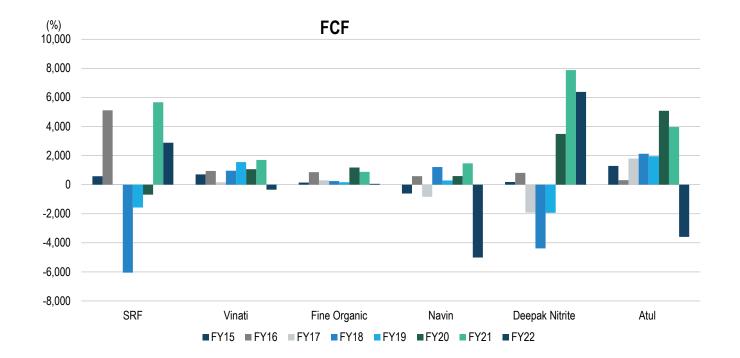
OCF declined \sim 40% y/y due to higher working capital

- On analysis of operating cash-flows, all companies' OCF declined ~40% y/y due to more working capital invested and subdued operating performances on higher raw material, power, fuel, utility and logistic expenses. SRF, however, increased its OCF due to better working-capital management and a sustainable operating performance
- Over FY15-FY22, chemicals companies' average capex-to-OCF was 108%, the highest for Deepak Nitrite (186%; major Rs11bn capex for the phenol and acetone plant over FY17-19) and 101% for SRF (the last eight years' annual average capex of Rs10bn). Navin did an average Rs800m capex yearly over FY15-FY21, which rose substantially in FY22 as it invested Rs5.8bn on tong-term contracts. Similarly, Atul's average capex-to-OCF was 55% over FY15-FY21 (average annual capex of Rs2.6bn), which rose a substantial 255% in FY22 (capex Rs5.9bn). Management talked of Rs15bn capex in the next 2-3 years on products, backward integration and expansion. All chemicals companies generated positive FCF in FY22, except Atul, Vinati and Navin as clarified above.
- The chemicals companies generally have investments (current and non-current, MFs, securities). To fund working capital and capex, Atul and Navin sold their investments of Rs4bn and Rs3.8bn respectively in FY22. Deepak Nitrite spent Rs2.4bn on current investments (MFs) as capex was low and it targeted major capex on downstream products in the next two years.



FCF generated despite huge capex

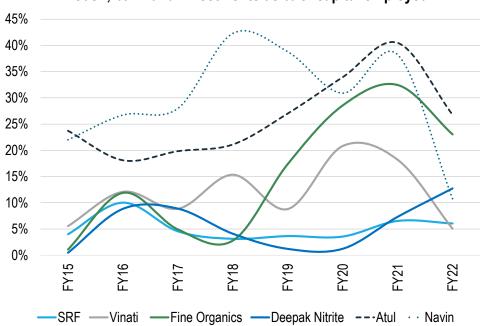
- Over the last eight years, chemicals companies expanded their gross block 2.9x, Atul the most (4.6x), followed by Deepak Nitrie (3.1x) and Fine Organic (2.9x). Over FY15-21, Atul generated free cash-flow averaging Rs2.4bn. Its FCF was negative in FY22 as OCF declined due to higher working capital and capex of Rs5.9bn.
- Deepak Nitrite generated positive FCF in the last few years except FY17-19 as it added phenol and acetone capacity (greenfield expansions).
- Over the last eight years, Fine Organic generated positive free cash-flows on average annual capex of Rs548m. It is coming up with greenfield capex in Gujarat for future expansions to cater to growing opportunities.
- □ Vinati's FCF was negative only in FY22 due to higher capex of Rs1.6bn against its annual average capex of Rs0.9bn over FY15-21. Further, higher working capital hurt OCF in FY22.
- Despite investing Rs30bn capex in the last two years, SRF generated positive FCF on the back of its strong operating performance and better working-capital management. Due to huge capex of Rs5.8bn in FY22, Navin reported negative FCF of Rs5bn due to higher working capital.



Cash, bank and investment at 16% of capital employed

In FY15, the chemicals companies maintained 9% of capital employed in cash, bank and investments. This was the highest for Navin and Atul as capex was low. Despite strong capex in the last 3-4 years, this percentage improved, coming at 24% in FY21 (from 15% in FY18) supported by strong profitability. In FY22, it declined to 14% due to lower profits, higher capex and working capital investments.

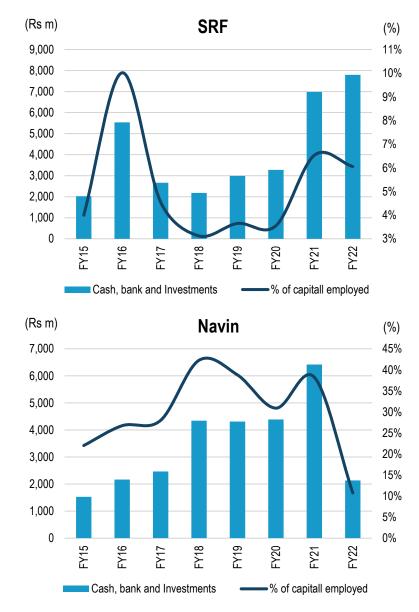
- Deepak Nitrite Cash, bank and investments as percent of capital employed was just 0.5% in FY15, rising to 13% in FY22 on the strong execution of the phenol/ acetone project and a 54% CAGR in profits.
- Navin has a strong balance sheet. Its cash, bank and investments as percent of capital employed averaged 30% over FY15-FY22, plunging steeply to 11% in FY22, the lowest in the last eight years as it invested Rs5bn on capex, largely funded by internal accruals.
- Atul's cash, bank and investment as percent of capital employed averaged 26% over FY15-FY22. It was the highest (40%) in FY21 and dropped to 27% due to funding capex of Rs5.9bn via internal accruals and to lower profit.
- □ Fine Organic's cash, bank and investments as percent of capital employed improved to 32% in FY21 against only 1% in FY15. In FY22, it declined 23% due to higher working capital.
- □ SRF is in the capex mode over last few years. Its gross block rose 2.5x in FY22 over FY16. Its cash, bank and investments as percent of capital employed averaged 5% over FY15-FY22 and 6% in FY22.
- □ Vinati's cash, bank and investments as percent of capital employed averaged 12% over FY15-FY22. It declined to 5% in FY22 due to higher capex and working capital.

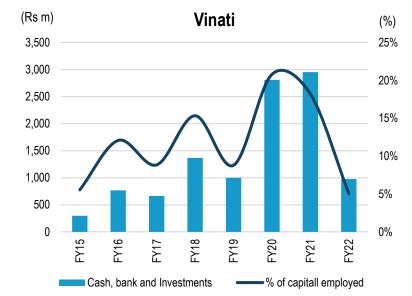


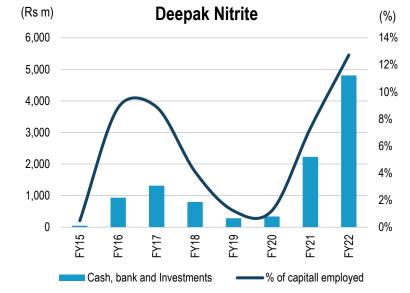
Cash, bank and investments as % of capital employed

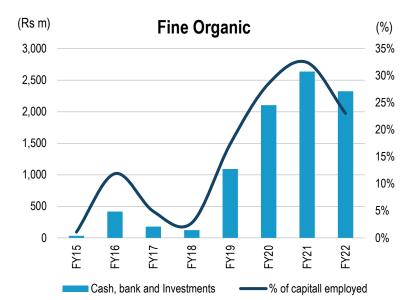
AnandRathi

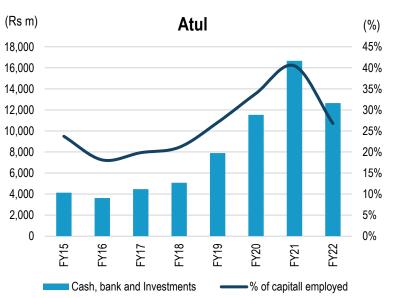
Cash, bank and investment: 16% of capital employed





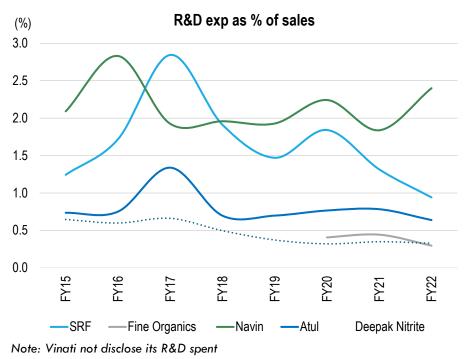






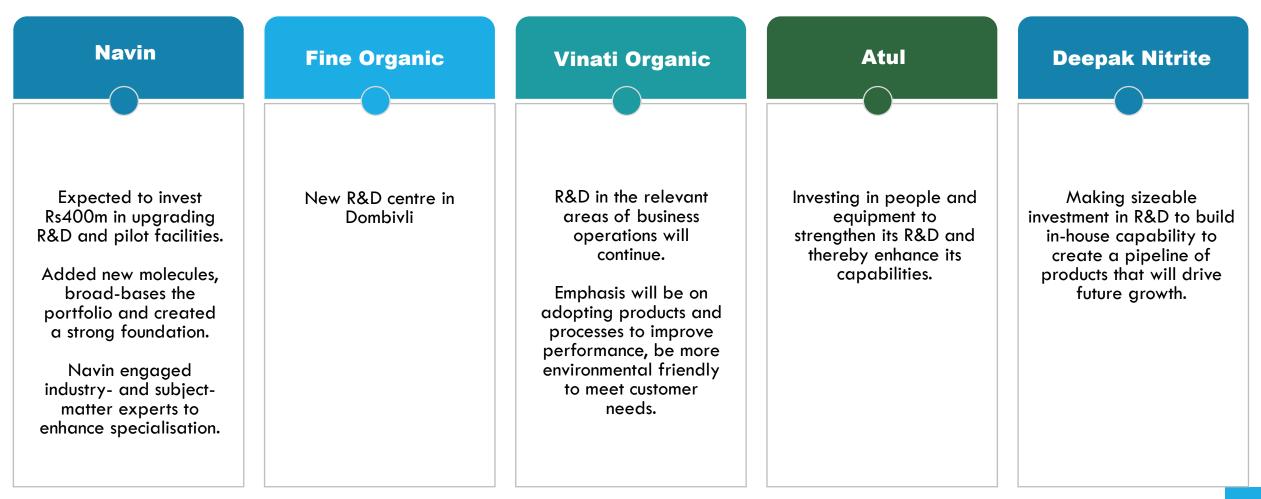
R&D continued to be focused on

- Indian chemicals companies are investing more on R&D to develop their niche in the market. They are also trying to develop "green" products and chemistries.
- Navin invested 2.4% of annual revenue in R&D (capital + recurring) in FY22. Its R&D spend averaged 2.2% over FY15-22. SRF's averaged 1.7% (0.9% in FY22). Compared to them, Fine Organic, Deepak Nitrite and Atul are investing an average ~0.4-1% of annual sales on R&D. Of the six companies, R&D spend averaged an 12% CAGR over FY15-FY22 to Rs2.1bn, compared to Rs1bn in FY15.
- Navin Fluorine invested in cutting-edge R&D, graduating towards sectoral leadership. A deep research-based culture translated to timely development of products cum grades, superior customer value, high product quality and robust product characteristics.
- SRF. Over two decades, Chemical technology dedicated for R&D group enabled growth in fluorinated molecules. Now it is increasingly engaged in developing complex non-fluorinated intermediates. This is crucial to keep enhancing CTG's capabilities and support systems with rising complexity in developing products and reducing timelines for delivery to market.
- Vinati. R&D on new projects and new products are strong business drivers for Vinati. It is focusing on expanding capacities and strengthening its R&D pipeline with better synergies to take advantage of growing opportunities in global markets. On average, the R&D team is working on developing of 10-12 products, most of them niche with unique chemistries.
- Fine Organic. Focusing on R&D and innovation capabilities. FINE's green additives have been
 effectively replacing potentially hazardous chemicals in a wide range of industries such as plastics,
 packaging, foods, cosmetics, rubbers and coatings, without compromising on performance.
- Atul. Focused R&D efforts on process improvement of existing products, recovery of products from waste, and developing products and formulations. The company increased yield of six products, decreased consumption of raw materials and solvents in eight products, recovered two value-added products from waste and introduced 24 products in the market.
- Deepak Nitrite is making sizeable investments in R&D to build in-house ability to create a pipeline of products for future growth. Its R&D centre has filed applications for 36 patents cumulatively and develops innovative and advanced intermediates that drive portfolio expansion.



Outlook on R&D

SRF's Aspirations 2030 emphasizes the company's commitment to innovation. The company is engaged in the development of complex non-fluorinated intermediates.



AnandRathi

- **Fine Organic** pays the highest share of profit to its directors and KMP compared to other companies.
 - It gave $\sim 14.7\%$ of profit as remuneration in the last six years and 6.7% in FY22 vs 12% in FY21.
- Deepak Nitrite paid an average 10.8% of profit as remuneration to directors and KMP in the last eight years.
 - For the last three years this figure has been declining regularly. It was 4.2% in FY20, declined to 2.1% in FY21 and then to 1.6% in FY22.
- □ Navin's average payment to directors and KMP as percent of PAT was 8.4%.
 - This was the highest in FY15 at 9.2%, falling to 6.3% in FY22.
- **SRF** paid an average 4.8% of profit as remuneration to directors and KMP in the last eight years.
 - It consistently decreased from 6.3% in FY15 to 3.1% in FY22
- Atul's payment to directors and KMPs was 3.4% in FY22, vs an average 3.6% over the last eight years.
- □ Vinati Organics paid an average 2.2% of profit as remuneration to directors and KMP in the last eight years.
 - It was $\sim 2.7\%$ average over FY15-FY19, which declined to average 1.7% over FY19-FY22.

Name	Designation	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22
Vinati					(Rs m	ı)			
Vinod Saraf	Chairman	9.5	10.5	11.5	12.6	13.9	15.2	16.7	18.4
Vinati Saraf Mutreja	Managing Director and CEO	7.2	8.0	8.7	9.6	10.5	11.5	12.6	13.7
Jayesh Ashar	СОО	5.0	5.9	6.8	7.4	8.3	9.2	10.3	7.8
Viral Saraf Mittal	Director, CSR	4.1	4.5	4.9	5.4	5.9	6.5	7.1	11.7
N. K. Goyal	CFO	4.3	4.9	5.6	5.8	6.4	7.2	7.9	9.1
Total Remuneration		30.1	33.7	37.5	40.8	45.0	49.6	54.6	60.7
Profit after tax		1,158	1,316	1,403	1,439	2,825	3,338	2,693	3,466
Remuneration, % of PA	т	2.6	2.6	2.7	2.8	1.6	1.5	2.0	1.8
Name	Designation	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22

Name	Designation	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22
Fine Organic					(Rs m	ı)			
Prakash Damodar Kamat	Chairman			74.2	23.7	22.8	26.4	28.8	35.0
Mukesh Maganlal Shah	Managing Director			60.7	25.6	22.8	26.4	28.8	35.0
Jayen Ramesh Shah	Executive Director & CEO			74.2	23.7	22.8	26.4	28.8	35.0
Tushar Ramesh Shah	Executive Director & CFO			74.2	23.7	22.8	26.4	28.8	35.0
Bimal Mukesh Shah	Executive Director			33.3	19.3	22.8	26.4	28.8	35.0
Total Remuneration				316.7	116.0	114.0	132.0	144.0	175.0
Profit after tax				779	953	1,362	1,648	1,203	2,596
Remuneration, % of PAT				40.7	12.2	8.4	8.0	12.0	6.7

Name	Designation	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22
Navin					(Rs	m)			
Vishad P. Mafatlal	Chairman wef Aug'16	0.7	0.9	26.9	56.5	58.8	68.4	86.2	90.8
Hrishikesh A. Mafatlal	Chairman up to Aug'16	16.7	24.7	23.6					
Shekhar S. Khanolkar	MD up to Oct'18	20.0	28.1	34.7	66.0	45.3			
Radhesh R. Welling	MD wef Dec'18				-	16.8	54.2	71.7	74.6
Atul K. Srivastava	Director uo to Apr'15	12.9	16.4						
Sitendu Nagchaudhuri	CFO up to Jun'18		7.0	12.6	14.7	5.8			
Ketan Sablok	CFO wef Jun'18					7.6	10.6	NA	NA
Basant Kumar Bansal	CFO wef Nov'21							NA	NA
Total Remuneration		50.2	77.0	97.8	137.3	134.4	133.3	157.8	165.4
Profit after tax (Adj.)		546	835	1,366	1,659	1,491	1,800	2,420	2,631
Remuneration, % of PAT		9.2	9.2	7.2	8.3	9.0	7.4	6.5	6.3

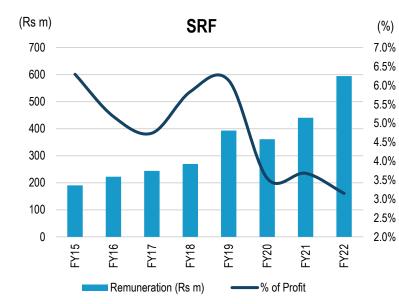
Name	Designation	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22
Deepak Nitrite					(Rs	; m)			
Deepak C. Mehta	Chairman & MD	26.8	34.3	33.2	50.6	90.7	139.2	69.4	69.9
Ajay C Mehta	MD up to Dec'17	24.8	33.7	9.8	7.3	-	-	-	-
Maulik D. Mehta	ED & CEO wef Jun'20			7.5	10.3	17.1	15.3	26.0	32.9
Meghav D Mehta*	Executive Director	1.2	2.6	3.0	5.4	5.5	8.2	15.4	19.5
Sanjay Upadhyay	CFO	12.6	14.6	16.3	20.6	29.4	31.3	35.9	43.2
Umesh Asaikar	CEO up to May'20	30.0	36.8	38.8	47.1	58.9	64.7	12.9	-
Total Remuneration		95.4	121.9	108.6	141.2	201.6	258.7	159.6	165.5
Profit after tax (Adj.)		529	627	963	790	1,737	6,110	7,758	10,666
Remuneration, % of PAT		18.1	19.4	11.3	17.9	11.6	4.2	2.1	1.6

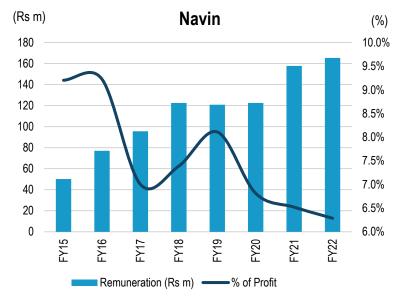
* Payment for services rendered over FY15-FY20

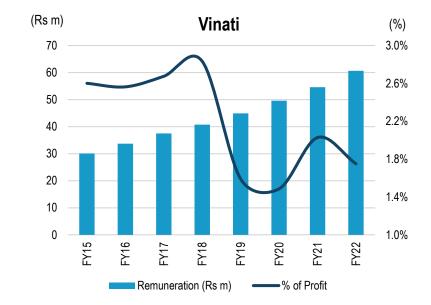
Name	Designation	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22
SRF									(Rs m)
Arun Bharat Ram	Chairman	44.8	46.3	48.4	50.4	55.3	58.3	76.1	127.6
Ashish Bharat Ram	MD	37.6	41.0	47.7	51.1	59.1	69.4	93.8	127.6
Kartik Bharat Ram	Joint MD	36.0	38.1	47.3	50.3	58.4	68.5	92.1	124.8
Anurag Jain	President & CEO (Specialty Chemicals and CTG)	11.8	15.0	18.7	22.8	60.2	40.9	44.5	56.1
Prashant Yada∨	President & CEO (Fluorochemicals and Technical Textile)	11.6	15.0	18.6	22.5	59.8	40.4	44.0	56.6
Prashant Mehra	President & CEO (Packaging Films, CF & LF)	11.8	15.0	18.7	22.6	60.1	41.6	45.2	56.8
Sanjay Chatrath	President and CEO – TTB(wef Oct'17)				14.1	18.8	25.2	27.6	24.3
Sushil Kapoor	President & CEO (Technical Textiles) (up to Sep'17)	21.3	23.3	24.9	19.3				
Rajendra Prasad	CFO up to Mar'16	15.9	17.8						
Anoop k Joshi	CFO up to Mar'19		11.2	16.2	16.5	21.8			
Rahul Jain	CFO wef Apr'19						17.2	17.6	21.2
Total Remuneration		190.7	225.3	240.5	269.6	393.5	361.5	440.9	595.0
Profit after tax		3,028	4,299	5,150	4,617	6,416	10,191	11,979	18,889
Remuneration, % of PAT		6.3	5.2	4.7	5.8	6.1	3.5	3.7	3.1

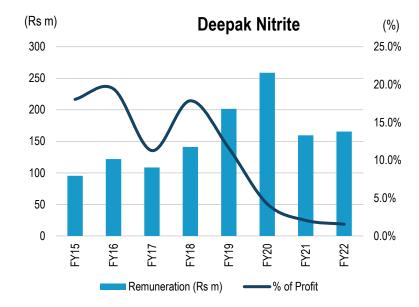
Name	Designation	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22
Atul					(Rs n	n)			
S S Lalbhai	Chairman & MD	49.8	65.6	70.7	70.4	100.9	120.4	140.0	136.2
S A Lalbhai	MD	17.4	20.6	22.6	22.6	24.9	26.9	27.7	29.8
B N Mohanan	Whole-time Director and President – Utility and services	8.6	10.5	11.8	11.1	13.0	15.3	15.5	18.4
S R Nammalvar	Whole-time Director	4.8							
T R Gopi Kannan	Whole-time Director and CFO	4.7	14.1	14.6	13.9	16.3	21.1	19.8	21.6
Total Remuneration		85.2	110.8	119.7	118.1	155.1	183.8	203.1	206.0
Profit after tax		2,407	2,742	3,230	2,765	4,322	6,665	6,571	6,043
Remuneration, % of PA	NT	3.5	4.0	3.7	4.3	3.6	2.8	3.1	3.4

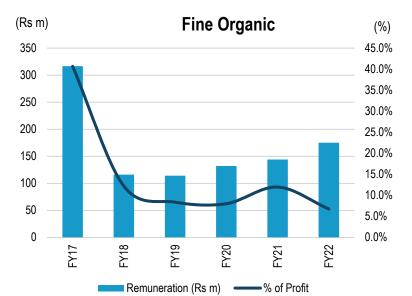
ANANDRATHI

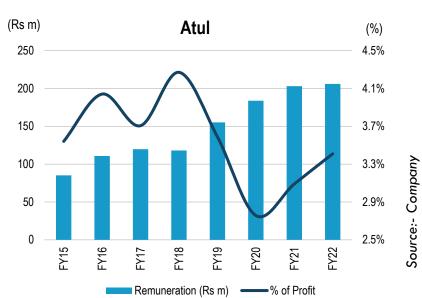










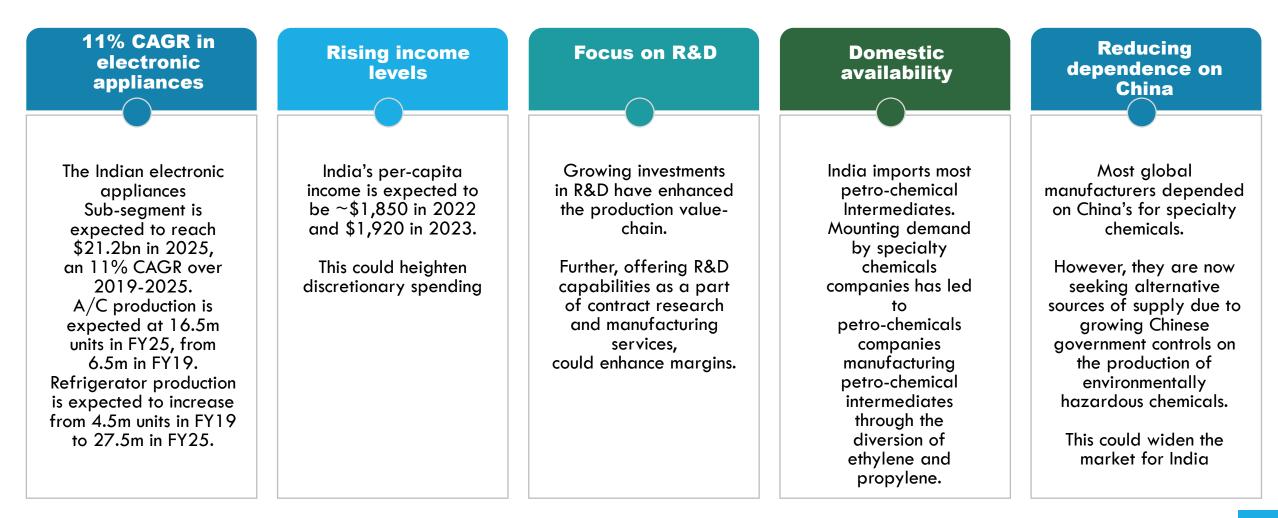


Navin's MDA

Key highlights

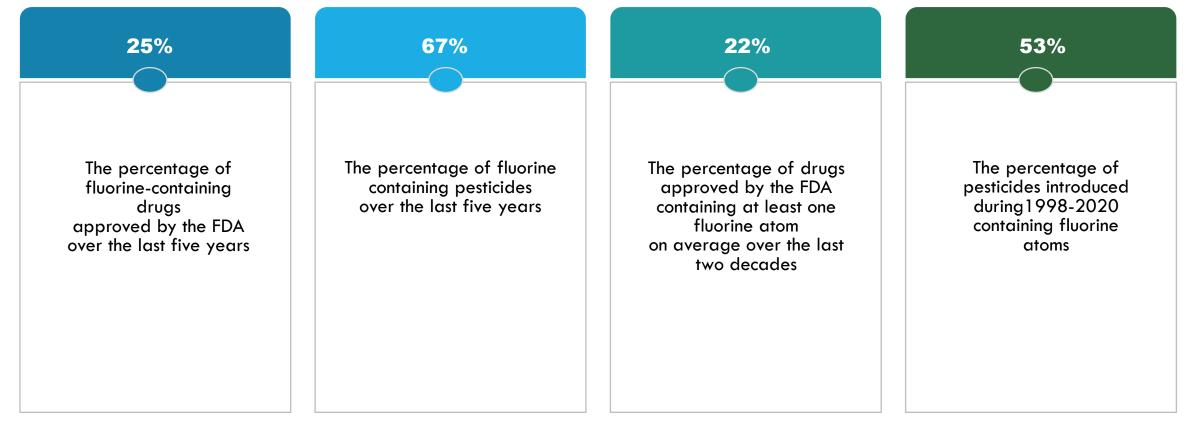
The Indian Specialty Chemicals sector would double by 2025

By 2025, it is expected to double to \$64bn, recording a 12.4% CAGR over CY20-25, attributed to global players focusing on India as an alternative to China, where the government is tightening regulatory controls due to environmental hazards



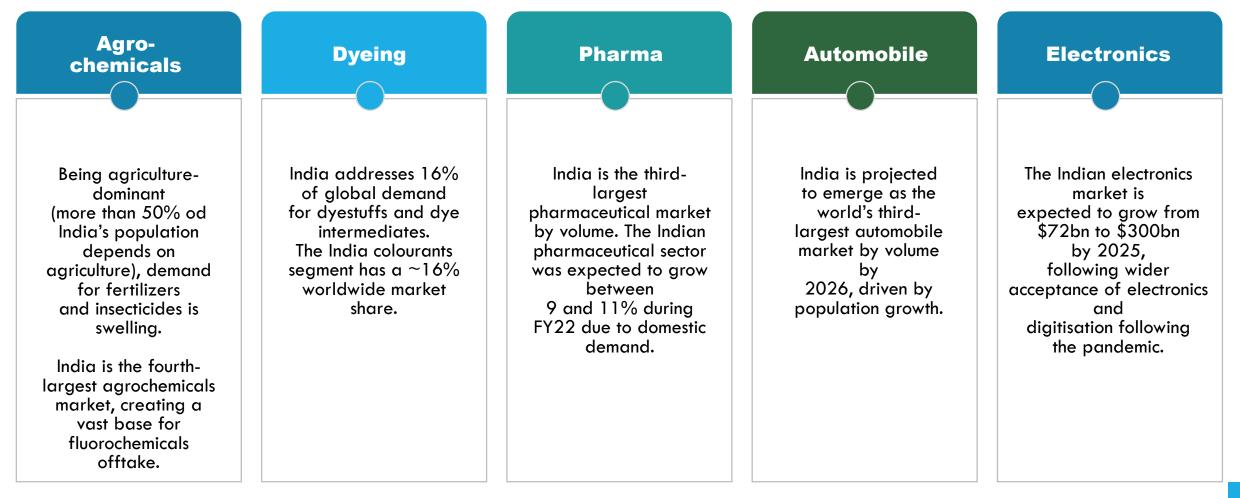
Fluorination emerging as key chemistry in pharma and agro industries

- The global fluoro-chemicals sub-segment is expected to register a 5.2% CAGR to \$25.1bn between now and 2026. Fluorinated organic compounds are of interest in the pharmaceutical and agrochemical sectors. The application of fluoro organic compounds can be attributed to the unique metabolic stability, lipophilicity and binding affinity offered by them.
- The global fluoro-elastomer market is valued at \$1.8bn by 2027, growing at a CAGR of 3.7% (2020-27), driven by increasing use of sealing applications. The global fluoro-carbon chemicals market is expected to grow at 7.4% CAGR between 2021 and 2027, owing to the growing demand for electronic appliances.
- The market size of the therapies in which fluorine is used is expected to clock a 5% CAGR, from \$423bn in CY20 to \$535bn in CY25.



The Indian fluoro-chemicals sub-segment

- Fluoro-chemicals are an essential ingredient in a number of sectors such as agrochemicals, dyeing, automotives and electronics, among others. Demand growth in any of these could strengthen demand for fluorochemicals.
- In 2020, around a third of India was living in cities. By 2031, 3/4th of India's national income could come from cities, heightening demand for better infrastructure and electronic appliances, strengthening in turn the market for fluorochemicals.



Navin Fluorine — Outlook for each category

Navin is enthused about the quality and quantum of growth opportunities in the pipeline that would translate to profitable growth in the foreseeable future. It is focusing on three value chains and building blocks, of which two are scaling up well. It identified two building blocks of substances that it expects to grow. These building blocks offer opportunities in its own critical value-chains, offering customers clear risk mitigation. Navin is working on new chemistry and engineering technologies which can be widely applied across businesses, reinforcing its technology leadership.

Specialty Chemicals	CRAMS	Refrigerants	Inorganic Fluorides	Navin Fluorine Advanced Sciences (subsidiary)
Developing a product on the fluoropyridine platform. Expected to emerge as the first such producer in India. Launch by end-2023 ~20% revenue growth in FY23, catalyzed by its new Dahej site commissioned in Jul'22	Intends to invest in advanced systems and processes to facilitate expansion. Aspires to strengthen project management and technical capabilities. CRAMS business expected to grow ~25% in FY23	Engaged in getting its R22PTFE samples approved, following which a large market could emerge from buyers solely dependent on China.	Seeks to explore potassium fluoride demand from overseas and de- bottleneck its hydrofluoric plants in FY23. Widen its customer profile especially from the solar and steel segments.	New process plant at Dahej expected to be commissioned in FY23 MPP at Dahej for fluoro specialty products is ongoing Expects attractive revenue growth and a higher margin arising from the expansion, strengthening business viability.

Vinati's MDA

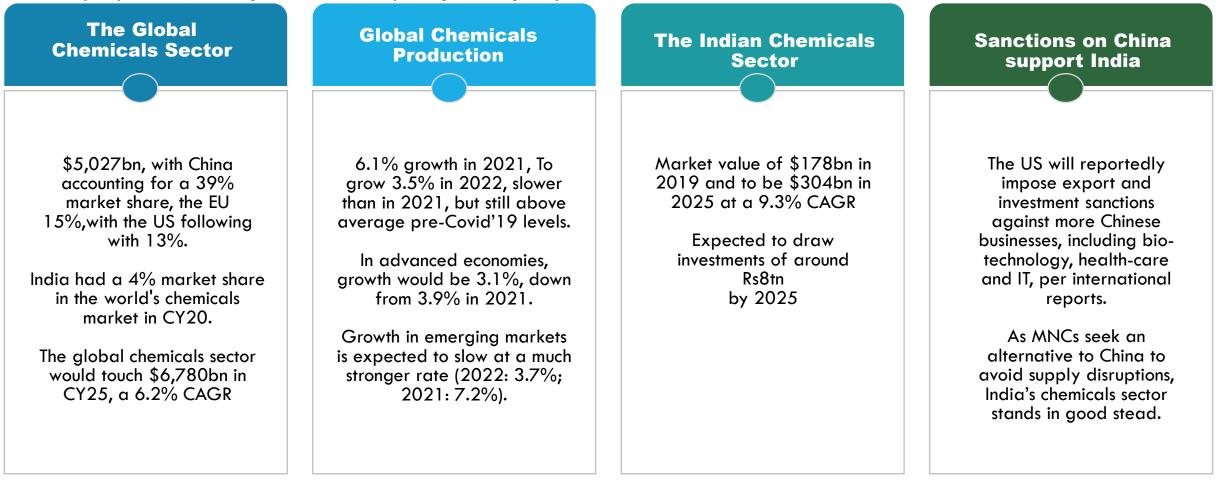
Key highlights

ANANDRATHI

Global and Indian Chemical Industry

Specialty chemicals are particular products which provide a wide variety of effects and which many other industry sectors rely on.

They are low-volume high-value products used across a number of consumer-facing industries. They can be some kind of formulation or single chemical entities whose chemical composition influences the end-product. Most specialty chemical formulations are patented and not easily replicable, which give them better pricing and higher yields.



55

Opportunities and challenges in the Indian specialty chemicals sub-segment

- □ The Indian specialty chemicals industry is expected to grow from ~\$40bn in FY20 to ~\$60bn in FY23, registering a 13% CAGR, outpacing the global average growth of ~5% CAGR
- The industry is also anticipated to gain in the medium term from potential changes in the global supply chain as major chemical producers strive to reduce their reliance on China. Indian companies are well positioned to benefit from this opportunity. The medium to long-term outlook is favourable for the industry supported by robust demand across end-user industries led by rising domestic consumption, strong export growth and rising import.

Opportunities	Opportunities	Opportunities	Opportunities	Challenges
China +1	Distributed manufacturing systems	More use of technology	PLI schemes and a greater focus on R&D	Dependence for RMs
Greater reliance on a single manufacturing source, higher costs in China and intensifying US-China competition, stringent environment regulations and compliance expenses have led to firms diversifying supply chains outside of China.	To shift manufacturing from a single-country dominant set-up to a multi-country operation is a means to reduce risks associated with international supply- chain interruptions and political headwinds. It represents a viable future path with international ambitions for domestic companies.	Rising use of technology and data analytics to improve margins will benefit the sector and key manufacturers. Per a McKinsey report, chemicals companies will see a 3-5% increase in earnings from using Industry 4.0 technologies.	More production- linked incentive (PLI) schemes in the chemicals sector R&D is of utmost importance in this sector. The government realised the importance of R&D and came up with a National Chemicals Policy that will strive to streamline and promote R&D within the sector.	 35% of the RMs needed by Indian chemicals firms are procured from outside India. Further, the companies which produce pharma intermediates have been obtaining RMs mainly from China. Procurement risk considering the current global situation on account of disruptions worldwide.

Vinati's core strengths. Outlook for FY23

Vinati has grown from a single-product manufacturer to an integrated operator. Its two state-of-the art manufacturing units in Maharashtra now provide diverse innovative solutions to more than 35 countries and to some of the largest industrial and chemicals companies across the US, Europe and Asia.



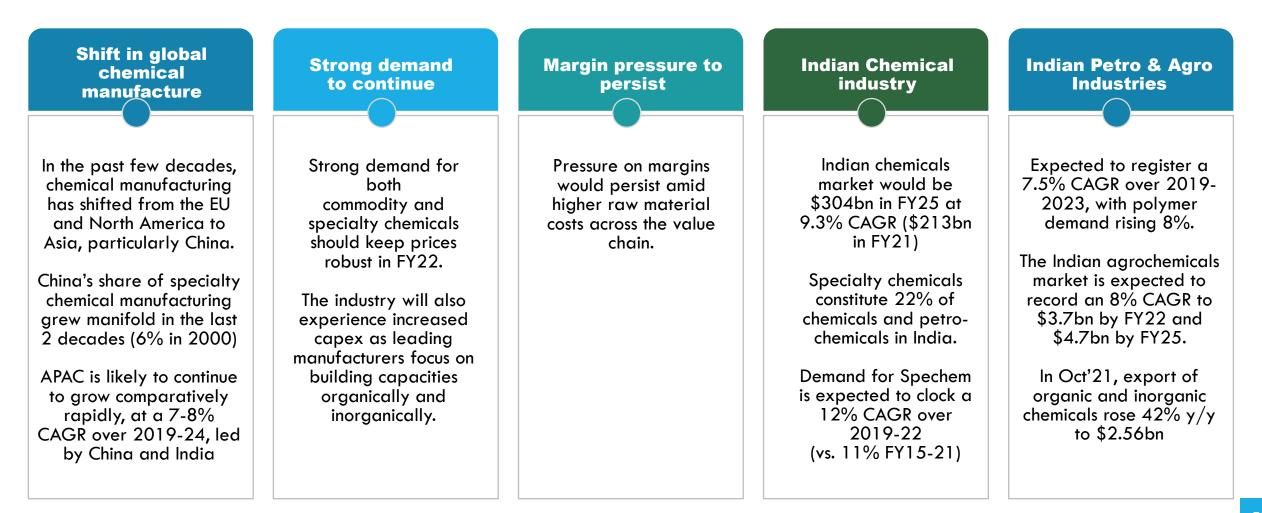
Deepak Nitrite's MDA

Key highlights

The Global and Indian Chemical Industry

 \Box Commodity' chemicals constitute ~80% of the global chemical industry, 20% being 'specialty' chemicals

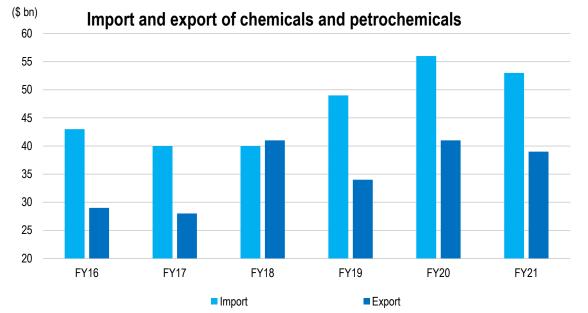
 \Box In terms of trade, globally ~25% of specialty chemicals are exported. China is the largest exporter, ~18% of exports



ANANDRATHI

Focus on reducing imports of chemicals

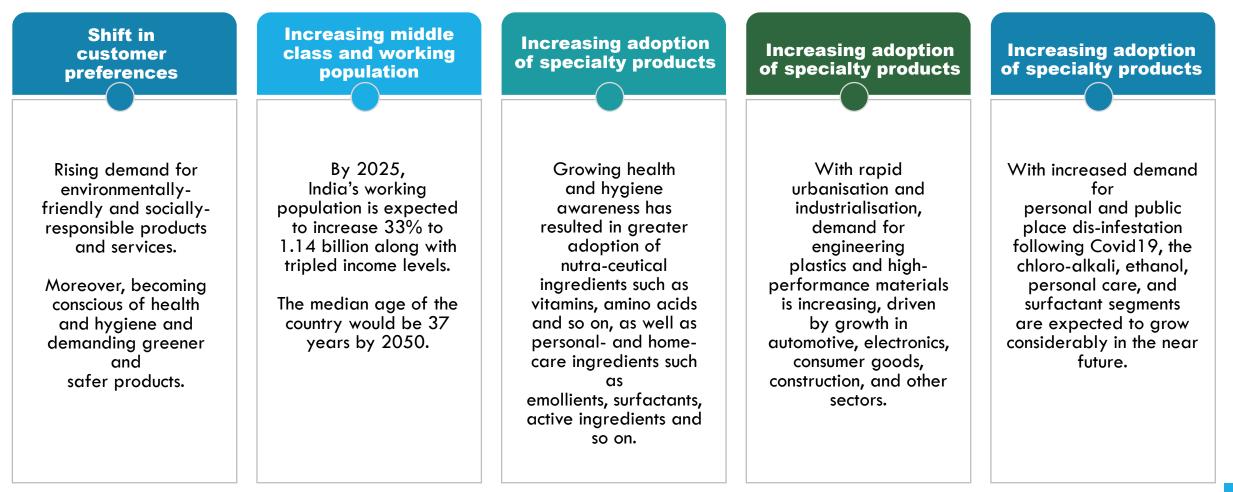
- □ In the past two decades, the world has seen the rise of China as a major supplier of chemicals. Its proportion of production of global chemicals increased from a mere 6% in 2000 to ~25% in 2020.
- China's cost-competitiveness has recently contracted as a result of rising environmental costs and shrinking government subsidies
- China's carbon-neutral commitment target by 2060 is a major reason for its stringent environmental norms and tightening financing options for polluter companies. Subsequently, its industry is faced with structural headwinds, hurting global supply chains. These factors have increasingly compelled global majors to re-consider Chinese supplies. That is why they are building alternative sources, benefitting Indian chemicals manufacturers who are making huge investments in R&D, the environment, health and safety protocols. Besides, cost-competitive manufacturing and adequate technical knowledge make India an apt choice for global majors.
- The government of India is focused on improving the chemical sector's competitiveness and share of manufacturing in the overall economy.
- The FY33-34 vision for the chemicals and petrochemicals sector emphasizes ways to enhance domestic output, reduce import dependence and promote investment. It also overhauls the Petroleum, Chemicals and Petrochemicals Investment Region (PCPIR) policy to encourage investment of Rs20trn by FY34-35. All this is likely to substantially reduce India's import dependence of basic RMs from neighbouring countries, including China.



Source:- Deepak Nitrite- Annual Report FY22

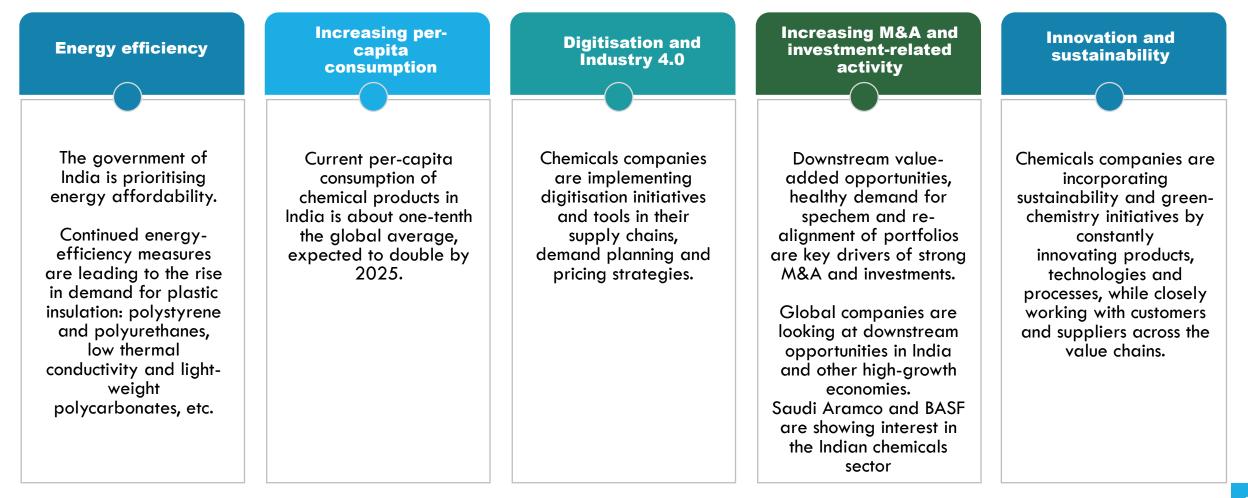
Structural growth drivers for the Indian chemicals sector

- End-use sectors (agriculture, consumer and retail, infrastructure, auto and electronics, and healthcare) could drive ~50% of added demand in chemicals. Besides, low labor costs, lower capex required (than developed countries) for capacity expansion, and supportive government policies would be additional levers of growth. Moreover, the government identifies the chemicals sector as a key growth driver, anticipated to account for 25% of GDP in manufacturing by 2025.
- □ The Union Budget 2022-23, allocated Rs2.1bn (\$27.43m) to The Department of Chemicals and Petrochemicals.



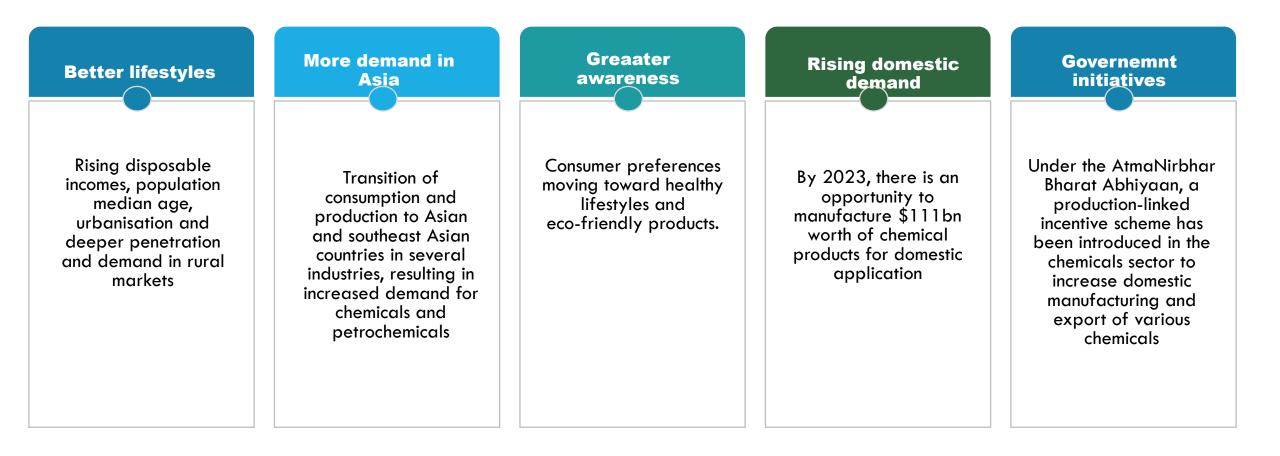
Structural growth drivers for the Indian chemicals sector

Furthermore, as global conglomerates look to de-risk their China-reliant supply chains, India's chemicals sector has the potential for enormous expansion. Moreover, to prevent dumping of chemicals in the country, the government has initiated several actions, including ADD, mandating BIS-like certification for imported chemicals, etc. It has also established a 2034 vision for the chemicals and petrochemicals sectors to explore opportunities to enhance domestic production, reduce imports and encourage investment in the sector. The intention is to establish an end-to-end manufacturing ecosystem through a cluster-development approach across the country.



Industry outlook and growth influencers

□ Vast potential for strong growth exists in the Indian economy. GDP is likely to double to \$5trn in the next decade, creating huge opportunities for Indian chemicals companies.

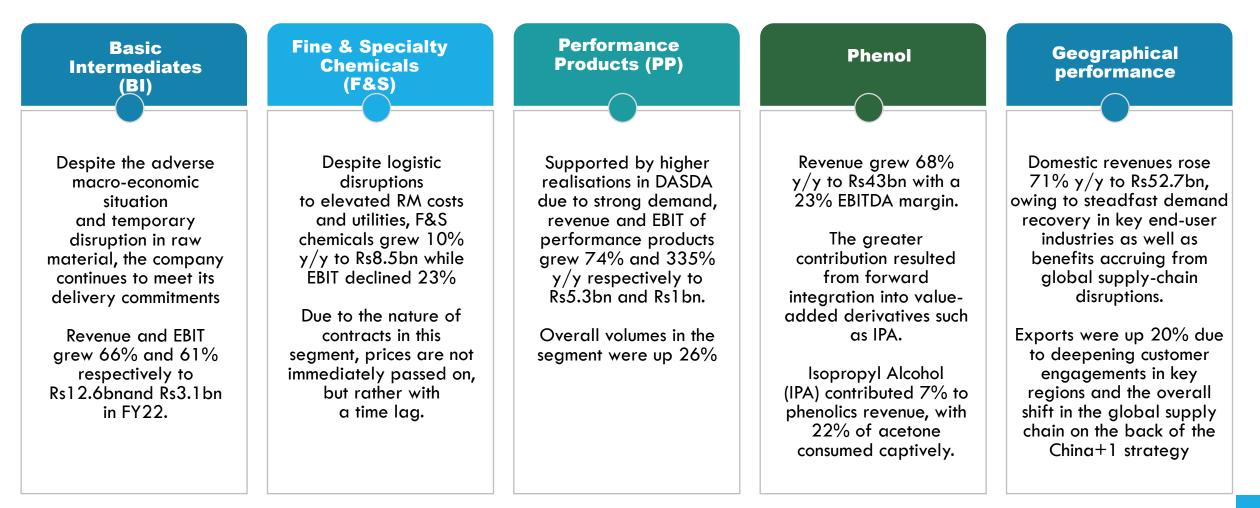


The benefit of prices passed on visible in FY23

- Recently, the effects of the Russia-Ukraine war are being felt across economies. Prices of every commodity, from oil to wheat to chemicals, are increasing due to congested supply-chain networks.
- Covid-19 spurred higher logistics and freight costs, as well as shutdowns of plants n China, particularly in the chemicals sector.
- Today, the chemicals industry is under pressure due to heightened volatility in crude oil prices and related petrochemical intermediates owing to the Russo-Ukraine conflict.
- □ This would also lead to margin pressure for some chemicals companies highly dependent on imports.
- Deepak Nitrite's business segments are interconnected. As a result, higher margins in one segment may result in lower margins in another. This year has been
- extremely successful for the BI, PP and phenolics sub-segments, supported by positive industry dynamics.
- In the fine & specialty chemicals sub-segment (FSC), since most of the contracts are long-term, there is some latency in passing on input costs.
- Price increases are being deferred tactically in some instances to build relationships and increase wallet shares of customers. The company has either maintained or gained market shares in almost all products.
- By proactively assessing the market situation and ensuring supplies, the company has passed on the rise in raw material costs in most cases, thereby protecting margins, although with some time lag, the effect of which will be more visible in the year following.

Performance of each segment in FY22

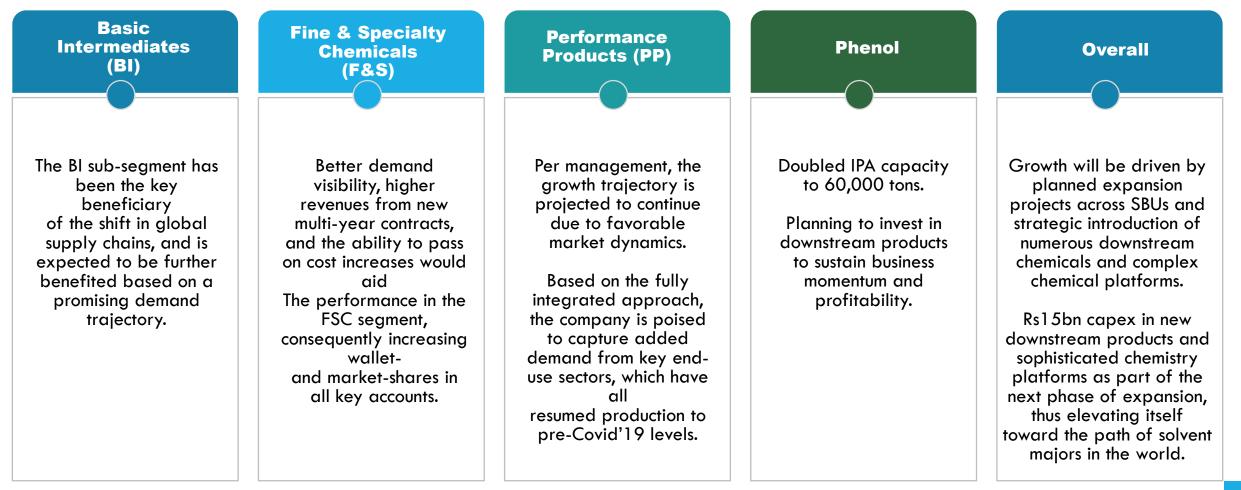
Operational environment in FY22 was challenging, with escalating costs across value chain. Raw material prices remained elevated together with heightened utility costs including power and fuel. This was in addition to logistical issues that persisted throughout year. Within this backdrop, Deepak Nitrite implemented its planned production strategy effectively and efficiently, to meet its supply commitments, and ensure reliable and steady supplies without much disruption.



ANANDRATHI

Outlook for segments in FY23

- Price increases are being deferred tactically in some instances to build relationships and increase wallet shares of customers. The company has either maintained or gained market shares in almost all products.
- By proactively assessing the market situation and ensuring supplies, the company has passed on the rise in raw material costs in most cases, thereby protecting margins, although with some time lag, the effect of which will be more visible in the year following.

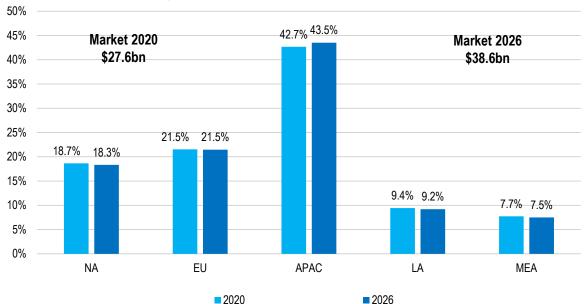


Fine Organic's MDA

Key highlights

Oleochemistry

- □ The global oleochemicals market was valued at \$22.5bn in 2021 and is estimated to touch \$33.9bn by 2027.
- U Household consumption of oleochemical products is expected to increase; thereby vigorously driving the demand for the oleochemicals.
- □ The fast-growing demand for biodiesel and the FMCG sector are key determinants driving the oleochemicals market expansion.
- Further, the growing adoption of oleochemicals by chemical manufacturers to produce bio-surfactants, bio-lubricants and bio-polymers as sustainable alternatives to petrochemicals is a major growth driver.
- The market is driven by rising consumer demand for natural items such as organic soaps, food additives, cosmetics and so on.
- Besides, rapid global industrialisation is another key driver of market expansion. Furthermore, manufactures are keen to introduce sustainable oleochemicals and reduce their carbon footprint to create a brand-image of an environmentally responsible businesses.



Regional contribution (2020-2026)

Source:- Fine Organic- Annual Report FY22

Industry Outlook: Plastics and Packaging

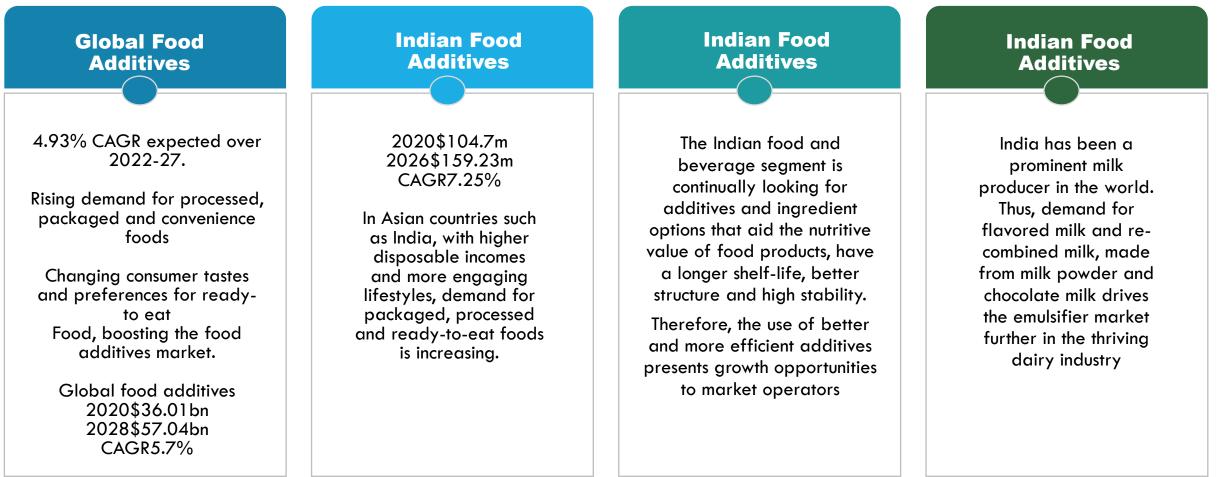
Additives constitute an integral part of the plastics sector. They are used to modify properties of plastic products during the compounding and processing stages. Some of the major trends in the plastics sector have been to enourage the use of bio-based raw materials, maximum recycling/reprocessing of used plastics to promote a 'circular' economy and, thereby, successfully address the issues caused by plastics waste. Therfore, the role of plastic additives has become more prominent and imperative

Global	Global	Indian	Demand
Scenario	Scenario	Scenario	drivers
2021 \$24.6bn 2026 \$30.8bn CAGR4.66% Greater demand for packaging With increasing populations, rapid urbanisation and rising middle-class incomes, APAC countries are expected to see robust demand for plastic additives in automotives, electronic & electrical goods and other applications.	The Covid-19 pandemic severely disrupted the overall plastic additives market in 2020.Consumption started improving in 2021, followed by economic recovery and resumption of manufacturing.However, pre-pandemic levels of consumption will be attained only by 2023.	2021 \$1.19bn 2026 \$1.64bn CAGR 6.66% The packaging segment is India's largest user of plastic additives, and is expanding rapidly. Plastic additives grew during the pandemic from rising demand for food and beverage packaging products not only in India but also worldwide.	Development of sustainable and value- added plastic additives Vast demand in packaging applications (flexible/ rigid films/ sheets, rigid bottles & containers) Consumer goods growth; Consumer preference shift toward eco- friendly plastic products and rise in use of food packaging and compostable bags

ANANDRATHI

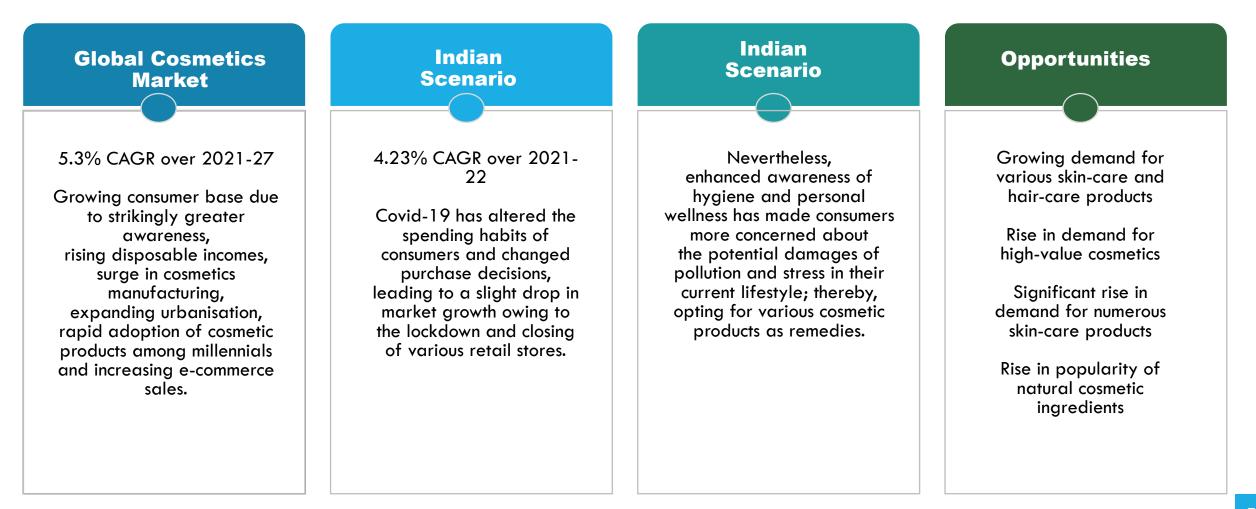
Industry Outlook: Food Additives

Food additives are used to preserve freshness, taste, texture and appearance of various food items for an extended duration to ensure adequate shelf-life of food products. Therefore, food additives play a critical role in high-volume products such as breads, biscuits and rusks to high-value ready-to-eat food items such as desserts, chocolates, spreads, cheese and more. The mounting demand for packaged/ canned food has been positive, translating to greater consumption of food additives in the past, and is expected to continue favorably in coming years as elaborated in the next section, capturing the global situation.



Industry Outlook: Cosmetics and Pharma

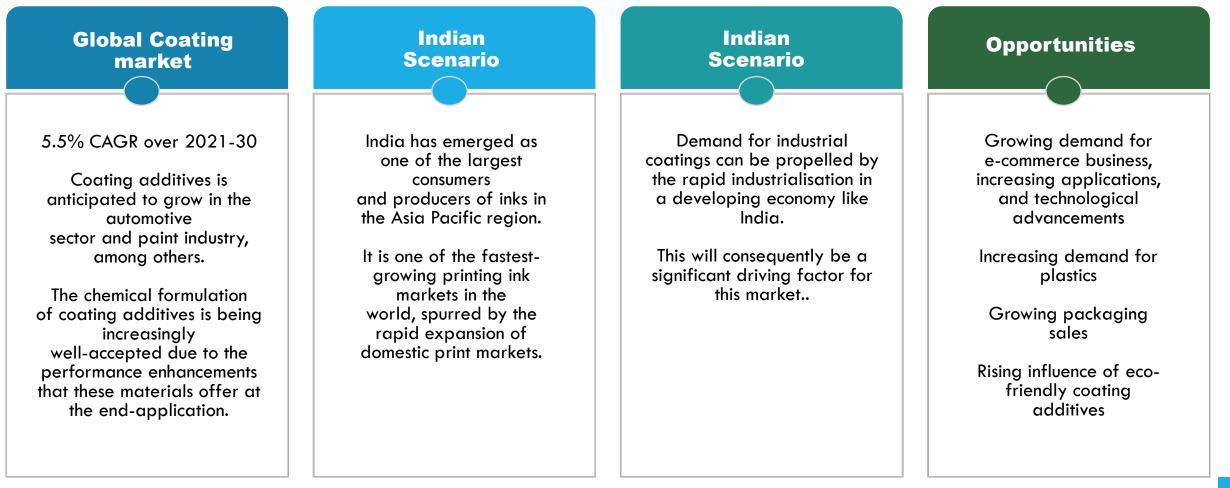
Cosmetic emulsifiers and emollients are used in various personal-care products, generally to mix water with oil. Surface active agents that act as an the interface between two immiscible liquids along with maintaining the stability of the mixture are called emulsifiers. Cosmetic emulsifiers help reduce surface tension between lipophilic and hydrophilic constituents, resulting in finely dispersed mixtures. This, in turn, improves shelf-life and increases performance properties of personal-care products.



ANANDRATHI

Industry Outlook: Coating Additives

Specialty coating additives play a critical role in coating applications by improving product quality and stability, resulting in maximised benefits in end-applications by imparting overall better quality. Although the use of these additives is typically modest, the functional improvement is noteworthy. These additives are used in the printing process to provide the necessary slip and anti-blocking qualities, resulting in a high-quality printed surface for an extended period. Printed surfaces often include various materials such as rubber, cardboard, papers and metals. Inks are also used in printing for plastic cards and films among others.

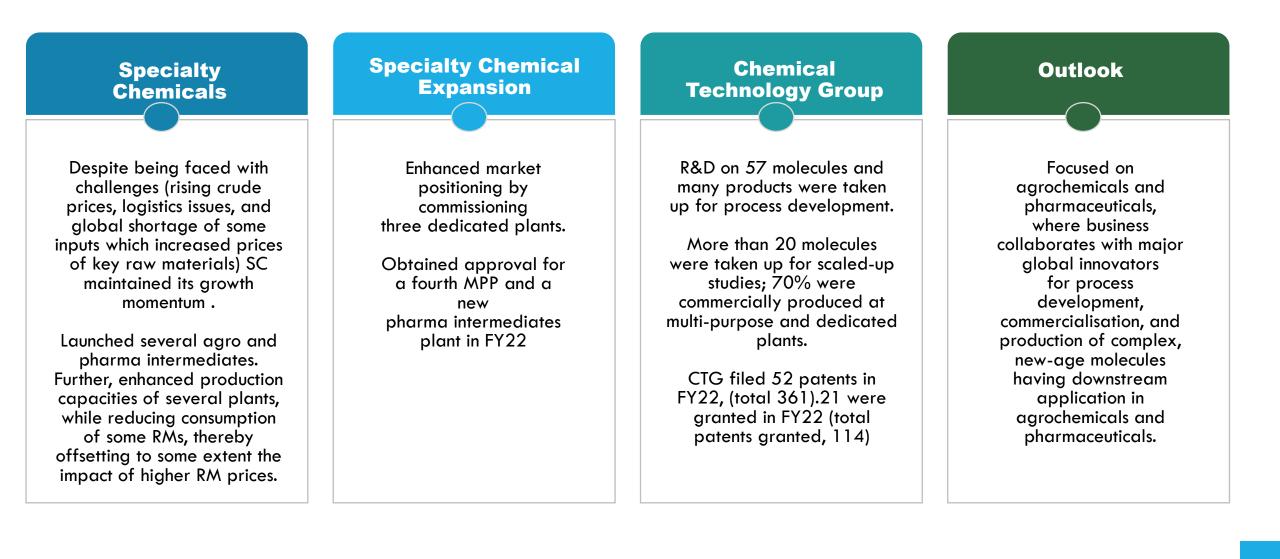


AnandRathi

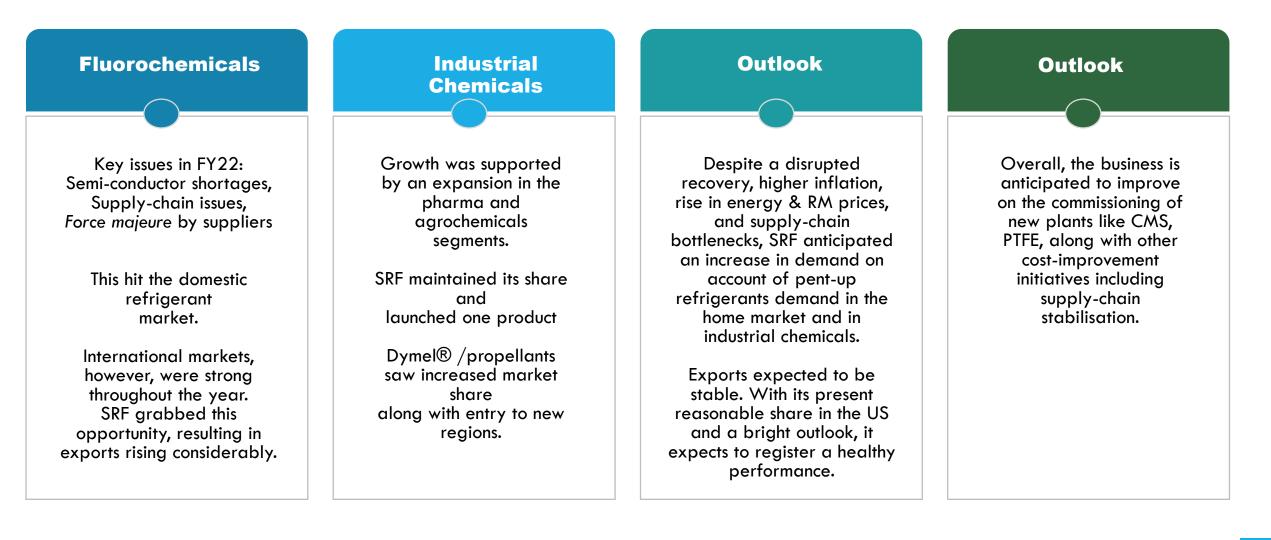
SRF's MDA

Key highlights

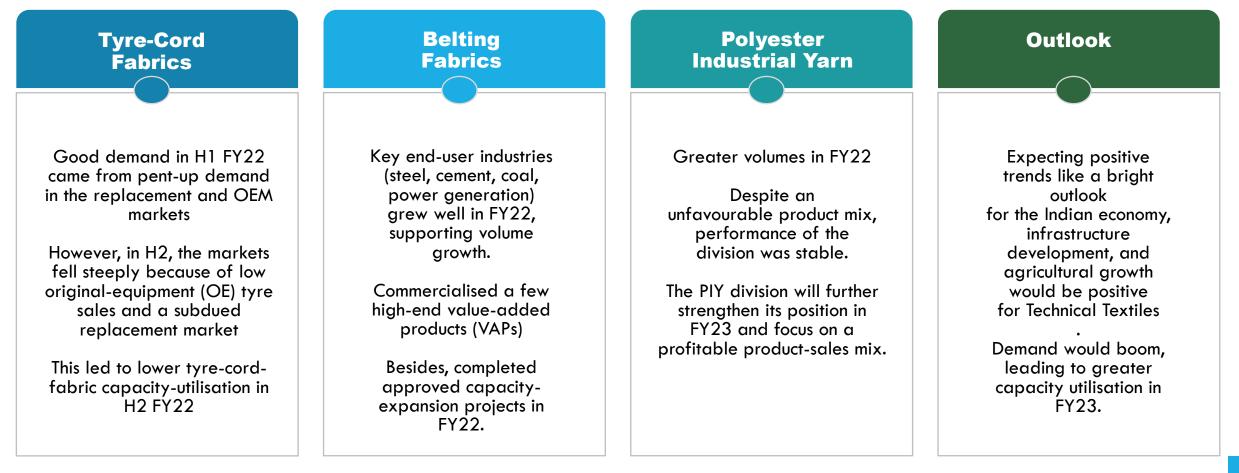
The chemicals business comprises two product segments, fluorochemicals and specialty chemicals. In FY22, it grew 43.8% y/y, to Rs52.4bn.



The chemicals business encompasses two product segments, fluorochemicals and specialty Chemicals. In FY22, this business grew 43.8% y/y to Rs52.4bn.

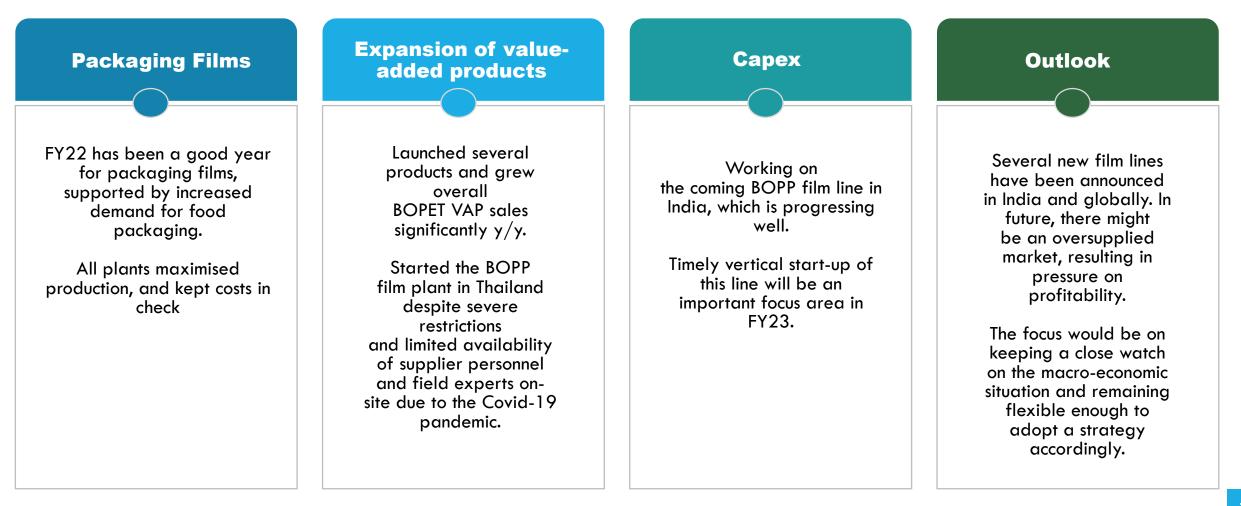


Technical Textiles FY22 started on a difficult note with lockdown restrictions due to the second wave of Covid-19. Further, business were faced with supply-chain challenges but no plants were shuttered due to shortages. Revenue of the segment grew 68% y/y to Rs21bn on the highest sales volumes of belting fabrics and polyester industrial yarn. This partially offset weak demand for nylon tyre-cord fabrics.



ANANDRATHI

Packaging Films revenue grew 45% y/y to Rs48bn. Domestic and international plants' performances were strong and contributed to overall growth. SRF allocated Rs4.25bn to set up an aluminium-foil manufacturing plant near Indore, MP, expected to be commercialised in the next 20 months.



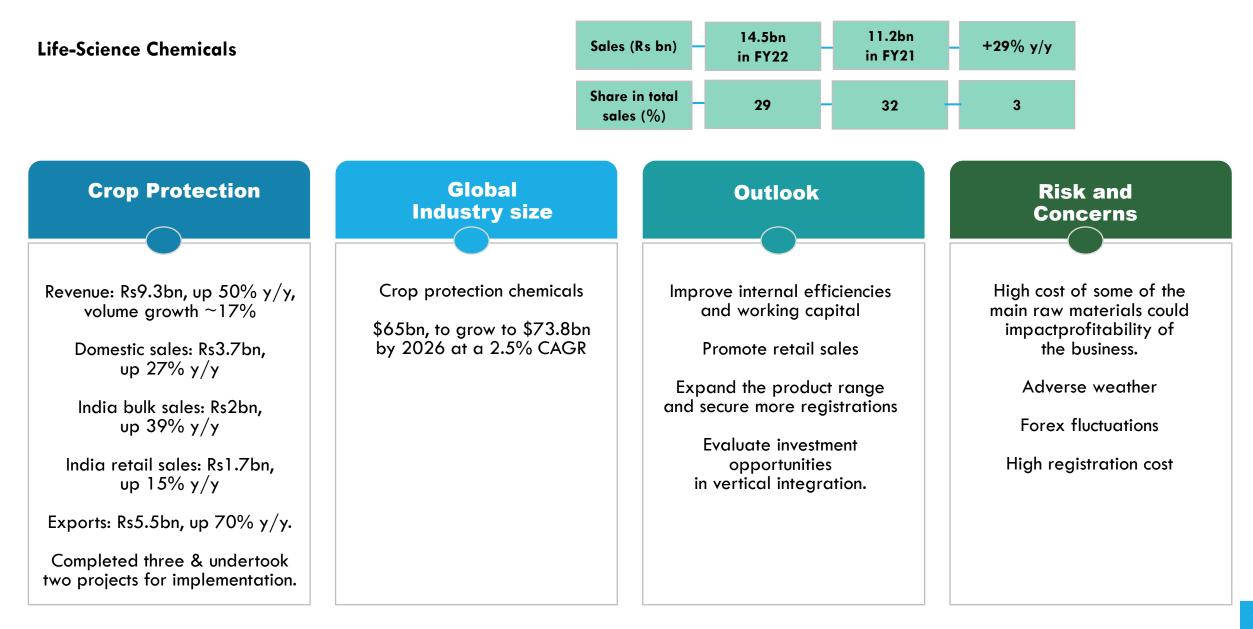
Other Businesses SRF retains market leadership in coated fabrics, with a high-volume share driven by improved sourcing initiatives and plant efficiency. In laminated fabrics, it retained its price and volume leadership, operating at full capacity, and attaining its highest sales in Q4. However, realisations were impacted by the continuing surplus supply situation.

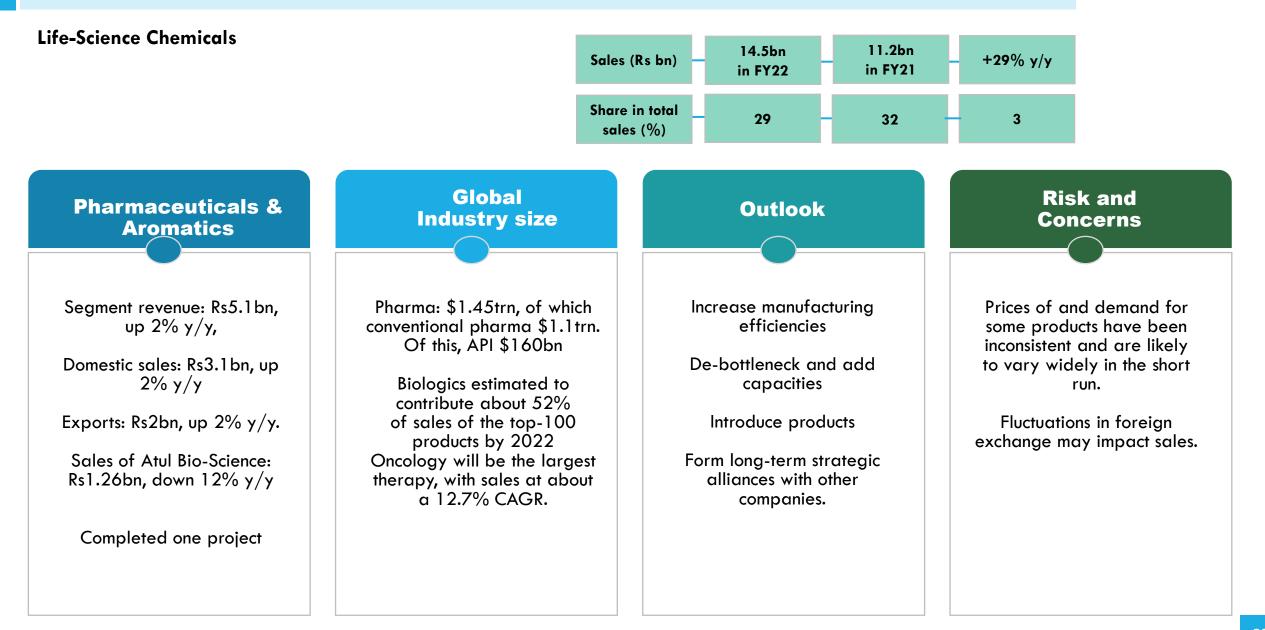


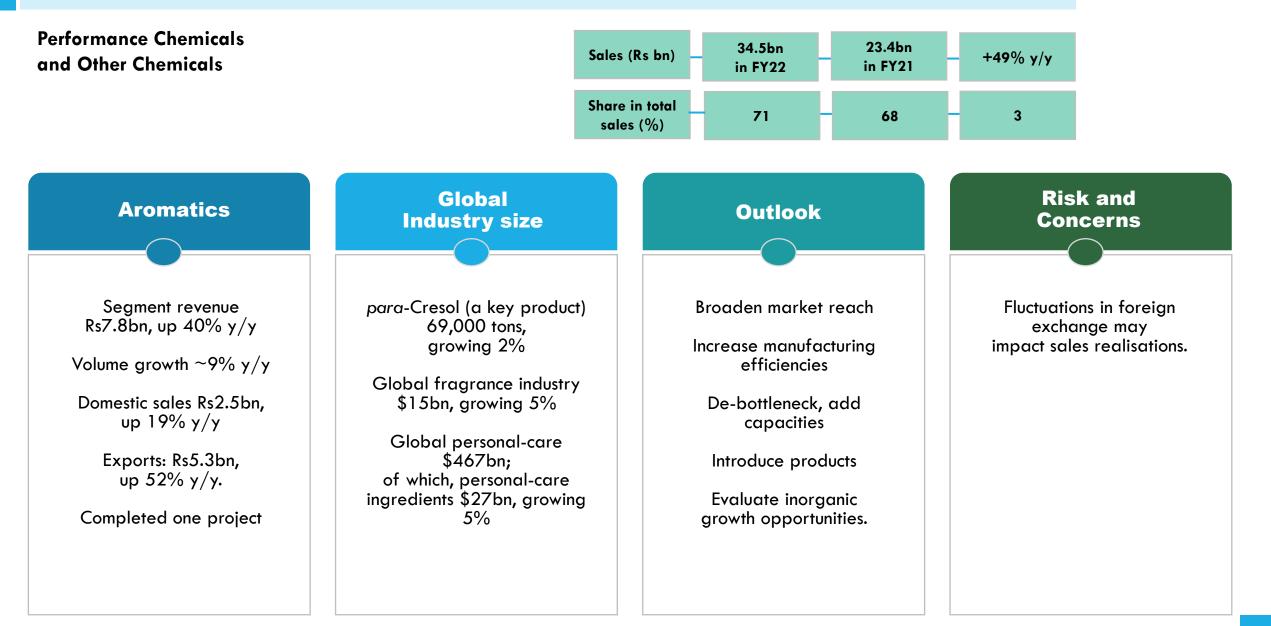
ANANDRATHI

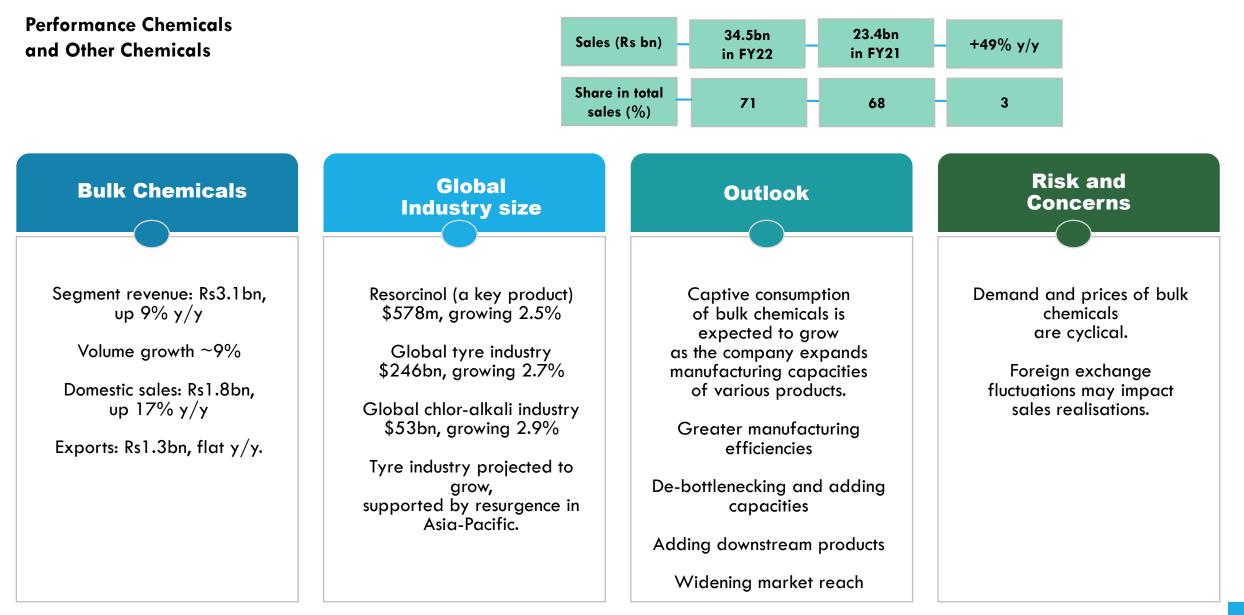
Atul's MDA

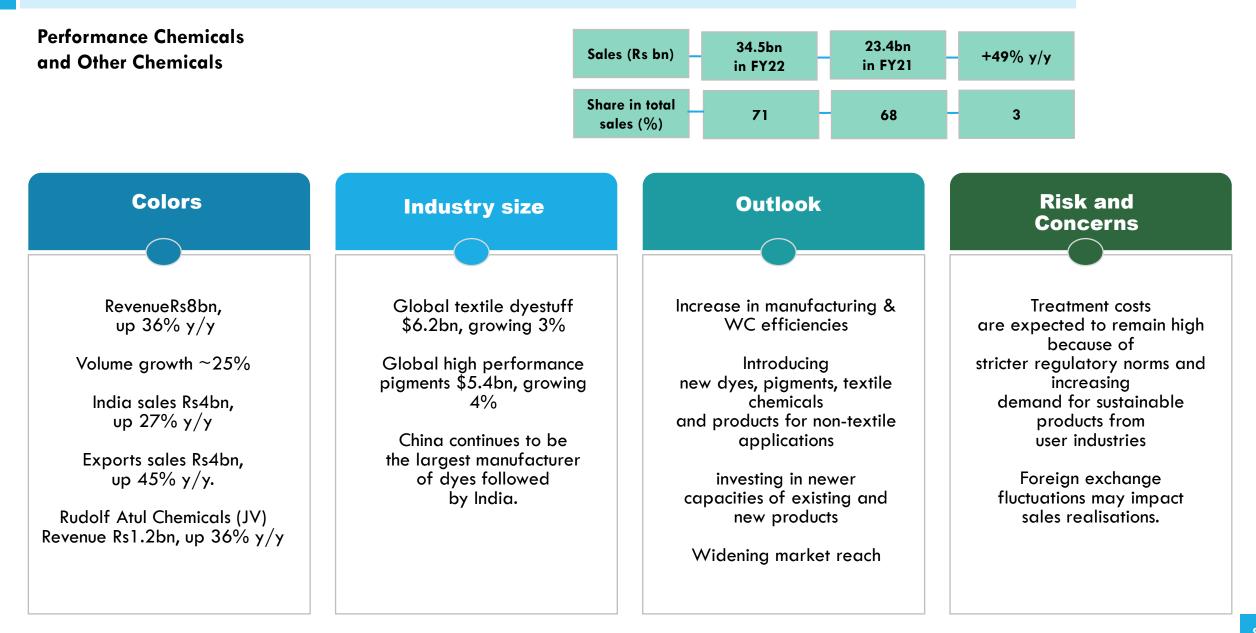
Key highlights

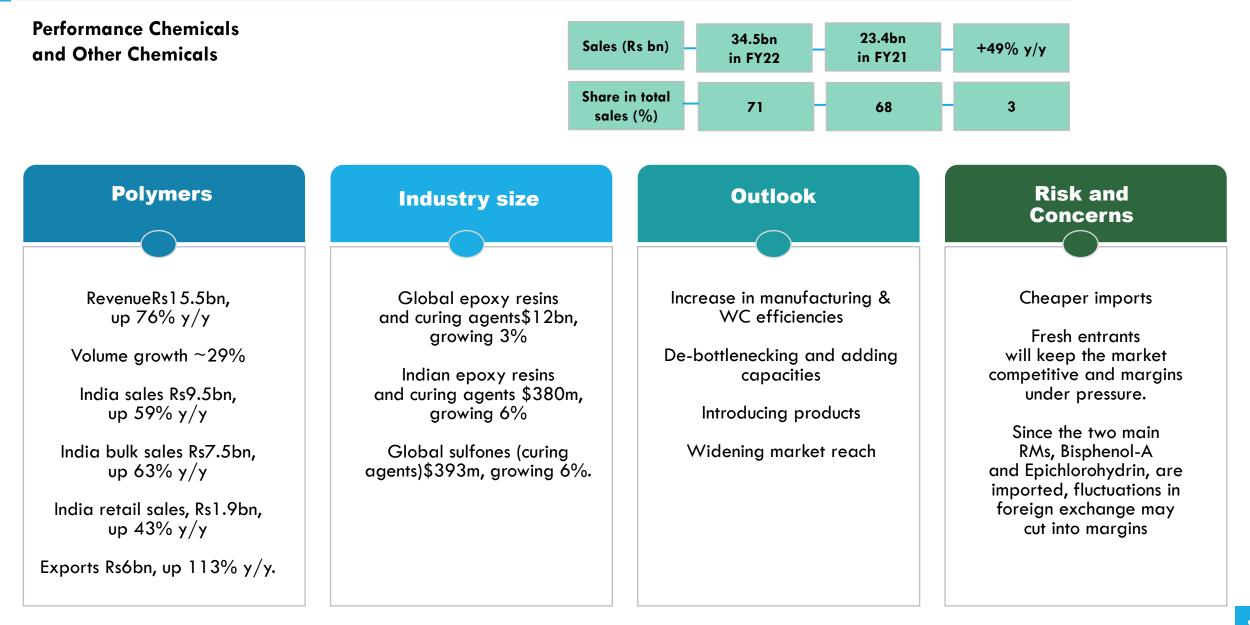






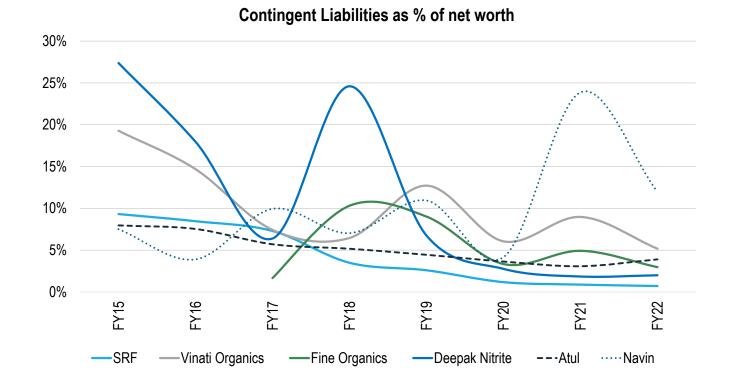






Contingent liabilities as percent of net worth

- □ Contingent liabilities (incl. capital commitments) as percent of net worth averaged 8% in FY22 (vs 17% in FY15).
- This substantially increased in the case of **Navin** in the last two years from the steep rise in its capital commitments.
- SRF's average contingent liabilities as percent of net worth were 14%, followed by Deepak Nitrite, Vinati, Navin and Atul at 13%, 10.1%, 9.9% and 9.3% each.
- **Fine Organic's** contingent liabilities as percent of net worth were lowest 5.4%.



Focus on ESG parameters, Environment Conservation Initiatives

Navin

- Shifted manufacturing units closer to carbon neutrality.
- Treated wastewater from the community
- Wastewater-treatment plant recycled to conserve freshwater at its Surat unit
- Recycled 2,000 kl of wastewater per day in the cooling towers
- In a few process plants, installed two-stage scrubbing units to eliminate fugitive emissions
- Waste streams were converted into calcium chloride and sold to end-users, enhancing waste re-use
- Took an initiative to supply a few finished products in bulk packaging, eliminating packaging waste.

SRF

- Energy saved through energy-efficient initiatives: 20 TJ
- Energy consumed from renewables and biomass: 914 TJ
- Recycled water consumption: 1,696m litres.
- Reduction in GHG emissions and less use of fresh resources with biodiversity preservation

🛛 Atul

- Collected 259 tonnes of waste. of which 196 tonnes were recycled
- Completed 86 identified air-emission-control projects.
- Commissioned a new effluent treatment plant at Atul South site to augment treatment capacity.
- Installed multiple-effect evaporators as part of the zero-liquid-discharge project at Atul North site.

ANANDRATHI

Focus on ESG parameters, Environment Conservation Initiatives, contd.

Given States Fine Organic

- Shifted from using furnace oil to natural gas to reduce CO2 emissions and eliminate SOx levels. All plants are zero-liquid-discharge.
- Developed and maintained a "green" belt and landscaping around facilities by renting open spaces/areas from MIDC to improve O₂ release into the surrounding environment.
- All warehouses use renewable energy like solar power in the form of "sky pipes".
- Plastic waste generated at facilities is collected and sent to authorised recyclers.

Vinati Organics

- Commissioned a 14MW solar plant. At present, 50% of energy required is obtained from renewable energy
- Reduced CO2 emission by over 15% in the past few years by strengthening boiler operations, which has led to less coal consumption
- Increased condensate recovery and recycled DM water in its co-gen power plant to reduce coal and DM water consumption

Deepak Nitrite

- To reduce emissions, Deepak installed electrostatic precipitators, bag filters, and scrubber systems in boilers throughout the year.
- It replaced older inefficient boilers with newer ones that will emit significantly less pollution.
- Primary focus is on recycling water into operations to reduce reliance on fresh water. It plans zero-liquid-discharge (ZLD) for facilities to achieve this. As it does not harvest water directly from any source, its operations have no direct impact on any water body. In total, 373,113 kl were recycled.
- Waste management is imperative. The company converted bye-products into value-added products, reducing packaging waste by greater efficiency and developing products from waste.
- 32% reduction in specific GHG emissions

Focus on ESG parameters, Social Initiatives- CSR

All companies were spending similar or higher amount on CSR activities than mandated by law except Vinati and Fine Organic. Fine Organic had Rs56.9m in a separate bank account on 31st Mar'22 to be spent on CSR. Vinati transferred Rs41.8m in FY21 and Rs34.2m in FY22 to a separate bank account. Atul had Rs43.5m in as separate bank account on 31st Mar'22.

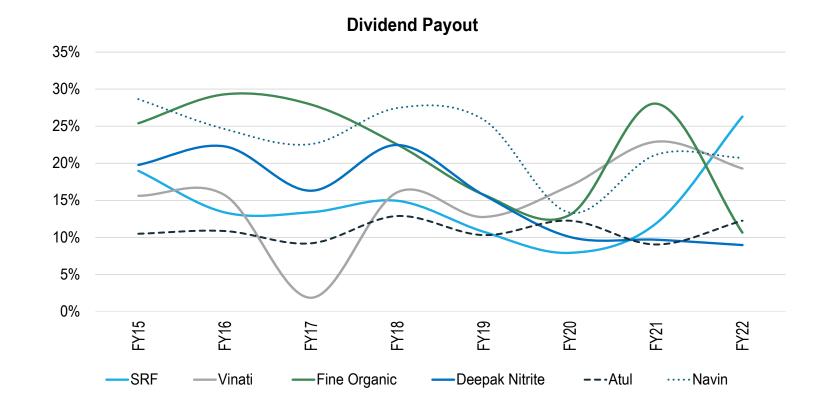
Particulars (Rs m)	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22
Navin								
Required to be spent	30.0	14.2	7.6	22.4	31.5	37.5	43.5	52.3
Spent	13.2	19.5	30.2	29.7	32.9	37.9	56.8	52.8
Deficit / (Excess)	16.9	-5.3	-22.6	-7.3	-1.4	-0.4	-13.3	-0.5
SRF								
Required to be spent	77.1	65.0	75.8	95.6	103.8	116.3	132.5	186.1
Spent	44.2	87.5	76.0	50.0	103.8	120.0	105.5	186.8
Deficit / (Excess)	32.9	-22.5	-0.2	45.6	-	-3.7	27.0	-0.7
Atul								
Required to be spent	39.5	51.4	65.9	73.5	78.8	95.8	124.0	148.7
Spent	39.5	53.1	66.0	73.9	79.0	96.0	124.1	105.4
Deficit / (Excess)	-	-1.7	-0.1	-0.4	-0.2	-0.2	-0.1	43.2
Fine Organic								
Required to be spent				21.7	26.3	33.6	39.8	39.8
Spent				-	3.3	45.5	32.1	23.6
Deficit / (Excess)				21.7	23.0	-11.9	7.7	16.2
Vinati Organics								
Required to be spent	20.9	27.0	32.6	37.7	39.6	36.7	70.2	79.0
Spent	20.6	26.6	21.5	6.9	28.0	17.8	28.5	44.8
Deficit / (Excess)	0.2	0.4	11.1	30.8	11.6	18.9	41.8	34.2
Deepak Nitrite								
Required to be spent	9.2	12.2	16.6	17.9	21.3	30.3	74.4	98.7
Spent	7.6	15.8	16.6	22.5	25.0	34.8	74.4	99.2
Deficit / (Excess)	1.6	-3.6	-	-4.6	-3.7	-4.5	-	-0.5

Focus on ESG parameters: Governance

Particulars	Vinati	Atul	Navin	Deepak	SRF	Fine Organic
Board Composition (No. of Persons)	8	11	12	12	10	10
Board Independence	50%	55%	75%	50%	60%	50%
Chairman	Vinod Saraf	S SLalbhai	Vishad P. Mafatlal	Deepak C. Mehta	Ashish Bharat Ram	Mukesh Shah
MD	Vinati Saraf Mutreja	S S Lalbhai	Radhesh R. Welling	Deepak C. Mehta	Ashish Bharat Ram	Mukesh Shah
Board Composition (Position)	 executive chairman MD and CEO whole-time directors non-executive, independent directors. 	 chairman and MD, 1 MD, 2 WTD, 1 non-executive director 6 non-executive independent directors 	1 MD, 1 chairman 1 non-executive, non- independent director 9 non-executive independent	3 executive directors, 3 non-executive directors, 6 non-executive, independent directors	1 chairman 3 executive promoters 6 independent directors	1 chairman 5 independent directors, 4 executive directors
Experience of Board	~75% of Board members have more than 30 years' experience	~75% of Board members have more than 30 years' experience	~70% of Board members have more than 30 years' experience	75% of Board members have more than 30 years' experience	More than 75% of Board members have more than 30 years' experience	More than 75% of Board members havemore than 30 years' experience
Average Directors' age	~50% of the Board averages 50 years and above	Complete Board averages 50 years and above	66 years	~75% of the Board is averages 50 years and above	~75% of the Board average 50 years and above	More than 75% of he Board averages 50 years and above
Women Directors	4, Vinati is among 0.5% of the listed entities in India to have four or more women on the Board	1	2	1	1	1
CEO/MD a member of the compensation committee	No	No	No	No	No	Yes, Mukesh Maganlal Shah is member of Remuneration Committee
CEO/MD/promoter a member of the audit committee	No	No	No	No	No	Yes, Jayen Ramesh Shah, CEO is member of Audit Committee
Auditor	M.M. Nissim & Co., LLP	Deloitte Haskins & Sells, LLP	Price Waterhouse Chartered Accountants, LLP	Deloitte Haskins & Sells	BSR & Co.	B Y & Associates,
Rotation of Auditors	Re-appointed auditor for the next five years	Re-appointed auditor for the next five years	Re-appointed auditor for the next five years	Re-appointed auditor for the next five years	1-year-term pending	Re-appointed auditor for the next three years

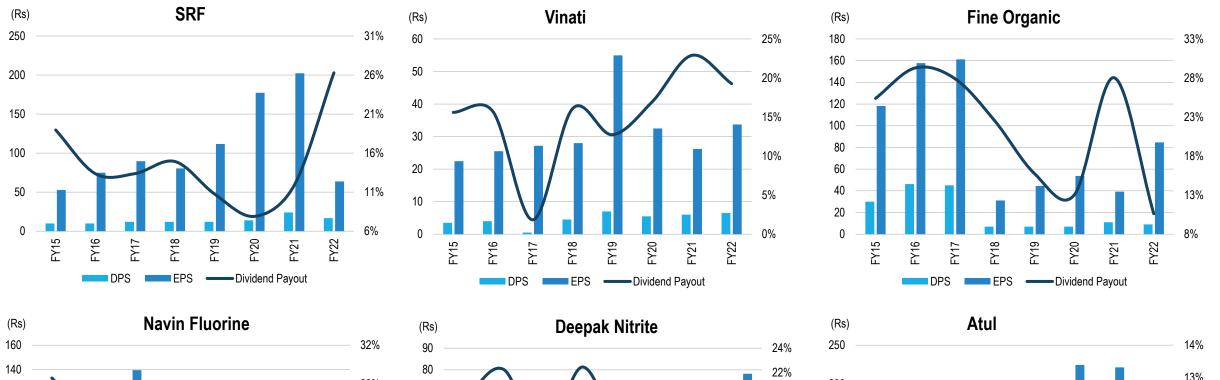
Dividend Payout

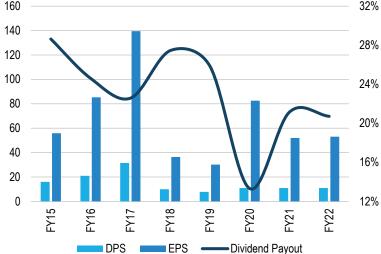
- \Box The dividend-payout ratio average 17% in the last eight years.
- □ Navin and Fine Organic averaged the highest dividend payout over FY15-FY22, 23% and 22% respectively.
- Deepak Nitrite's dividend-payout ratio was 16% over FY15-18
- Atul's dividend-payout ratio averaged 11%, while SRF and Vinati paid 15% of earnings as dividend in the last eight years

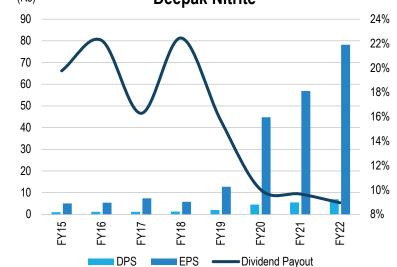


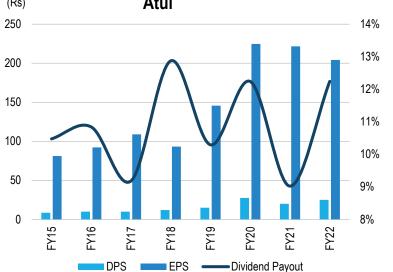
ANANDRATHI

Dividend Payout



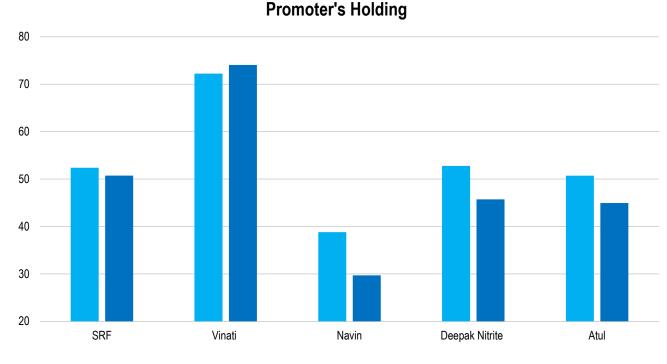






Promoters' shareholdings

- □ In the last eight years, only Vinati's promoter raised its stake from 72.3% on 31st Mar'15 to 74.1% on 31st Mar'22
- □ Fine Organic's promoter-holding was 75%, post listing in FY18.
- □ All other companies' promoter-holdings declined by an average of 6%
- □ Navin's promoter-holding fell steeply to 29.7% on 31st Mar'22 vs 38.8% on 31st Mar'15.
- Deepak Nitrite's promoter-holding declined 706bps to 45.7% on 31st Mar'22.
- □ SRF's promoter-holding changed by 1.65% to 50.7% on 31st Mar'22 compared to 52.4% at 31st Mar'15.



■ FY15 ■ FY22

ANANDRATHI

Related Party transactions; not material

No material transactions with related parties. It remained to 3/4% of total sales and Raw material cost over last eight years for these companies.

SRF	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Remark	
Sales				(Rs m)						
Enterprises over which KMP have significant influence	-	-	-	-	-	2.5	-	0.4		
% of Sales	-	-	-	-	-	0.0	-	0.0		
Purchases									No major transaction with related parties.	
Enterprises over which KMP have significant influence	-	-	-	-	-	-	-	-		
% of RMC	-	-	-	-	-	-	-	-		

Vinati Organics	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Remark
Sales				(Rs m)					
Viral Alkalis	0.2	0.1	0.2	0.2	12.5	1.7	0.5	0.1	Vinati Organic's sales to related parties was
Veeral Additives Pvt. Ltd.					-	3.3	108.9	163.6	negligible over FY15-20. It increased to 1% in
% of Sales	0.0	0.0	0.0	0.0	0.1	0.0	1.1	1.0	FY21 and FY22 (Rs109m and Rs164m) as it
Purchases									started to sell to Veeral Additives. Its purchase as
Viral Alkalis Ltd			-	10.2	34.4	40.8	67.8	12.9	% of RMC was 2% in FY21 and 0.2% in FY22. Its
Veeral Additives Pvt. Ltd.					-	1.5	9.9	2.5	major related-party transaction was a Rs1.2bn
% of RMC	-	-	-	0.3	0.7	1.0	2.0	0.2	loan to Veeral Additives Pvt Ltd. It was Rs1.3bn
Loans to									inFY21.
Veeral Additives Pvt. Ltd.						-	1,319	1,205	

Atul	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Remark
Sales					(Rs m)				
Sale of goods to JV				27.5	38.5	30.1	21.0	37.3	
% of sales	-	-	-	0.1	0.1	0.1	0.1	0.1	
Purchases									Atul's purchases from related parties were
With JVs				3.0	2.4	1.9	0.9	0.1	0.6% to 1.3% of RMC in the last eight years. Sales to related parties were less than 1%.
Entity over which control exercised by JVs	153.3	134.4	144.2	233.3	140.0	117.2	164.3	159.1	Sales to related parties were less than 1 %.
% of RMC	1.1	1.0	1.0	1.3	0.7	0.6	1.0	0.6	

Related Party transaction; not material

Navin	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Remark
Sales					(Rs m)				
Convergence Chemicals Pvt Ltd	-	-	-	23.9	95.6	102.1	103.8	-	Navin Fluorine's sales and purchases to related parties were less than 1% of sales and raw material costs in the last eight years. No material
Nocil	0.3	0.1	0.1	-	-	-	-	-	
% of Sales	0.0	0.0	0.0	0.3	1.0	1.0	0.9	-	
Purchases									
Convergence Chemicals Pvt Ltd	-	-	-	-	7.9	6.9	-	-	transactions with related parties.
% of RMC	-	-	-	-	0.2	0.1	-	-	

Fine Organic	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Remark		
Sales	(Rs m)										
OleoFine Organics SDN. BHD.			53.1	52.5	40.6	45.0	60.8	87.2			
OleoFine Organics (Thailand) Co., Ltd.			20.1	31.0	49.0	48.3	8.7	-			
Fine Organics Industries			41.0	32.6					Fine Organic's purchases and sales with relate		
Fine Zeelandia Pvt Ltd			1.5	0.0	71.7	126.3	129.7	164.3	parties were 0-2% in the last five years.		
% of Sales			1.5	1.4	1.5	2.1	1.8	1.3	Its highest sales to related parties were Rs164m, 1.3% of sales to Fine Zeelandia Pvt Ltd (JV). No		
Purchases									purchase from any related parties during the year.		
Fine Zeelandia Private Ltd			0.0	-	-	0.5	-	-	Sales to related parties averaged 1.6% of sales		
Fine OrganicsIndustries			22.3	136.4	-	-	-	-	over FY17-22.		
OleoFine Organics s SDN. BHD.			0.3	2.5	6.6	-	0.8	-			
% of RMC			0.4	2.1	0.1	0.0	0.0	-			

ANANDRATHI

Related Party transaction; not material

Deepak Nitrite	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Remark
Sales				(Rs m)					
Deepak Novochem Technologies	1.3	6.4	71.3	90.2	69.6	-	211.5	181.2	
Deepak Phenolics	-	-	-	-	-	-	96.7	17.2	
Deepak Fertilisers & Petrochemicals Corp.	-	-	-	-	-	-	-	12.3	
% of Sales	0.0	0.0	0.5	0.5	0.3	0.0	0.7	0.3	
Purchases									
Deepak Fertilisers & Petrochemicals Corp.	628.5	708.3	820.2	1,024.5	790.0	633.4	771.6	1,246.4	
Deepak Novochem Technologies	22.4	5.5	-	3.4	-	-	-	-	mainly Deepak Fertilizers & Petrochemicals Corp.,were ~3.2% of RMC in FY22.
Deepak Phenolics	-	-	-	-	-	-	22.6	58.0	
% of RMC	7.6	8.6	9.7	9.9	4.8	2.7	3.5	3.2	It averaged 9% over FY15-FY18, declining to 3.5% over FY19-FY22.
Purchase of Capital assets									Its sales to related parties were less than 1% ove
Deepak Fertilisers & Petrochemicals Corp	-	-	-	-	-	1,171.1	-	-	the last eight years.
Interest paid to related parties									
Storewell Credits & Capital Pvt Ltd	-	-	14.8	24.2	22.2	7.3	-	-	
Deepak C. Mehta	-	-	3.9	7.3	2.0	-	-	-	
Loans from related parties									
Storewell Credits & Capital Pvt Ltd	-	-	230.0	-	-	-	-	-	
Deepak C. Mehta	-	-	70.0	-	-	-	-	-	

Appendix

Anand Rathi Research

Analyst Certification

The views expressed in this Research Report accurately reflect the personal views of the analyst(s) about the subject securities or issuers and no part of the compensation of the research analyst(s) was, is, or will be directly or indirectly related to the specific recommendations or views expressed by the research analyst(s) in this report. The research analysts are bound by stringent internal regulations and also legal and statutory requirements of the Securities and Exchange Board of India (hereinafter "SEBI") and the analysts' compensation are completely delinked from all the other companies and/or entities of Anand Rathi, and have no bearing whatsoever on any recommendation that they have given in the Research Report.

Anand Rathi Ratings Definitions

Analysts' ratings and the corresponding exp	ected returns take into account our definitions of Large Caps (>US\$1b	n) and Mid/Small Caps (<us\$1bn) as="" below:<="" described="" in="" ratings="" table="" th="" the=""><th></th></us\$1bn)>	
Ratings Guide (12 months)	Buy	Hold	Sell
Large Caps (>US\$1bn)	>15%	5-15%	<5%
Mid/Small Caps (<us\$1bn)< td=""><td>>25%</td><td>5-25%</td><td><5%</td></us\$1bn)<>	>25%	5-25%	<5%

Research Disclaimer and Disclosure inter-alia as required under Securities and Exchange Board of India (Research Analysts) Regulations, 2014

Anand Rathi Share and Stock Brokers Ltd. (hereinafter refer as ARSSBL) (Research Entity, SEBI Regn No. INH000000834, Date of Regn. 29/06/2015) is a subsidiary of the Anand Rathi Financial Services Ltd. ARSSBL is a corporate trading and clearing member of Bombay Stock Exchange Ltd, National Stock Exchange of India Ltd. (NSEIL), Multi Stock Exchange of India Ltd (MCX-SX), and also depository participant with National Securities Depository Ltd (NSDL) and Central Depository Services Ltd. ARSSBL is a corporate trading and distributor.

General Disclaimer: This Research Report (hereinafter called "Report") is meant solely for use by the recipient and is not for circulation. This Report does not constitute a personal recommendation or take into account the particular investment objectives, financial situations, or needs of individual clients. The recommendations, if any, made herein are expression of views and/or opinions and should not be deemed or construed to be neither advice for the purpose of purchase or sale of any security, derivatives or any other security through ARSSBL nor any solicitation or offering of any investment /trading opportunity on behalf of the issuer(s) of the respective security (ies) referred to herein. These information / opinions / views are not meant to serve as a professional investment guide for the readers. No action is solicited based upon the information provided herein. Recipients of this Report should rely on information/data arising out of their own investigations. Readers are advised to seek independent professional advice and arrive at an informed trading/investment decision before executing any trades or making any investments. This Report has been prepared on the basis of publicly available information, internally developed data and other sources believed by ARSSBL to be reliable. ARSSBL to be reliable. ARSSBL to be reliable. ARSSBL shall be liable for any direct, indirect, special, incidental, consequential, punitive or exemplary damages, including lost profits arising in any way whatsoever from the information / opinions / views contained in this Report. The price and value of the income from them may go down as well as up, and investments. Past performance. ARSSBL does not provide tax advice to its clients, and all investors are strongly advised to consult with their tax advisers regarding taxation aspects of any potential investment.

Opinions expressed are our current opinions as of the date appearing on this Research only. We do not undertake to advise you as to any change of our views expressed in this Report. Research Report may differ between ARSSBL's RAs and/ or ARSSBL's associate companies on account of differences in research methodology, personal judgment and difference in time horizons for which recommendations are made. User should keep this risk in mind and not hold ARSSBL, its employees and associates responsible for any type whatsoever.

ARSSBL and its associates or employees may; (a) from time to time, have long or short positions in, and buy or sell the investments in/ security of company (ies) these and other activities of ARSSBL and its associates or employees may not be construed as potential conflict of interest with respect to any recommendation and opinions. Without limiting any of the foregoing, in no event shall ARSSBL and its associates or employees or any third party involved in, or related to computing or compiling the information have any liability for any damages of any kind. Details of Associates of ARSSBL and its associates of ARSSBL and its associates of ARSSBL and its associates or employees or any third party involved in, or related to computing or compiling the information have any liability for any damages of any kind. Details of Associates of ARSSBL and its associates are available on our website i.e. www.rathionline.com

Disclaimers in respect of jurisdiction: This report is not directed to, or intended for distribution to or use by, any person or entity who is a citizen or resident of or located in any locality, state, country or other jurisdiction, publication, availability or use would be contrary to law or regulation or which would subject ARSSBL to any registration or licensing requirement within such jurisdiction(s). No action has been or will be taken by ARSSBL in any jurisdiction (other than India), where any action for such purpose(s) is required. Accordingly, this Report shall not be possessed, circulated and/or distributed in any such country or jurisdiction unless such action is in compliance with all applicable laws and regulations of such country or jurisdiction. ARSSBL requires such recipient to inform himself about and to observe any restrictions at his own expense, without any liability to ARSSBL. Any dispute arising out of this Report shall be subject to the exclusive jurisdiction of the Courts in India.

Statements on ownership and material conflicts of interest, compensation - ARSSBL and Associates

Answers to the Best of the knowledge and belief of ARSSBL/ its Associates/ Research Analyst who is preparing this report		
Research analyst or research entity or his associate or his relative has any financial interest in the subject company and the nature of such financial interest.	No	
ARSSBL/its Associates/ Research Analyst/ his Relative have actual/beneficial ownership of one per cent or more securities of the subject company, at the end of the month immediately preceding the date of publication of the research report?	No	
ARSSBL/its Associates/ Research Analyst/ his Relative have actual/beneficial ownership of one per cent or more securities of the subject company	No	
ARSSBL/its Associates/ Research Analyst/ his Relative have any other material conflict of interest at the time of publication of the research report?	No	
ARSSBL/its Associates/ Research Analyst/ his Relative have received any compensation from the subject company in the past twelve months	No	
ARSSBL/its Associates/ Research Analyst/ his Relative have managed or co-managed public offering of securities for the subject company in the past twelve months	No	
ARSSBL/its Associates/ Research Analyst/ his Relative have received any compensation for investment banking or merchant banking or brokerage services from the subject company in the past twelve months	No	
ARSSBL/its Associates/ Research Analyst/ his Relative have received any compensation for products or services other than investment banking or merchant banking or brokerage services from the subject company in the past twelve months	No	
ARSSBL/its Associates/ Research Analyst/ his Relative have received any compensation or other benefits from the subject company or third party in connection with the research report	No	
ARSSBL/its Associates/ Research Analyst/ his Relative have served as an officer, director or employee of the subject company.	No	
ARSSBL/its Associates/ Research Analyst/ his Relative has been engaged in market making activity for the subject company.	No	

Other Disclosures pertaining to distribution of research in the United States of America

This research report is a product of ARSSBL, which is the employer of the research analyst(s) who has prepared the research report. The research report is/are resident outside the United States (U.S.) and are not associated persons of any U.S. regulated broker-dealer and therefore the analyst(s) is/are not subject to supervision by a U.S. broker-dealer, and is/are not associated persons of any U.S. regulated broker-dealer and therefore the analyst(s) is/are not subject to supervision by a U.S. broker-dealer, and is/are not required to satisfy the regulatory licensing requirements of FINRA or required to otherwise comply with U.S. rules or regulations regarding, among other things, communications with a subject company, public appearances and trading securities held by a research analyst account.

This report is intended for distribution by ARSSBL only to "Major Institutional Investors" as defined by Rule 15a-6(b)(4) of the U.S. Securities and Exchange Act, 1934 (the Exchange Act, 1934 (the Exchange Act, 1934) (the Exchange Act, 1934) (the Exchange Act, 1934) of the U.S. Securities and Exchange Commission (SEC) in reliance on Rule 15a 6(a)(2). If the recipient of this report is not a Major Institutional Investor as specified above, then it should not act upon this report and return the same to the sender. Further, this report may not be copied, duplicated and/or transmitted onward to any U.S. person, which is not the Major Institutional Investor.

In reliance on the exemption from registration provided by Rule 15a-6 of the Exchange Act and interpretations thereof by the SEC in order to conduct certain business with Major Institutional Investors, ARSSBL has entered into an agreement with a U.S. registered broker-dealer Marco Polo Securities Inc. Transactions in securities discussed in this research report should be effected through Marco Polo Securities Inc.

1. ARSSBL or its Affiliates may or may not have been beneficial owners of the securities mentioned in this report.

2. ARSSBL or its affiliates may have or not managed or co-managed a public offering of the securities mentioned in the report in the past 12 months.

3. ARSSBL or its affiliates may have or not received compensation for investment banking services from the issuer of these securities in the past 12 months and do not expect to receive compensation for investment banking services from the issuer of these securities within the next three months.

4. However, one or more of ARSSBL or its Affiliates may, from time to time, have a long or short position in any of the securities mentioned herein and may buy or sell those securities or options thereon, either on their own account or on behalf of their clients.

5. As of the publication of this report, ARSSBL does not make a market in the subject securities.

6. ARSSBL or its Affiliates may or may not, to the extent permitted by law, act upon or use the above material or the conclusions stated above, or the research or analysis on which they are based before the material is published to recipients and from time to time, provide investment banking, investment management or other services for or solicit to seek to obtain investment banking, or other securities business from, any entity referred to in this report.

© 2022. This report is strictly confidential and is being furnished to you solely for your information. All material presented in this report, unless specifically indicated otherwise, is under copyright to ARSSBL. None of the material, its content, or any copy of such material or content, may be altered in any way, transmitted, copied or reproduced (in whole or in part) or redistributed in any form to any other party, without the prior express written permission of ARSSBL. All trademarks, service marks or servi

Additional information on recommended securities/instruments is available on request ARSSBL registered address: Express Zone, A Wing, 9th Floor, Western Express Highway, Diagonally Opposite Oberoi Mall, Malad (E), Mumbai – 400097. Tel No: +91 22 6281 7000 | Fax No: +91 22 4001 3770 |

CIN: U67120MH1991PLC064106.