Indian Chemical Industry

ICICI direct Research

October 09, 2020

Specialty chemicals- Opportunities galore for Indian players …

The global chemical industry size is estimated to be around €3.7 trillion ($4 trillion), which has grown at a CAGR of ~4% over 2004-18. In terms of the geographic break up, China is one of the leading players in the global chemical industry with a share of ~35% followed by Europe ~20% and US ~15%. India constitutes ~3% of the global chemical market. Over the years, there has been a shift in the overall market share from matured markets such as Europe and the US to China. Going ahead, we expect China plus one strategy along with increase in intermediate capacity in India, recent corporate tax cuts to be a few key positives to capture the potential deal flows for Indian chemical manufacturers.

We also believe that since many domestic speciality chemical companies have invested heavily in capacity expansion in the past few years along with higher spending into R&D this has helped them become prominent players across different chemistries. In turn, this is expected to translate into many Indian companies garnering CRAMS opportunities for intermediates along with few domestic companies garnering export market share for finished products on account of many global companies diversifying their supplier base from China to offset any supply side challenges. We identified a few speciality chemical companies, which are likely to emerge as potential winners from this transformation. We initiate coverage with **BUY** rating on **Navin Fluorine, PI Industries, Sudarshan Chemical** and **Aarti Industries**.

Indian speciality players well poised to outpace global growth

The India chemical industry size is estimated at ~$163 billion in FY18 (~3% share in the global chemical industry). It is expected to reach ~ $300 billion by FY25E with an anticipated growth of 9% CAGR. Going ahead, we expect an increase in intermediate capacity along with China plus one strategy to translate into Indian speciality chemical industry growing at double digits. This industry is currently valued at $32 billion. It is expected to reach $65 billion by FY25E (CAGR of ~12% vs. global growth in mid-single digits). Growth from the domestic speciality chemical industry would largely be catered to by sub sectors like agrochemical, surfactants, aroma chemicals, plastic additives, water treatment chemicals, etc. Further, we also expect that since China constitutes ~20% of the global speciality chemical industry ($800 billion), even ~5% shift in market share from China to India can translate into an $8-billion opportunity for the Indian speciality chemical companies. Further, assuming gross margins for speciality chemical companies are ~50%, an increase in capabilities to provide intermediates of finished products (~$400 billion market size) can transform the Indian speciality chemical industry to the next phase of growth.

Sector Update

Initiate Navin fluorine – BUY – TP ₹ 2550

- *Higher consumption of fluorine molecules to assist better growth for Navin fluorine (NFIL)*
- *Speciality business revenue to inch up operating margins*

Initiate PI Industries – BUY – TP ₹ 2450,

- *Robust order book in CSM bodes well for future growth*
- *New venture into pharma value chain likely to diversify revenue stream ahead*

Initiate Sudarshan Chemical– BUY – TP ₹ 550

- *We like company's focused approach, dominating market share, strong past record and technical capabilities*
- It is a prime beneficiary to tap opportunities panning out from global consolidation and China plus one strategy
- *Strong track record, with favourable macro factors, strong domestic demand key catalyst for stock*

Initiate Aarti industries – BUY – TP ₹ 1200

- *We like Aarti's leadership position, strong visibility and order book*
- *Company also key beneficiary of China plus one strategy, improving domestic demand*

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Valuation Summary

Company	CMP	Target	Upside %	Rating	P/E				EV/EBITDA			
					FY20	FY21E	FY22E	FY23E	FY20	FY21E	FY22E	FY23E
Navin Fluorine	2,029	2,550	26%	BUY	56.1x	52.6x	41.9x	27.9x	36.8x	38.8x	28.1x	19.0x
PI Industries	2,033	2,450	21%	BUY	61.5x	48.8x	36.9x	29.0x	39.4x	30.2x	23.1x	18.4x
Sudarshan Chemical	462	550	19%	BUY	22.0x	28.9x	22.0x	18.5x	14.9x	14.9x	12.2x	10.5x
Aarti Industries	1,008	1,200	19%	BUY	32.8x	34.0x	14.8x	18.5x	19.9x	19.6x	15.6x	12.1x

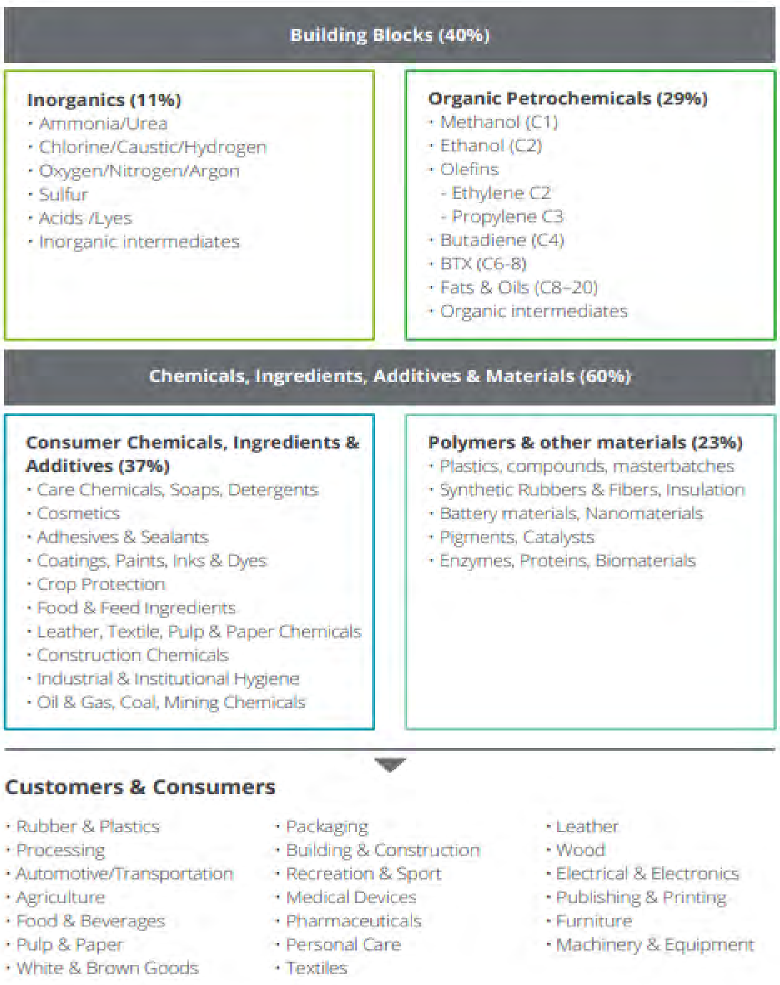
Source: Company, ICICI Direct Research

Global chemical industry

Post globalisation, along with a rise in personal disposable income, the world has seen many developments in chemistry with the usage of different building blocks such as inorganic and organic petrochemicals like olefins, aromatics value chain, etc, to meet the demand of global households either for durable/non-durable items. These items are widely used in routine consumption. Thus, it is imperative to understand the building blocks of the chemical industry before moving to the sub segment explanation. It is estimated that out of the overall size of the global chemical industry of ~US$4 trillion, building blocks account for 40% of the share. Of which organic petrochemicals hold 70% share while inorganic chemicals account for the rest.

Since petrochemicals are built of carbon chains, thus, with the refining of petrochemicals, one can get the value chain of different base chemicals with different carbons. It is estimated that base chemicals can be broadly classified into two groups: olefins and aromatics. Olefins include ethylene, propylene and butadiene while aromatics include benzene, toluene and xylene. These base chemicals are then converted into various 'intermediate' products. Lastly, these intermediates are either further processed or converted into goods and ‘effects’ used directly by consumers or industry.

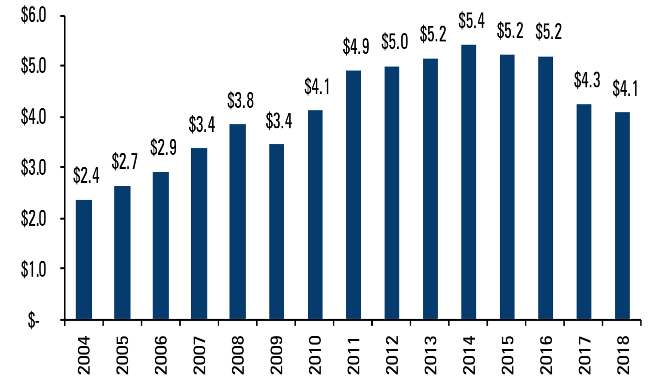
Exhibit 1: Value chain chemical industry



Source: Industry, ICICI Direct Research

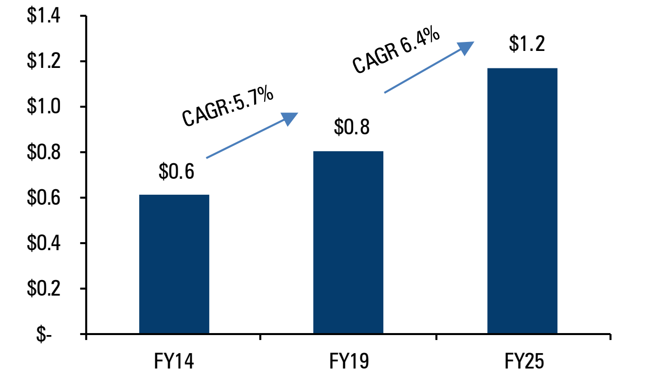
As per various industry reports, global chemical industry size is estimated to be around €3.7 trillion (US$ 4 trillion) which has grown at a CAGR of ~4% over the period of 2004-18. The chemical industry has been divided among basic chemical, specialty chemical, petro chemical, pharma intermediate etc. Specialty chemicals remains a key focus segment given an increase in the consumptions of aroma chemicals, crop protection chemicals, surfactants, plastic additives, water treatment chemicals to name a few in last few years. It is estimated that specialty chemicals comprises ~20% of the overall chemical industry, which has been growing at a CAGR of mid-single digits in the last few years.

Exhibit 2: Global chemical industry size (US$ trillion)



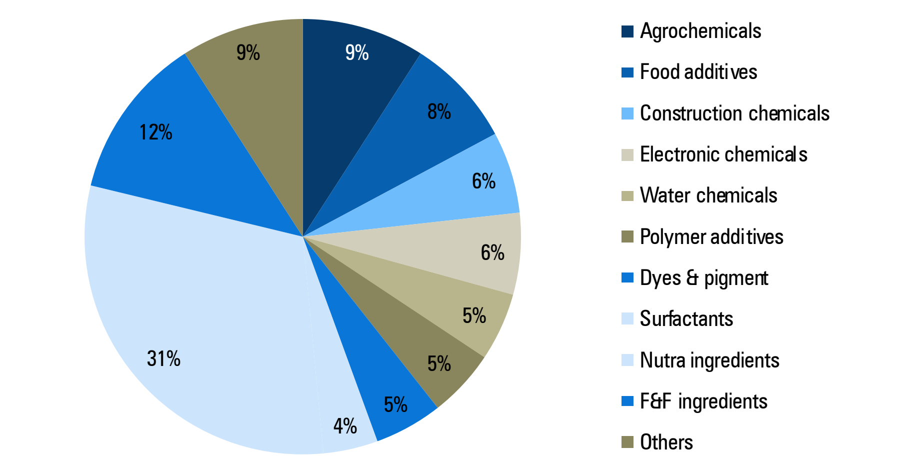
Source: Industry, ICICI Direct Research

Exhibit 3: Global speciality chemical industry size ($ trillion)



Source: Industry, ICICI Direct Research

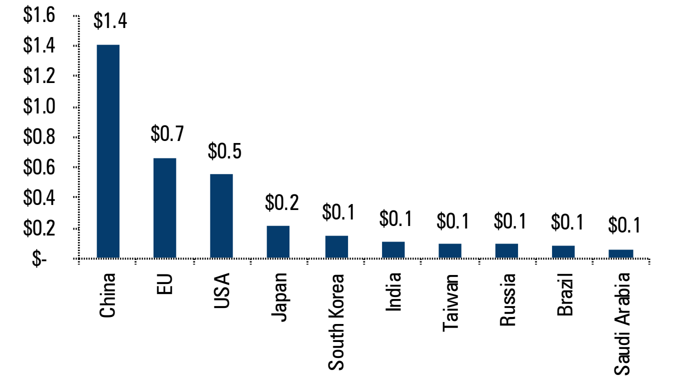
Exhibit 4: Specialty chemicals industry by segment - 2019



Source: Industry, ICICI Direct Research

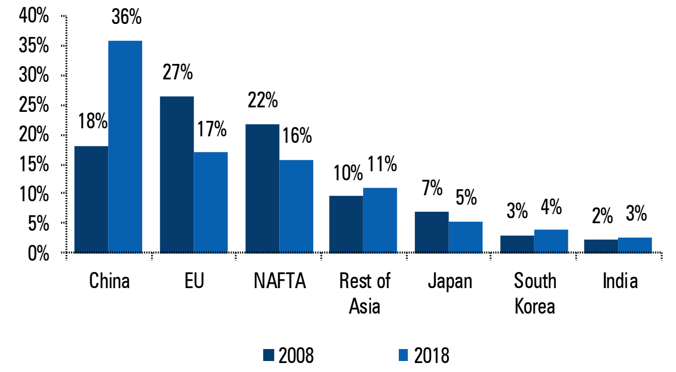
In terms of the geographic break up, China is one of the leading players in the global chemical industry with a share of ~35% followed by Europe with a share of 20% and US of ~15%. India constitutes ~3% of the global chemical industry. Over the years, there has been a shift in the overall market share from mature markets such as Europe and the US to China. The China chemical industry was contributing ~18% to the global chemical market in 2008, which grew to ~35% in 2018. This translates into ~8% CAGR for the China chemical industry against growth of around low-mid-single digits for the global chemical market in last few years. We have tried to envisage the reason behind the growth in the China chemical industry over the past few years.

Exhibit 5: Chemical sales by country – 2018 (US$ trillion)



Source: Industry, ICICI Direct Research

Exhibit 6: Global chemical sales share based on region



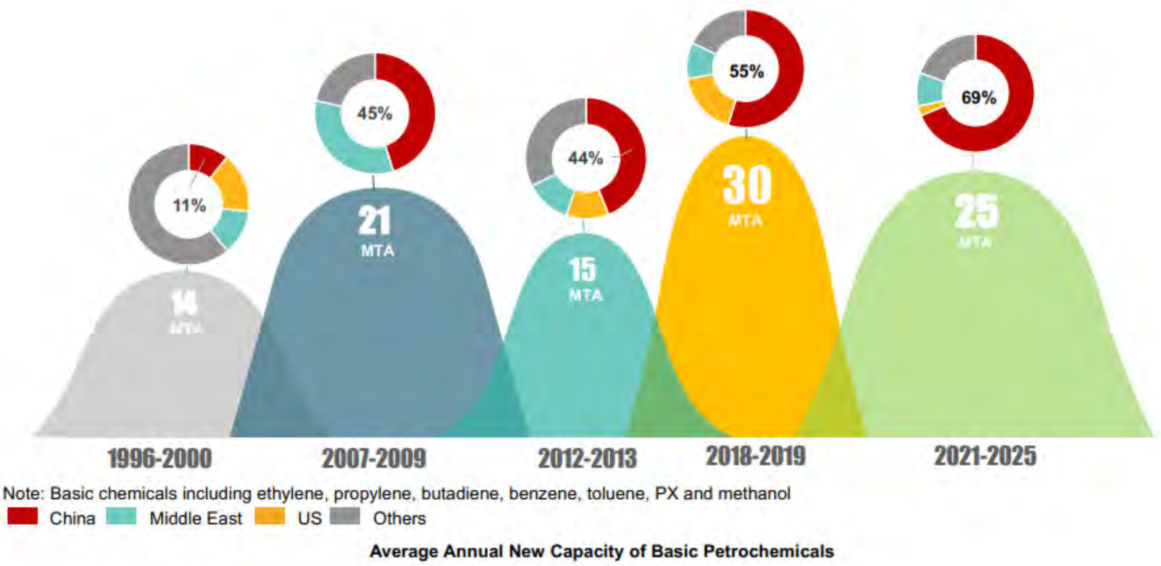
Source: Industry, ICICI Direct Research

What led to boom in China chemical industry in past decade?

We believe that growth in the Chinese chemical industry was largely attributable to an increase in the olefin and feedstock capacity as a strategic move in the initial years. Further, the government impetus to achieve economies of scale, less stringent norms to achieve better FDI flows also helped the country to gain market share in the past. Cheap labour along with higher R&D spending resulting into better usage of resources were one of the key reasons to help Chinese companies to gain market share across APAC and Europe.

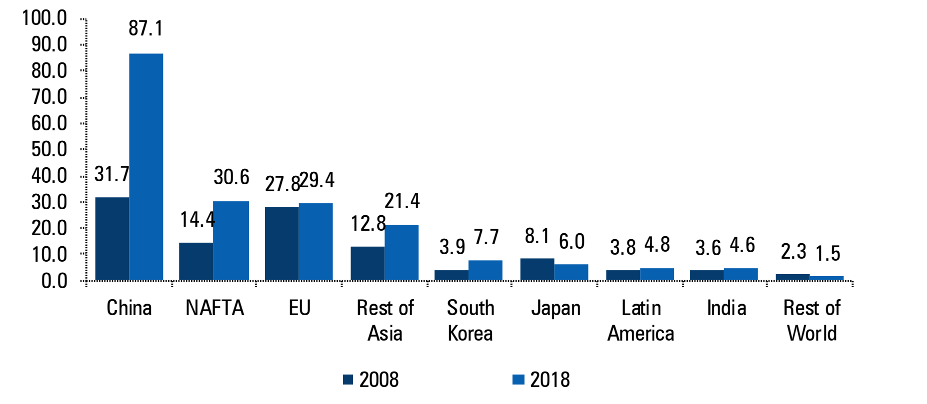
We also believe the rise in the e-commerce market along with better growth from electronics also led to higher growth in some commodity/specialty chemical portfolio. Chinese was first to develop commodity chemicals in bulk, which helped them to dump those at such rates, which were inconceivable. Later, the strategy moved towards developing specialty chemical portfolio. Since the country had enough feedstock capacity, it helped the country to manufacture intermediates of those specialty chemical and, thereby, formulations at a competitive rate, resulting in China's market share inching up to the high thirties in recent times from the mid-teens a decade back.

Exhibit 7: Average annual new capacity of basic petrochemicals based on key geographies (in million MT)



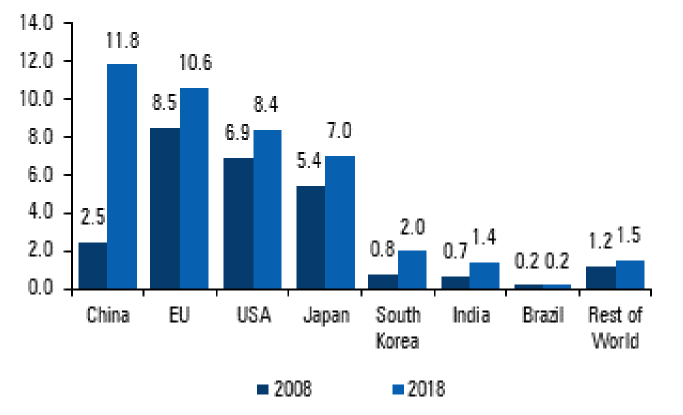
Source: Industry, ICICI Direct Research

Exhibit 8: China witnesses highest capital spending in last decade (Euro billion)



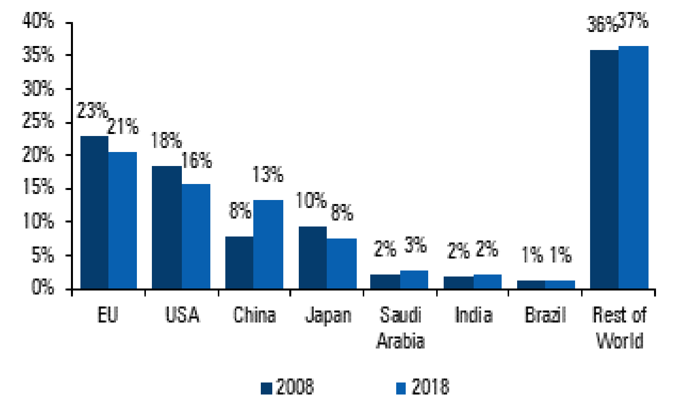
Source: Industry, ICICI Direct Research

Exhibit 9: China at top in R&D spending (Euro billion)



Source: Industry, ICICI Direct Research

Exhibit 10: Leading to higher chemical export share by China

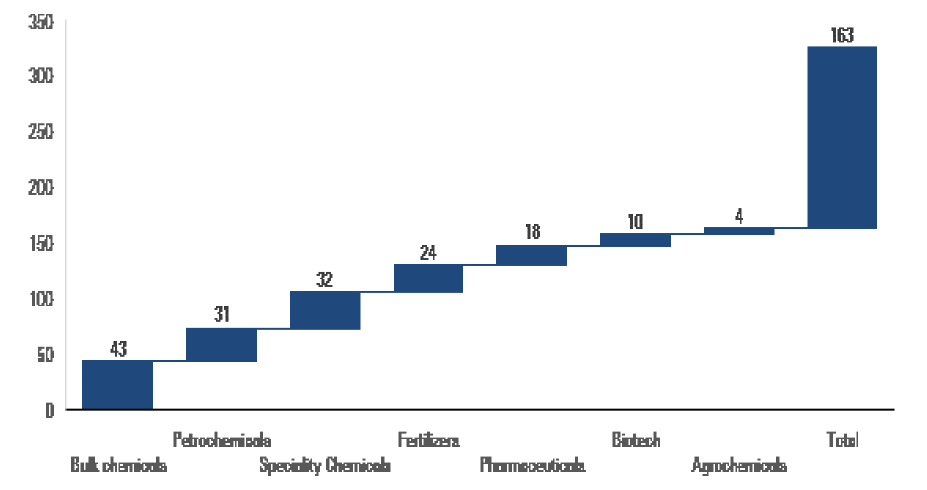


Source: Industry, ICICI Direct Research

Where does India chemical industry stands today?

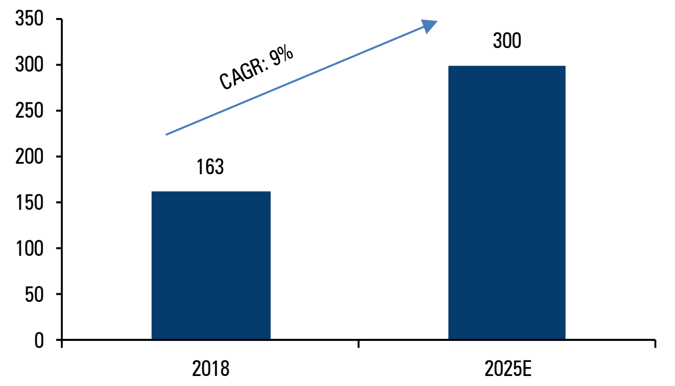
The India chemical industry size is estimated at ~US$163 billion in FY18 (~3% share in the global chemical industry). It is expected to reach ~US$300 billion by FY25E, with anticipated growth at 9% CAGR. The specialty chemical industry forms ~20% of the domestic chemical market, which is expected to grow at a CAGR of around mid-teens over the same period, reaching ~US$65 billion by FY25E.

Exhibit 11: Sector wise breakdown of Indian chemical sales (US$ billion)



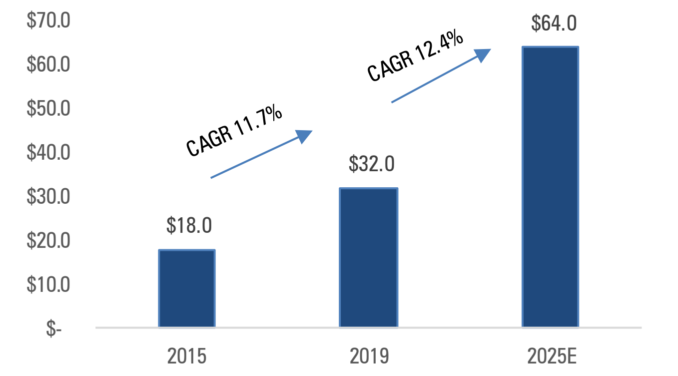
Source: Industry, ICICI Direct Research

Exhibit 12: Indian chemical industry likely to grow at 9% CAGR in 2018-25E



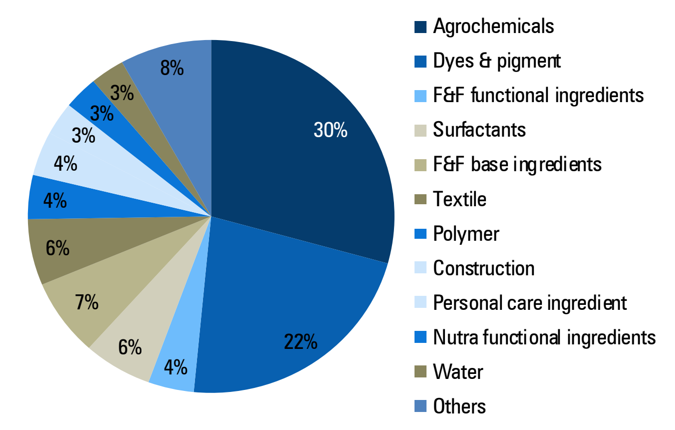
Source: Industry, ICICI Direct Research

Exhibit 13: Growth of Indian speciality chemical market (2019-25E)



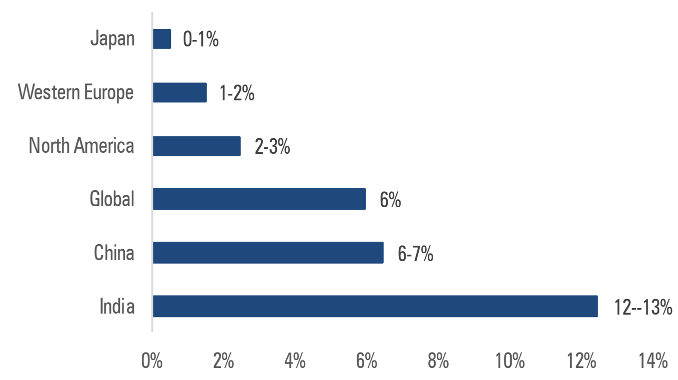
Source: Industry, ICICI Direct Research

Exhibit 14: Indian specialty chemicals industry by segment



Source: Industry, ICICI Direct Research

Exhibit 15: Indian speciality chemical likely to grow ahead of global peers in FY19-25E



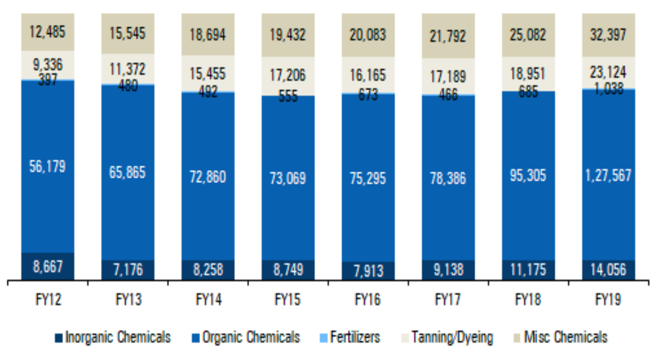
Source: Industry, ICICI Direct Research

Production of predominantly five segments of chemicals like alkali chemicals, inorganic chemicals, organic chemicals, pesticides and dyes & pigments was at 11.6 million metric tonnes (MMT) against total installed capacity of ~14 MMT in FY19. On the other hand, consumption of the aforementioned chemical groups remained at around 16 MMT, depicting a deficit of ~4.9 MMT, which is met through imports. The deficit has got widened from ~1.4 MMT in FY12 to ~4.9 MMT in FY19 largely due to higher share of imports of inorganic chemicals along with organic chemicals. It is estimated that of the overall net imports of around 4.9 MMT of chemical products, organic chemical imports remained at 3.4 MMT followed by inorganic chemical of 1.4 MMT against 1.87 MMT & 0.15 MMT, respectively, in FY12. We believe imports are largely of intermediates given that India does not have enough intermediate capacity compared to formulations. On the other hand, pesticides and dyes & pigment garnered larger export share with net exports of pesticides at 0.35 MMT while dyes & pigments were at 0.47 MMT in FY19 against net exports of 0.12 MMT and 0.24 MMT, respectively, in FY12.

In terms of absolute amount, total exports of chemicals from India were at ~₹ 198,000 crore in FY19 while imports were at ₹ ~313,000 crore in the same period, leading to net deficit of ~₹ 115000 crore. This is largely on the back of net deficit from fertilisers of ~₹ 45400 crore along with net deficit from inorganic chemical (~₹ 39200 crore,) organic chemicals (~₹ 29000 crore). Major deficit from organic chemical was for acetic acid (~₹ 4100 crore), phenol (~₹ 2060 crore), methanol (~₹ 5157 crore), acetone (~₹ 462 crore) while the same for inorganic chemical was in carbon black (₹ 1457 crore), aluminium fluoride (₹ 557 crore), hydrogen peroxide (₹ 367 crore), calcium carbonate (₹ 752 crore). Deficit from fertilisers was due to imports of DAP.

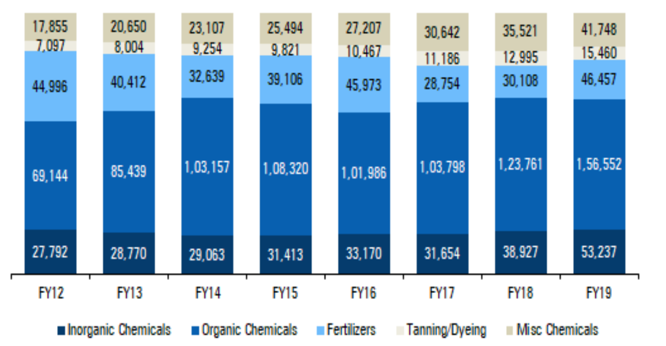
Indian chemical industry story in charts

Exhibit 16: India chemical exports (₹ crore)



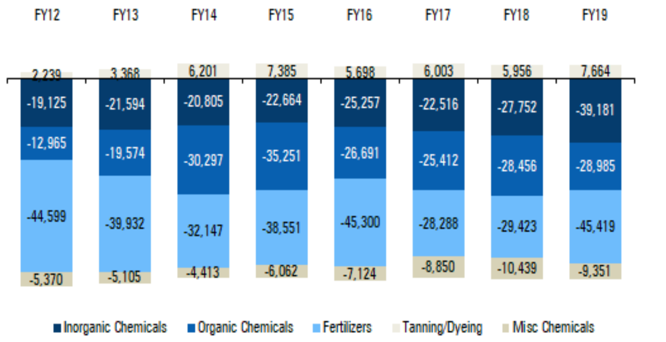
Source: Industry, ICICI Direct Research

Exhibit 17: India chemical imports (₹ crore)



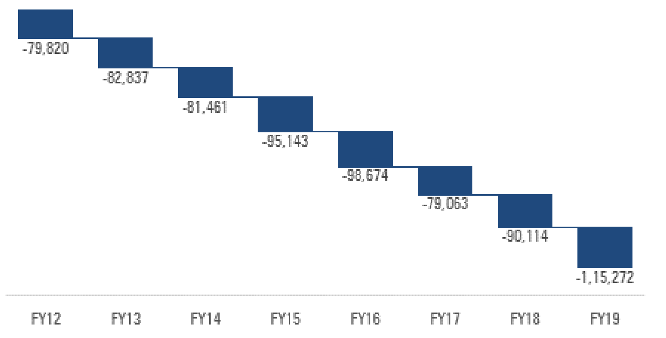
Source: Industry, ICICI Direct Research

Exhibit 18: Trade surplus/deficit (₹ crore)



Source: Industry, ICICI Direct Research

Exhibit 19: India chemical deficit increasing (₹ crore)



Source: Industry, ICICI Direct Research

Exhibit 20: India's share in world exports and imports of chemicals -2018 (in US$ billion)

	India Exports	Global Exports	% Share	Rank in the world	India imports	Global imports	% Share	Rank in the world
Inorganic Chemicals	2.0	122.6	1.7%	19	7.3	135.4	5.4%	6
Organic Chemicals	17.8	438.7	4.1%	10	22.6	474.4	4.8%	5
Fertilizers	0.1	58.0	0.2%	47	5.9	63.2	9.4%	3
Tanning/Dyeing	3.2	85.4	3.8%	11	2.2	82.3	2.6%	13
Misc Chemicals	4.4	212.2	2.1%	15	5.9	211.1	2.8%	7
Total	**27.6**	**917.0**	**3.0%**		**43.9**	**966.4**	**4.5%**	

Source: Industry, ICICI Direct Research

Exhibit 21: Major Indian chemical group based on capacity, production, import, export (in million MT)

	FY12				FY19				FY25E			
	Installed Capacity	Production	Imports	Exports	Installed Capacity	Production	Imports	Exports	Installed Capacity	Production	Imports	Exports
Alkali Chemicals	8.16	6.48	0.66	0.35	9.42	8.04	1.05	0.24	11.01	10.58	1.33	0.38
Inorganic Chemicals	1.24	0.90	0.48	0.33	1.30	1.06	1.58	0.18	1.41	1.24	2.27	0.30
Organic Chemicals	2.51	1.64	2.18	0.32	2.58	1.88	3.65	0.23	2.67	2.05	4.83	0.07
Pesticides	0.30	0.16	0.03	0.15	0.32	0.22	0.05	0.41	0.36	0.23	0.07	0.64
Dyes & Pigments	0.41	0.24	0.05	0.29	0.49	0.38	0.06	0.53	0.55	0.53	0.07	0.77
All Major chemical group total	**12.62**	**9.41**	**3.40**	**1.43**	**14.11**	**11.59**	**6.38**	**1.58**	**15.99**	**14.62**	**8.57**	**2.16**

Source: Industry, ICICI Direct Research

What can enable Indian chemical Industry to reach new milestones like China chemical sector?

As per Xinhua News Agency 2019, by 2018, there were 676 petrochemical industrial parks: 57 national level industrial parks, 351 provincial-level industrial parks and 224 prefectural-level industrial parks in China. These chemical industrial parks are mainly in the provinces of Jiangsu, Shandong, and Hubei. Jiangsu is one of the richest provinces in China and has a developed industrial system that needs a lot of chemical products as raw materials. Besides, the Yangtze river flows through Hubei and Nanjing, providing convenient transportation for the development of the chemical industry. Most chemical companies in the two provinces are along the Yangtze river.

Moreover, Hubei is situated in the middle reaches of the Yangtze river and the Hubei section of the Yangtze river is the longest in all provinces. The Shengli oilfield in Shandong is able to provide considerable raw materials for petrochemical companies in the province. The coast-line of the Shandong province also provides convenient maritime transportation for petrochemicals and chemicals. Thus, it is evident that India should also come up with such a cluster based approach, where it will create chemical industrial parks along with petrochemical plants. This can help chemical companies to achieve logistic cost savings, to a certain extent, and help to improve their supply chain dynamics at a competitive rate.

Exhibit 22: Sector wise break-up of Indian chemical sales (US$ billion)

Source: Industry, ICICI Direct Research

Secondly, we believe India should increase its olefins/feedstock capacity to increase intermediates production, which are largely imported into the country. China had developed a technology of coal gasification in earlier years. With the enough source availability of coal, it was able to manufacture coal to olefins at an economical cost. This also helped them to manufacture intermediates and finish product at such competitive rate, which was largely incomparable even with the gas source based countries.

It is estimated that by the end of FY15, China had a total olefin capacity of 55 MMT of which around 76% was from oil to olefins (OTO), 8% from coal to olefins (CTO), 7.6% from methanol to olefins (MTO), 7% from PDH (Propane route), 0.6% from butane to olefins (BTO) and rest from others. The country envisaged to increase olefins capacity by 30.4 MMT over FY15-20, which they also achieved, to a certain extent. Out of the envisaged capacity expansion, around 44% came from CTO, 34% from OTO and rest from others. This can also be ascertained from the aforementioned chart in Exhibit 23.

India also has enough coal sources but technological barriers could hurt the economies of scale. Thus, we believe natural gas to olefins could be a key prospect to connect India as a major chemical hub in the eyes of global companies given natural gas prices are at lower levels and are expected to remain at benign levels for the foreseeable future. Further, natural gas is also a clean energy compared to coal and, thus, bodes well in terms of environmental outlook as well. We believe expansion in petrochemical is still at a small scale compared to China's expansion a decade back and thus, timely execution along with encouragement of private players can improve growth of petrochemicals and, thereby, the speciality chemical industry.

Out of the major petrochemicals, we tried to envisage the trade deficit of key petrochemicals and found that around ₹ 21,000 crore deficit comes from the polymer value chain of which PVC remains the key product being imported into the country. Apart from this, there are other key petrochemicals across synthetic rubber chain along with few other petrochemical based products such as styrene, polycarbonate, VAM, Polyol, which are among the list of key imported petro chemical products into the country. ***(Note: Exhibit 26 gives details of net imports of major petrochemicals based on different product wise).***

McKinsey identified an expansion into six carbon value chain, which can reduce overall chemical imports into the country by $ 11 billion. ***(Note: we have mentioned the value chain flow chart based on different building blocks at the end of this report, click here for reference).***

Exhibit 23: China olefin capacity (in million MT)

	Ethylene capacity	Propylene capacity	Total capacity	Capacity expansion planned in 2016-20
OTO	20.3	21.8	42.1	10.4
CTO	1.7	2.8	4.5	13.3
MTO	1.3	2.9	4.2	1.5
PDH	–	4.0	4.0	5.2
BTO	0.3	–	0.3	–
Others	0.2	–	0.2	–
Total	**23.7**	**31.6**	**55.3**	**30.4**

Source: Industry, ICICI Direct Research

Exhibit 24: India olefin & aromatics capacity (in million MT)

	In Million MT
(a) Olefins	
Butadiene	0.4
Ethylene	4.4
Propylene	4.8
(b) Aromatics	
Benzene	1.6
Mixed Xylene	0.9
Orthoxylene	0.4
Tolune	0.3
Paraxylene (PX)	3.1
Total Olefins & Aromatcis	**16.0**

Source: Industry, ICICI Direct Research

Exhibit 25: Six major petrochemical value chain to curb import gap of chemicals

		India imports, 2018		
		KT	**USD mn**	**Key enablers**
C1	Methanol – Formic/Acetic Acid - Acetate esters - VAM - EVA-PVA	~3,300	~2,100	
C2	EDC - VCM - PVC	~3,000	~2,400	**Access to feedstock** • Form strategic partnerships with local refineries/gas majors to secure feedstock • Invest in basic building blocks in feedstock-advantaged regions and build downstream value chain in India
C6/ C4	Styrene - PS - ABS - SAN - SBR	~1,700	~2,500	
C3/ C6	Phenol - Acetone - Bisphenol A - PC – MMA/PMMA	~1,000	~1,700	**Access to feedstock** • Set up on-purpose Propane DeHydrogenation (PDH) unit • Partner with refinery majors implementing PRU units
C3	Acrylic acid - Oxo alcohol - Acrylates - SAP	~900	~1,300	**Access to technology** • Partner with major chemical MNCs or independent technology licensors
C3	PO-PG/Polyol - MDI/TDI - PU systems	~500	~1,000	**Capability to offer application-specific product and solutions** • Partner with MNCs to develop end-market solutions, e.g., polymer compounding • Make targeted acquisitions to build capabilities, e.g., independent PU system house
	Total	**~USD 11 bn**		

Note: VAM: Vinyl acetate monomer; EVA: Ethylene vinyl acetate; PVA: Poly vinyl acetate; EDC: Ethylene dichloride; VCM: Vinyl chloride monomer; PVC: Poly vinyl chloride; PS: Polystyrene; ABS: Acrylonitrile butadiene styrene; SAN: Styrene Acrylonitrile; SBR: Styrene butadiene rubber; PC: Polycarbonate; (P)MMA: (Poly) methyl methacrylate; SAP: Superabsorbent polymer; PO: Propylene oxide; PG:Propylene Glycol; MDI: Methylene phenyl diisocyanate; TDI: Toulene diisocyanate; PU: Polyurethane

Source: Industry, ICICI Direct Research

Exhibit 26: Trade (deficit)/surplus of major petrochemicals (₹ crore)

	FY12	FY15	FY19
Synthethic fibers			
POLYESTER FILAMENT YARN	4,578	5,886	7,215
POLYESTER STAPLE FIBRE	1,176	800	1,354
Fiber Intermediates			
ACRYLONITRILE	-717	-1,189	-2,410
MONO EHYLENE GLYCOL	-3,107	-4,931	-1,963
PURIFIED TEREPHTHALIC ACID	-3,488	-5,591	-2,434
CAPROLACTUM	109	-436	-992
Polymers			
POLY VINYL CHLORIDE	-4,408	-8,524	-13,523
LOW DENSITY POLYETHYLENE	-1,328	-2,719	-1,777
HIGH DENSITY POLYTHYLENE	-1,390	-7,601	-5,075
POLYPROPYLENE (INC. CO-POLYMER)	2,538	308	-2,404
LINEAR LOW DENSITY POLYTHYLENE	-2,999	-5,057	1,521
Synthetic Rubber			
STYRENE BUTADIENE RUBBER	-3,200	-2,464	-1,134
POLY BUTADIENE RUBBER	-1,111	-775	-1,230
ETHYL VINYL ACETATE	-918	-1,542	-2,016
BUTYL RUBBER	-1,720	-1,561	-1,989
Synthetic Detergent Intermediates			
LINEAR ALKYL BENZENE	-98	-1,107	-2,096
Performance plastics			
NYLON-6	-1,258	-2,088	-3,913
POLYESTER CHIPS/PET CHIPS	2,027	1,519	6,906
ABS RESIN	-530	-939	-1,730
Olefins			
BUTADIENE	1,721	425	1,125
ETHYLENE	-82	-385	901
PROPYLENE	39	-27	163
Aromatics			
BENZENE	2,563	3,489	8,092
ORTHO-XYLENE	972	1,148	1,073
TOLUENE	-1,357	-1,774	-2,260
PARAXYLENE	1,746	1,587	12,793
Other Petro based chemicals			
ETHYLENE DICHLORIDE	-467	-1,170	-1,370
VINYL CHLORIDE MONOMER	-1,474	-1,788	-2,529
POLYCARBONATE	-1,592	-1,871	-3,647
STYRENE	-3,440	-5,371	-7,374
VINYL ACTATE MONOMER	-667	-1,131	-1,292
POLYOL	-1,495	-1,981	-3,075

Source: Industry, ICICI Direct Research

Can China plus one strategy helps Indian chemical industry, going ahead?

As per industry reports, around 200 accidents occur at Chinese chemical plants every year of which 40% are severe incidents. Moreover, ~25% of overall incidents happen in the key provinces of Jiangsu, Shandong and Hubei, which are key provinces contributing to the China chemical industry and thereby play pivotal role in the global supply chain dynamics. Since there have been two epidemics from China in the past decade along with pollution and plant blast related disruptions, it has hampered the global business dynamics, to a certain extent in the past. Thus, it is evident that all these would translate into many global players diversifying their presence to other geographies such as India, Vietnam, Thailand, etc.

We believe the recent tax cuts for newly incorporated companies is one step in the direction of making growing sectors like chemical 'Atmanirbhar' and generate decent export receipt in the long term. Europe and the US together constitute ~32% of the global chemical industry. Hence, the ongoing trade war between US and China should likely materialise into positive developments for the Indian chemical industry. The US had imported ~US$15.8 billion worth of chemicals from China in 2018 while it exported ~US$11.8 billion of chemicals, leaving a deficit of US$4 billion with China.

Likewise, it imported US$3.4 billion worth of chemicals from India and exported ~US$3 billion for the same period. Thus, we expect even 5-10% market shift of overall US imports from China to India to increase India exports by US$0.5-1 billion in the medium to long term. Similarly, China is also one of the prominent trading partner for Europe with overall exports to EU at €15.7 billion while imports were at €14.8 billion in 2018. Thus, we expect worsening relations between the US-Europe and China to only augur well for economies like India in the medium to long run. Any developments on signing free trade agreement (FTA) with Europe could bolster the growth outlook for the Indian chemical sector in the years to come.

Exhibit 27: US chemical trade flows (US$ billion)

	Export	Import	Trade surplus/Deficit
Mexico	22.9	5.4	17.5
Canada	22.6	19.5	3.1
China	11.8	15.8	-4.0
Brazil	7.7	NA	NA
Japan	6.4	6.7	-0.3
South Korea	6.1	3.8	2.2
Netherlands	4.8	NA	NA
India	3.8	3.4	0.4
Singapore	3.3	NA	NA
Germany	3.1	8.3	-5.2

Source: Industry, ICICI Direct Research

Exhibit 28: Europe chemical trade flows (Euro billion)

	Export	Import	Trade surplus/Deficit
NAFTA	37.2	26.6	10.6
Rest of Europe	39.3	27.3	12.0
Latin America	9.9	4.7	5.2
Africa	12.1	4.2	7.9
China	14.8	15.7	-0.9
Japan	5.1	6.7	-1.6
Rest of Asia	37.5	28.8	8.7
Rest of world	5.4	2.5	2.9

*Source: Industry, ICICI Direct Research (Note: * Rest of Europe covers Switzerland, Norway, Turkey, Russia and Ukraine. Asia excluding China, India, Japan and South Korea)*

Indian ecosystem well prepared to exploit China plus one scenario

We believe recurring plant blast incidents along with closure of many chemical units in key provinces in China have affected the supply chain for many global players. This has led many players to look after secondary sources, which, we believe, can be beneficial for India, Vietnam, South Korea, etc. We believe that since the Government of India has reduced corporate taxes for newly incorporated unit during this year, this can make India an attractive source of destination for many global/domestic companies to expand their operations.

Further, there has been an increase in production cost of Chinese chemical companies largely on account of increase in pollution control cost to meet environmental norms, which has narrowed down the cost differential between Indian and Chinese companies, to a certain extent. Thus, India can become another source of a chemical manufacturing hub.

Going ahead, we expect announcement of pharma API parks by the government along with increase in focus of many domestic companies to backward integrate to offset any RM vulnerability to likely augur well in terms of speciality chemical portfolio. This should translate into increase in contract manufacturing from India as can be seen from many Indian chemical companies, which are gaining traction in this segment. Thus, we expect a high probability of some small cap Indian chemical companies moving into the orbit of the midcap universe while the same should transition midcaps to large caps in the medium to long run. **We believe companies like PI industries, Navin Fluorine, Sudarshan Chemical and Aarti Industries are a few names from the Indian chemical space Which could be major beneficiaries due to conducive environment .**

Navin Fluorine (NAVFLU)

CMP: ₹ 2029 | Target: ₹ 2550 (26%) | Target Period: 12 months | **BUY**

October 9, 2020

Initiating Coverage

ICICI Securities – Retail Equity Research

Higher share of speciality business likely to improve business performance ahead…

Incorporated in 1967, Navin Fluorine (NFIL) operates one of the largest integrated fluorochemicals complexes in India. NFIL operates in four segments viz. (i) refrigeration gases, (ii) inorganic fluorides, (iii) speciality chemicals, (iv) CRAMS, largely dispersed equally in terms of topline contribution at the end of FY20. Going ahead, we expect an increase in CRAMS revenue along with better growth visibility from speciality chemical business owing to higher share of fluorine consumption across pharma and agrochemical, recent deal win in high performance product (HPP) to translate into speciality business revenue share inching up to 75-80% in the medium term from 54% in FY20. This bodes well in terms of operational performance given that high value business generates high thirties margins against legacy being into mid-teens. In turn, this would improve FCF and return ratios in the years to come. We initiate coverage on the stock with a **BUY** recommendation.

Higher fluorine molecules consumption to improve growth

The size of fluorine molecule market is estimated at US$16.9 billion in 2016 and is expected to grow at a CAGR of 5.2% to $US26.7 billion by 2025E. Consumption of fluorine molecule has increased across pharma and agrochemical largely on account of its efficacy. It is estimated that at least 30-40% of the newly launched drugs/pesticides contain fluorine molecules, leading to better demand visibility for players like NFIL. Further, there has been an increase in usage of fluorine molecules across different applications such as coated cookware, high performance lubricants, PTFE, etc, which should increase the market size of fluorine molecules. We believe NFIL being one of the largest players in the fluorine value chain should likely benefit from the incremental opportunities due to aforementioned factors.

Speciality business revenue to inch up operating margins

With cGMP3 plant coming on stream, we expect CRAMS revenue to grow at 33% CAGR in FY20-23E. Also, we expect high teens growth in speciality chemical business with revenues from HPP segment likely to start flowing in from FY23E, leading to higher share of high value business in overall group performance thereby providing strong visibility of OPM expansion. We expect OPM to improve to ~30% by FY23E from ~25% in FY20.

Valuation and outlook

We value the company at 35x FY23E PER (~1.3x PEG) and arrive a target price of ₹ 2550, a potential upside of 26% from the CMP of ₹ 2029. We initiate coverage on the stock with a **BUY** recommendation.

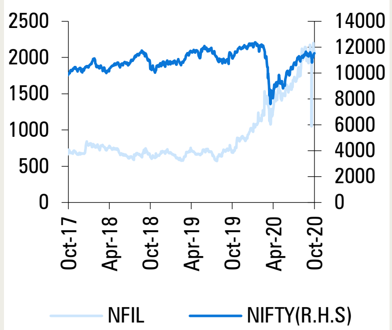
Particulars

Particular	Amount
Market cap (₹ Crore)	10,043
FY20 Total Debt (₹ Crore)	1
FY20 Cash & Inv (₹ Crore)	351
EV (₹ Crore)	9,693
52 Week H/L	2249/685
Equity Capital (₹ Crore)	9.9
Face Value (₹)	2

Key Highlights

- Higher consumption of fluorine molecules to assist better growth for NFIL
- Speciality business revenue to inch up operating margins
- Initiate with BUY

Price movement



Source: ICICI Direct Research, Company

Research Analyst

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Key Financial Summary

(₹ Crore)	FY18	FY19	FY20	FY21E	FY22E	FY23E	CAGR (FY20-23E)
Net Revenue	912.7	995.9	1,061.6	1,060.9	1,294.9	1,690.3	16.8
EBITDA	215.0	218.4	263.5	251.4	352.2	515.5	25.1
EBITDA Margins (%)	23.6%	21.9%	24.8%	23.7%	27.2%	30.5%	
Adj.PAT	179.8	149.1	179.1	191.0	239.9	360.5	26.3
Adj. EPS (₹)	36.4	30.1	36.2	38.6	48.5	72.8	
EV/EBITDA	45.5x	44.9x	36.8x	38.8x	28.1x	19.0x	
P/E	55.7x	67.3x	56.1x	52.6x	41.9x	27.9x	
ROE (%)	18.3	13.9	12.7	12.2	13.7	17.6	
ROCE (%)	25.6	19.9	17.9	15.2	17.1	22.2	

Source: ICICI Direct Research, Company

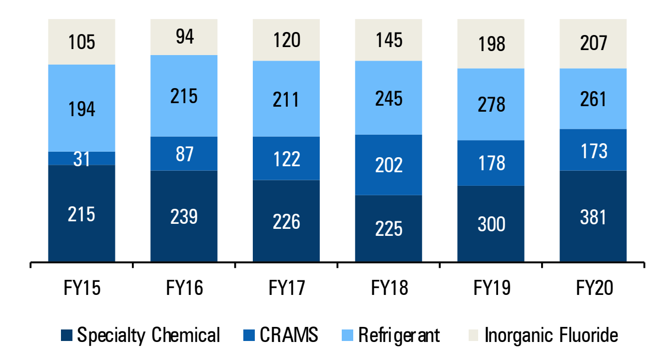
Company background

Established in 1967, NFIL operates one of the largest integrated fluorochemicals complexes in India with manufacturing facilities at Surat, Dahej and Dewas. The company's Surat plant manufactures refrigerants, various organic and inorganic fluorides, which includes anhydrous hydrofluoric acid (AHF), R-22 and boron trifluoride. The CRAMS unit at Dewas mainly focuses on developing process chemistries, novel analogues and derivatives around the customers' target molecules to support research and discovery activities. NFIL has a subsidiary Manchester Organics Ltd in the UK, which also participates in this early discovery phase with innovator customers. The cGMP pilot plant facility at Dewas enables NFIL to supply specialised and niche fluorinated molecules from milligram to multi-kilogram level quantities. The company produces over 60 fluorinated products for domestic and international customers while more than 40% of overall products are exported to North America, Europe, Middle East, Asia Pacific regions. NFIL has emerged as a preferred source and a partner of choice for a variety of fluorochemicals globally. The clientele of the company includes top-tier life sciences, crop protection, petro chemical and speciality chemical companies with several of them being Fortune 500 companies.

NFIL operates in four segments viz. (i) refrigeration gases (ii) inorganic fluorides, (iii) speciality chemicals and (iv) CRAMS. The revenues of these four segments are largely dispersed equally at the end of FY20. The first two segments are mainly non speciality in nature while the last two deal with speciality products. Revenues grew at a CAGR of 13% in FY15-20 with OPM improvement at 1260 bps over the same period. The expansion in operational performance was largely on account of higher share of speciality business over a period of time.

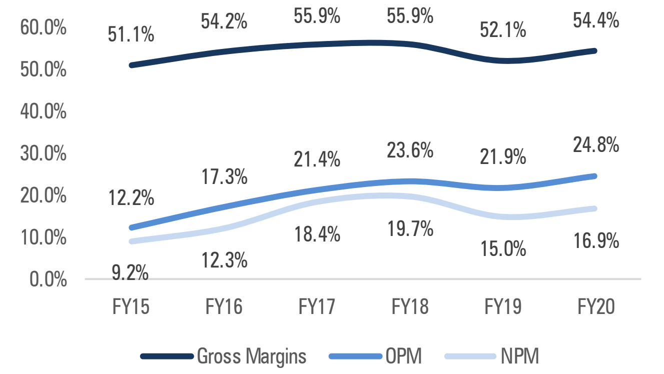
Business snapshot in charts

Exhibit 29: Segment revenue break up (₹ Crore)



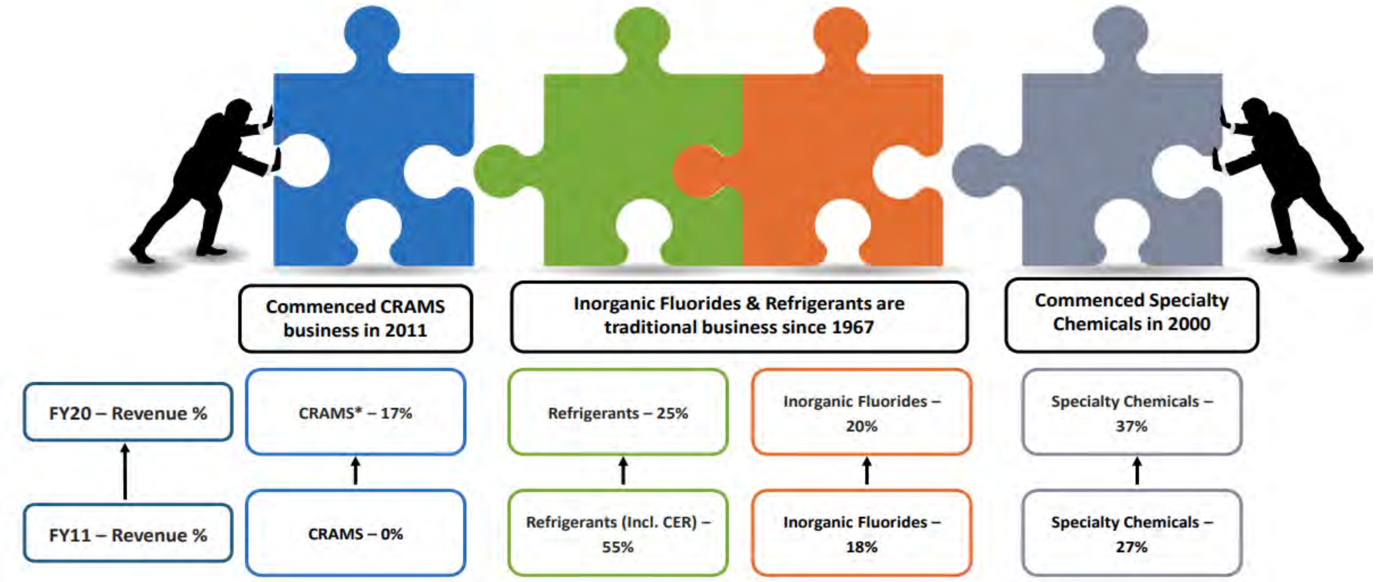
Source: Company, ICICI Direct Research

Exhibit 30: Margins trend…



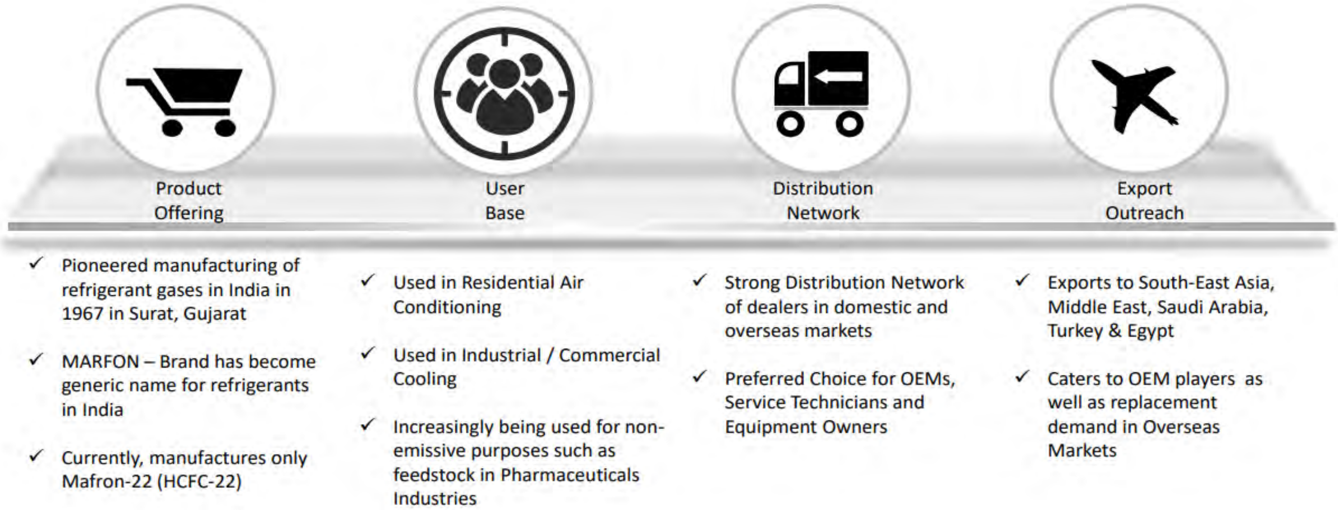
Source: Company, ICICI Direct Research

Exhibit 31: High value business revenue contribution inched up over the years…



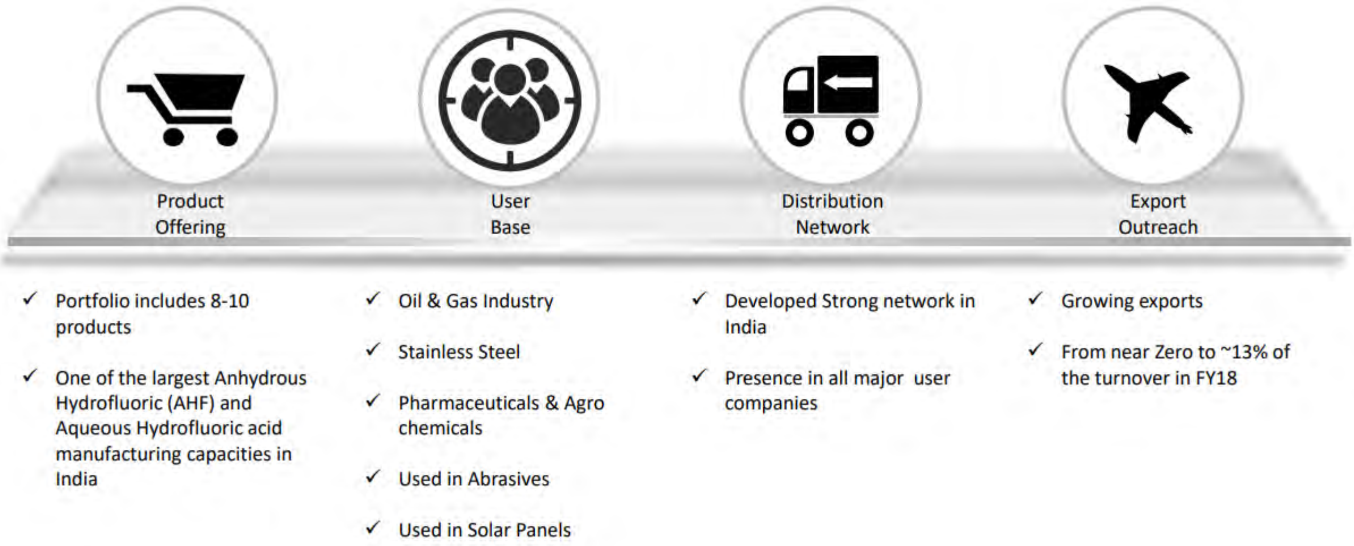
Source: Company, ICICI Direct Research

Exhibit 32: Refrigerant business model



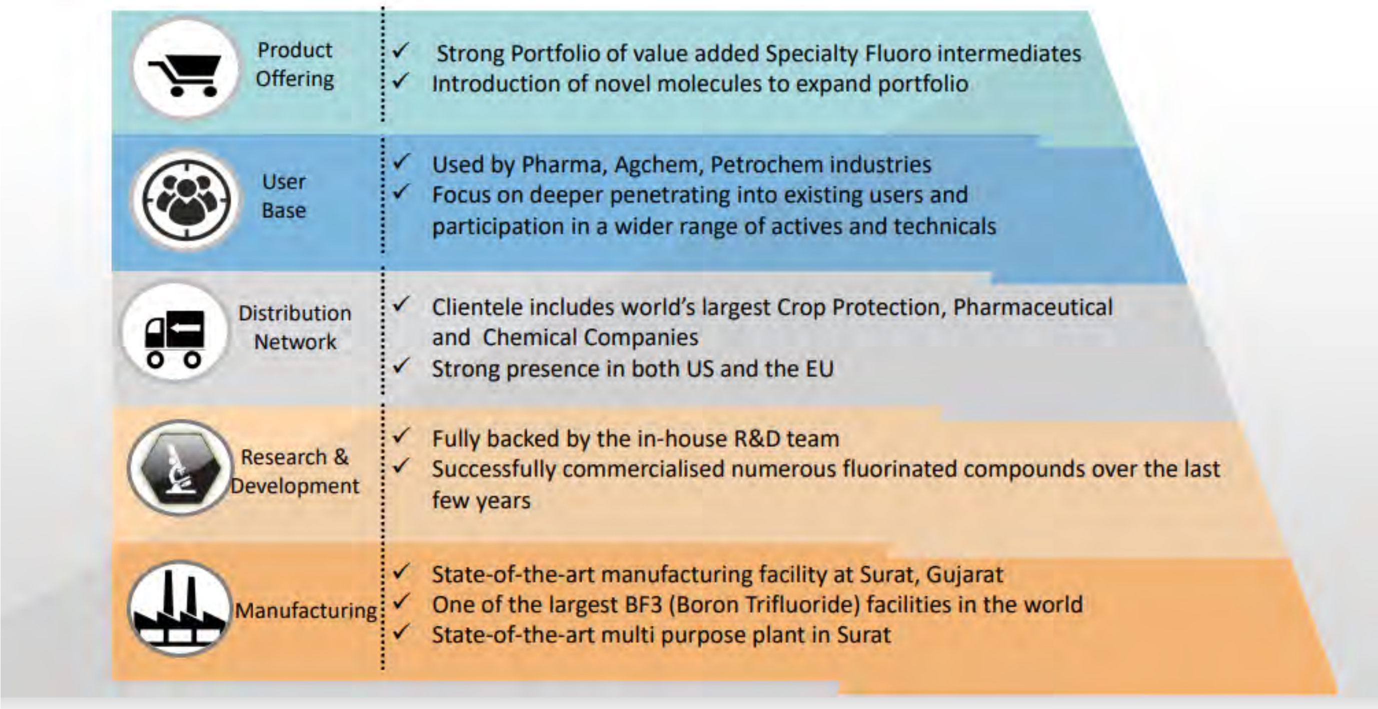
Source: Company, ICICI Direct Research

Exhibit 33: Inorganic fluoride business model



Source: Company, ICICI Direct Research

Exhibit 34: Speciality chemical business model



Source: Company, ICICI Direct Research

Exhibit 35: Cliental base across the world..

Source: Company, ICICI Direct Research

Investment Rationale

Increasing size of fluorine molecules market likely to improve growth

Fluorine is an essential element, which is used by most people in the developed world on a daily basis. The wide range of applications of organic systems bearing fluorine atoms include pharmaceuticals, anaesthetics, materials and air conditioning materials. All fluorine atoms used in organic chemistry are ultimately sourced from a mined raw material, fluorspar (CaF_2). As per USGS estimates, current global use of fluorspar is 6.7 million tonnes with current global reserves of 500 million tonnes (MT). Currently, out of the 6.7 MT of fluorspar used each year, around 51% is used by steel manufacture while the rest is dispersed among inorganic fluorides (~14%) and fluorinated organic molecules (~35%) having application in pharma, agrochemical to name a few. The fluorspar reserves are mainly located in China and Mexico.

As per estimates, the fluorine molecule market size is estimated to be $16.9 billion in 2016 and is expected to grow at a CAGR of 5.2% to $26.7 billion by 2025. We tried to envisage the importance of fluorine in the pharma and agrochemical value chain and found that since the FDA approval of its first fluorocorticosteroid drug in 1956, over 140 drugs have been introduced that contain at least one fluorine atom and several blockbuster pharmaceuticals owe their biological activities to the presence of fluorine within their structures. Some examples of fluorine containing pharmaceuticals are given in the exhibit 37 demonstrating the range of therapeutic areas where fluorinated atoms find useful application.

Usage of fluorinated anaesthetics has increased post anaesthesia being revolutionised by the advent of volatile fluorinated gases such as halothane, which have now been superseded by Desflurane and Sevoflurane. Currently, ~20% of new pharmaceuticals entering the market have fluorine atoms within their structures. Further, fluoridated molecules enhance drug efficacy by increasing metabolic stability and thus, should likely aid its usage in the pharma value chain in the years to come.

In terms of the agrochemicals, industry reports suggest that over 1998-June 2020, around 126 fluoro-agrochemicals were registered, which accounts for 53% of all active agrochemical ingredients registrations (237 compounds). Despite the higher cost of fluorine-containing synthetic building blocks relative to their non-fluorinated counterparts, fluoro- agrochemicals have maintained a position as a strong competitor to non-fluorinated pesticides. It is indeed striking that every year more than 50% of compounds with new ISO common names are fluoro-organic compounds.

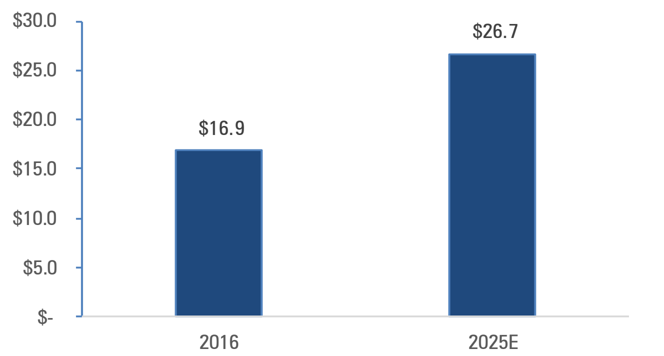
Further, we tried to analyse fluorine compounds on the basis of different types of pesticides. We found that in the insecticide and acaricide categories, the contributions of fluorinated compounds are extraordinarily high (70% and 77%, respectively). In the other three main categories they make up ~50% of the compounds (fungicides: 49%; herbicides: 50%; nematicides: 57%). Thus, it is evident that with an increase in the demand of food along with reduction in the crop area, there will be a need of effective usage of agri input consumptions. Agrochemicals being the key input are thereby expected to grow in low-mid teens over the medium to long run thereby paving the way for the growth of fluorine compounds over the long run.

Apart from this, polytetrafluoroethylene (PTFE), a range of fluorinated polymers, are finding applications in a wide number of technological fields, mainly due to the enhance chemical and thermal stability of highly fluorinated polymers in various harsh operating conditions. PTFE is now widely used in the areas of coated cookware (Teflon®, DuPont) and protective clothing (Goretex®, WL Gore).

Further, Perfluoropolyethers (Fomblin®, Solvay) are widely used as high performance lubricants that can withstand the extreme operating temperatures and pressures of air and space craft engines while perfluoroalkylated acid derivatives are crucial components of high water and oil repellent textile treatments (Scotchgard®, 3M). Ethylene-tetrafluoroethylene (ETFE) copolymers (Asahi Glass) are relatively recent additions to the fluoropolymer range. Thus, we believe these are few growing segments, which can aid industry growth further in the long run.

Navin Fluorine is one of the largest player in the fluorine value chain for the domestic market with a presence into both CRAMS and specialty chemicals segments should likely benefit from incremental opportunities due to aforementioned factors. Further, we expect Navin Fluorine to have a market share of around low-mid single digit in the global fluorine market. Thus, with an increase in product offerings across other segments apart from pharma and agrochemical, there is a high probability of gaining incremental share largely on account of its prominent name in the industry due to its product quality/durability. Hence, we expect Navin Fluorine to register at least 1.5x growth over global fluorine industry growth in medium to long run.

Exhibit 36: Global fluorine molecule size (US$ billion)



Source: Company, ICICI Direct Research

Exhibit 37: List of few fluorinated pharma drugs

API name	Brand name	Developer	Therapeutic area
Fluticasone propionate	Advair/Seretide (combination with salmeterol xinafoate))	GSK	Respiratory
Moxifloxacin	Avelox	Bayer	Antibiotic
Atorvastatin	Lipitor	Pfizer	Cardiovascular
Voriconazole	Vfend	Pfizer	Anti-fungal
Capecitabine	Xeloda	Roche	Anti-cancer
Sofosbuvir	Sovaldi	Gilead	Antiviral

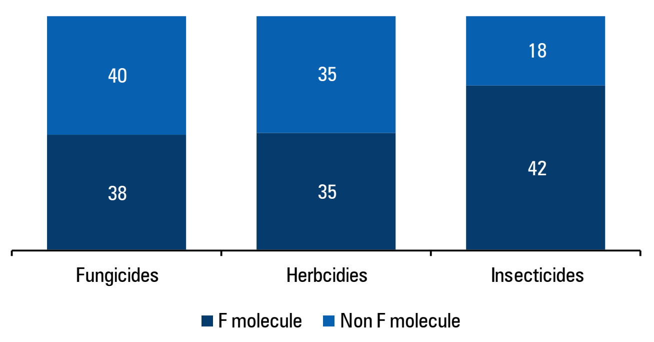
Source: Company, ICICI Direct Research

Exhibit 38: List of few fluorinated crop protections

Name	Brand name	Developer	Application
Fluroxypyr methylheptyl	Starane®	Dow	Post emergence herbicide
Benfluralin	Balan®, Team®	Dow	Herbicide
Tefluthrin	Force®	Syngenta	Insecticide (seed treatment)
Teflubenzuron	Nomolt®, Nomax®	BASF	Insecticide
Fluazifop butyl	Fusilade®	Syngenta	Post-emergence herbicide
Trifloxystrobin	Flint®	Bayer Crop science	Fungicide

Source: Company, ICICI Direct Research

Exhibit 39: Fluorine molecule in more than 30-40% of agrochemicals nowadays



Source: Company, ICICI Direct Research

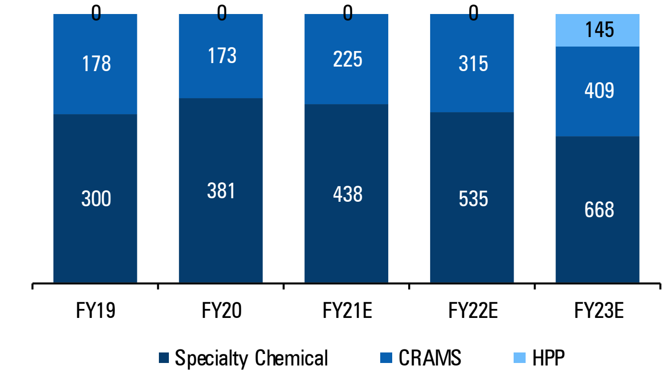
Speciality business revenue to inch up operating margins ahead

Navin Fluorine has four business segments viz. inorganic fluoride, refrigerant, speciality chemical and CRAMS. Both speciality chemical and CRAMS together constitute ~54% of overall revenue in FY20 while the rest comes from another two segments. Historically, revenue from both specialty business (speciality chemical, CRAMS) grew at a CAGR of ~18% against non-speciality business (refrigerant, inorganic fluoride) revenue growth of 9%, leading specialty revenue mix to change from 45% in FY15 to 54% currently. As per our back of the envelop calculation, we expect CRAMS to have better gross margins compared to speciality chemical segment, which also translates into better OPM for the former. We expect higher thirties to mid-forties OPM for CRAMS while the same for speciality chemical should be mid-high thirties. The same for non-speciality business remains at low to mid-teens.

Going ahead, as the cGMP3 plant got commissioned last year and historically, we have seen CRAMS capacity getting fully utilised by three years. The management has envisaged an asset turn of 2-2.5x. Thus, we expect incremental revenues of ₹ ~260 crore in the CRAMS segment over the next three years, depicting growth of 33% CAGR for the same period. Further, as per our understanding, the company can also come up with another capacity expansion for CRAMS segment in the next two years largely on account of increase in the fluorine consumption for pharma value chain and thereby higher demand for the players like Navin in the international market.

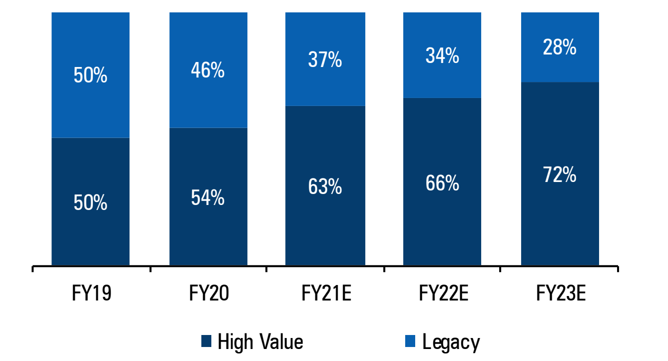
Apart from this, the company also received one high performance product (HPP) deal this year worth around ₹ 2800 crore, spread over the next seven years. This translates into revenue visibility of ₹ 400 crore per year. The company has been incurring a capex of ₹ 435 crore for this venture, which is likely to get commissioned by the end of FY22. We expect utilisation in the first year of commissioning to be around 30-40%, which should inch up to optimum post two years. We expect margins for HPP to be equivalent to CRAMS segment and thus, provides decent operational visibility post FY24. We expect all three speciality segment put together to contribute at least 80% to the topline post FY24, FY25E from ~65% currently. Thus, assuming average ~1300-1500 bps higher operating margins than non-specialty business, increase in revenue contribution by 15% from specialty portfolio could aid group OPM by at least 300-400 bps in the next three years.

Exhibit 40: High value segments revenue break up (₹ Crore)



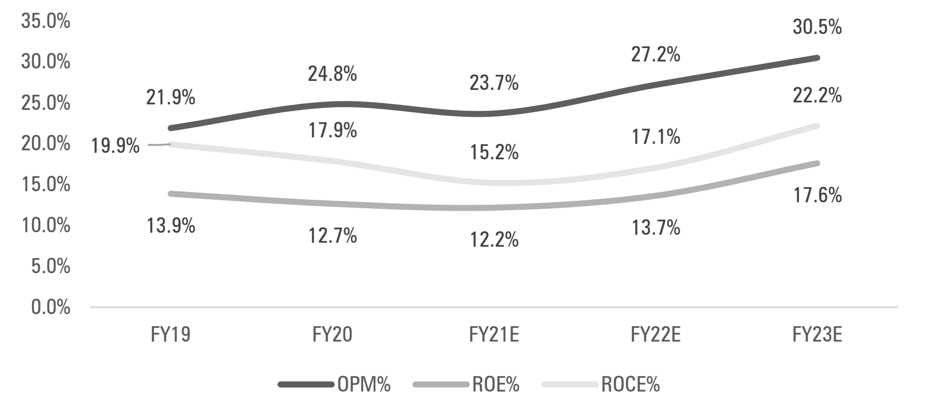
Source: Company, ICICI Direct Research

Exhibit 41: High value vs. legacy segments revenue mix



Source: Company, ICICI Direct Research

Exhibit 42: OPM & return ratios likely to inch up with increase in high value share

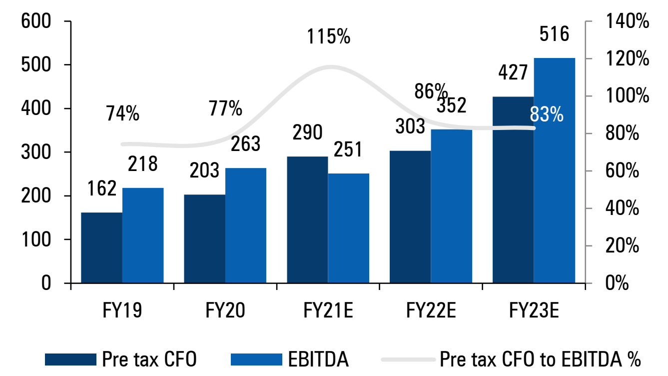


Source: Industry, ICICI Direct Research

Strong FCF generation, low leverage makes Navin Fluorine top bet this time

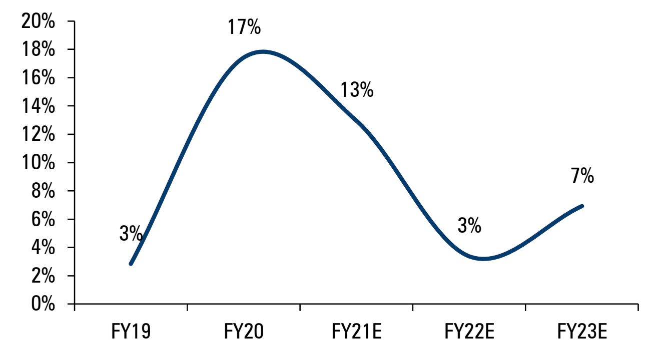
Navin Fluorine has been generating average pre-tax CFO to the tune of ~25% of sales and ~80% of EBITDA every year. Further, the cash conversion cycle for the company remains ~25% of sales. Thus, going ahead, with expected revenue growth of mid to high teens and annual capex of around ₹ 200-300 crore per year, we expect the company to generate FCF to the tune of at least ~10% of sales. Further, with no major leverage on the balance sheet, we expect the cash balance to grow to 7% of total assets in the next three years. This should help the company in any further capex in the CRAMS segment from internal accruals in the years to come. This better utilisation of internal accruals towards high RoCE generating segment should likely aid group RoCE further thereby aiding in providing better valuations in the years to come.

Exhibit 43: Pre-tax CFO to EBITDA (%)



Source: Company, ICICI Direct Research

Exhibit 44: Cash as % of total assets likely to grow to 7%



Source: Company, ICICI Direct Research

Key risks and concerns

Cancellation of order remains key risk to financial performance

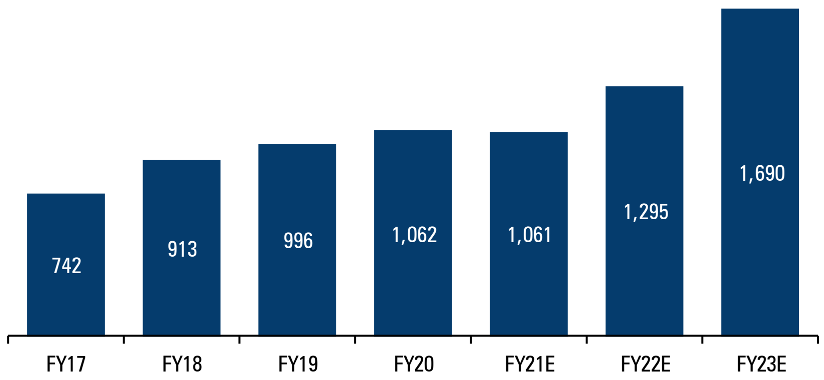
The company received around ₹ 2900 crore order for HPP this year, which will be executed over the next six years. Although there is less probability of cancellation of such kind of speciality contracts, we have seen such cancellation with one speciality chemical company recently. Any such development can impact the future performance of the company. However, we expect the terms of the contract to be largely in favour of suppliers as seen in the aforementioned cancellation. Thus, future cash flows are largely protected.

Slowdown in global agrochemical industry likely to impact speciality chemical performance

Navin Fluorine caters to the agrochemical and pharma sector under speciality chemical segment. Since agrochemicals are largely cyclical in nature, hence, any impact in the crop value chain for the global market can impact the order flows for this segments and thereby revenues. However, better growth from pharma can arrest the decline, to a certain extent.

Financial overview

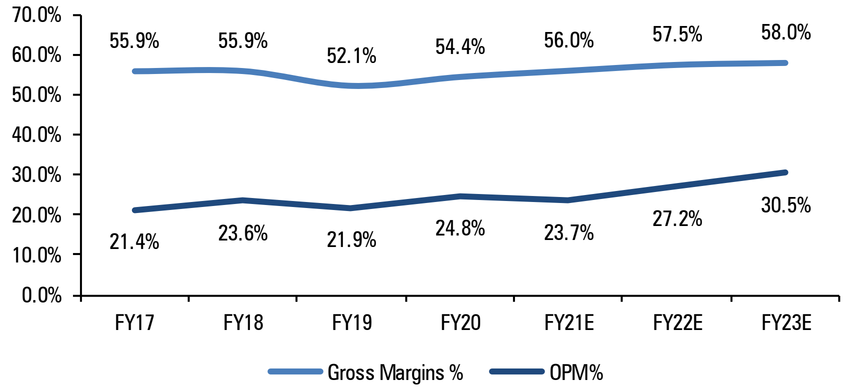
Exhibit 45: Revenues likely to grow at 17% CAGR over FY20-23E (₹ crore)



Source: Industry, ICICI Direct Research

Revenues are likely to grow at a CAGR of 17% over FY20-23E largely on the back of better growth from specialty chemical, CRAMS. Further, commissioning of HPP plant by Q4FY22E bodes well for FY23E topline

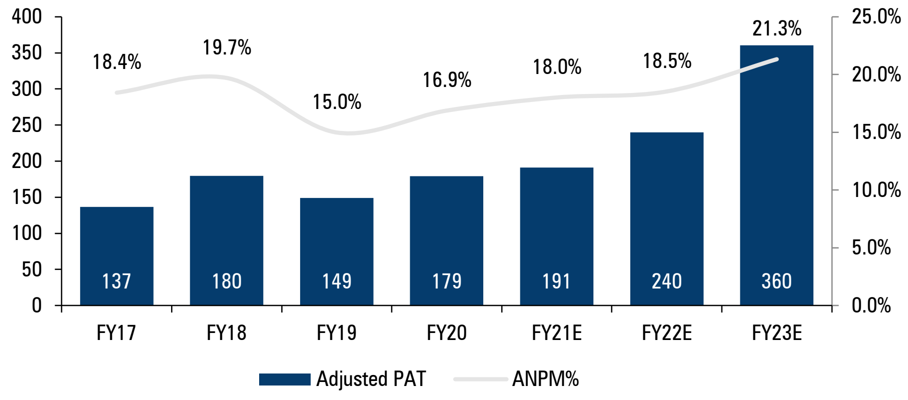
Exhibit 46: Gross margins, OPM likely to improve owing to higher share of speciality



Source: Industry, ICICI Direct Research

Revenue from high value business would increase in the years to come leading to better gross margins and thereby operational performance

Exhibit 47: PAT likely to grow at a CAGR of 26% over FY20-23E (₹ crore)



Source: Industry, ICICI Direct Research

PAT is expected to grow at a CAGR of 27% over FY20-23E largely on the back of strong operational performance

Financial Summary

Exhibit 48: Profit & Loss statement (₹ crore)

Year end March	FY19	FY20	FY21E	FY22E	FY23E
Total Operating Income	**995.9**	**1,061.6**	**1,060.9**	**1,294.9**	**1,690.3**
Growth (%)	**9.1**	**6.6**	**-0.1**	**22.1**	**30.5**
Raw Material Expenses	476.6	483.8	466.8	550.3	709.9
Employee Cost	115.5	130.8	145.3	168.3	202.8
Other Expenses	185.5	183.5	197.3	224.0	262.0
Total Operating Expenditure	777.6	798.1	809.4	942.7	1,174.8
EBITDA	**218.4**	**263.5**	**251.4**	**352.2**	**515.5**
Growth (%)	1.6	20.7	-4.6	40.1	46.4
Other Income	34.4	33.3	36.5	41.4	49.0
Depreciation	27.5	37.0	43.7	85.4	96.7
Net Interest Exp.	0.8	2.0	0.1	0.0	0.0
Other exceptional items	0.0	0.0	0.0	0.0	0.0
PBT	224.4	257.8	244.1	308.3	467.8
Total Tax	77.0	-143.6	61.0	77.1	116.9
PAT	**147.4**	**401.4**	**183.1**	**231.2**	**350.8**
Adjusted PAT	149.1	179.1	191.0	239.9	360.5
Growth (%)	-17.1	20.1	6.7	25.6	50.2
Adjusted EPS (₹)	30.1	36.2	38.6	48.5	72.8

Source: Company, ICICI Direct Research

Exhibit 49: Cash flow statement (₹ crore)

Year end March	FY19	FY20	FY21E	FY22E	FY23E
PBT & Extraordinary	224.4	257.8	244.1	308.3	467.8
Add: Depreciation	27.5	37.0	43.7	85.4	96.7
After other adjustments					
(Inc) / Dec in Working Capital	-61.5	-70.6	2.2	-90.3	-137.5
Taxes	-71.9	-46.2	-61.0	-77.1	-116.9
Others	-28.4	-21.3	0.1	0.0	0.0
CF from operating activities	**90.2**	**156.7**	**229.1**	**226.3**	**310.0**
Purchase of Fixed Assets	-61.6	-107.7	-250.0	-350.0	-150.0
Others	37.3	192.9	7.9	8.7	9.6
CF from investing activities	**-24.3**	**85.1**	**-242.1**	**-341.3**	**-140.4**
Issue/(Buy back) of Equity	2.1	1.2	0.0	0.0	0.0
Inc/(dec) in loan funds	-8.5	-8.7	-1.4	0.0	0.0
Dividend paid & dividend tax	-61.1	-71.4	-38.2	-48.0	-72.1
Others	-0.8	-2.0	-0.1	0.0	0.0
CF from financing activities	**-68.4**	**-80.9**	**-39.7**	**-48.0**	**-72.1**
Net cash flow	-2.5	160.9	-52.6	-163.0	97.6
Opening cash	37.4	37.0	283.8	231.1	68.1
Closing cash	37.0	283.8	231.1	68.1	165.7

Source: Company, ICICI Direct Research

Exhibit 50: Balance Sheet Statement (₹ crore)

Year end March	FY19	FY20	FY21E	FY22E	FY23E
Liabilities					
Equity Capital	9.9	9.9	9.9	9.9	9.9
Reserves & Surplus	1,062.6	1,402.3	1,555.1	1,747.1	2,035.4
Total Shareholders Funds	**1,072.5**	**1,412.2**	**1,565.0**	**1,757.0**	**2,045.3**
Minority Interest	0.0	0.0	0.0	0.0	0.0
Long Term Borrowings	0.0	0.0	0.0	0.0	0.0
Net Deferred Tax liability	34.8	0.0	0.0	0.0	0.0
Other long term liabilities	14.5	28.9	28.8	35.2	46.0
Long term provisions	8.6	10.3	10.3	12.5	16.4
Current Liabilities and Provisions					
Short term borrowings	4.1	1.4	0.0	0.0	0.0
Trade Payables	71.3	98.1	101.7	124.2	162.1
Other Current Liabilities	99.0	74.9	74.8	91.3	119.2
Short Term Provisions	2.4	2.8	2.8	3.5	4.5
Total Current Liabilities	176.9	177.2	179.4	219.0	285.8
Total Liabilities	**1,307.2**	**1,628.5**	**1,783.5**	**2,023.7**	**2,393.5**
Assets					
Net Block	286.3	386.0	431.1	895.7	949.0
Capital Work in Progress	39.3	38.9	200.0	0.0	0.0
Intangible assets under dev	0.0	0.0	0.0	0.0	0.0
Goodwill on Consolidation	87.8	87.8	87.8	87.8	87.8
Non-current investments	239.1	127.9	127.9	127.9	127.9
Deferred tax assets	0.0	15.1	15.1	15.1	15.1
Long term loans and advan	7.5	9.9	9.9	12.0	15.7
Other Non Current Assets	86.5	179.5	179.4	206.9	253.2
Current Assets, Loans & Advances					
Current Investments	188.4	67.5	67.5	67.5	67.5
Inventories	111.9	157.9	159.9	202.2	268.6
Sundry Debtors	172.7	218.5	218.0	273.2	356.6
Cash and Bank	37.0	283.8	231.1	68.1	165.7
Loans and Advances	4.8	4.5	4.5	4.5	4.5
Other Current assets	46.0	51.4	51.4	62.7	81.9
Current Assets	560.8	783.6	732.4	678.3	944.8
Total Assets	**1,307.2**	**1,628.5**	**1,783.5**	**2,023.7**	**2,393.5**

Source: Company, ICICI Direct Research

Exhibit 51: Key Ratios

Year end March	FY19	FY20	FY21E	FY22E	FY23E
Per share data (₹)					
Adj. EPS	30.1	36.2	38.6	48.5	72.8
Adj. Cash EPS	35.7	43.7	47.4	65.7	92.4
BV	216.9	285.3	316.2	354.9	413.2
DPS	0.0	0.0	7.7	9.7	14.6
Operating Ratios (%)					
Gross Margin (%)	52.1	54.4	56.0	57.5	58.0
EBITDA Margin (%)	21.9	24.8	23.7	27.2	30.5
PAT Margin (%)	15.0	16.9	18.0	18.5	21.3
Debtor Days	63	75	75	77	77
Inventory Days	41	54	55	57	58
Creditor Days	26	34	35	35	35
Cash Conversion Cycle	78	96	95	99	100
Return Ratios (%)					
Return on Assets (%)	11.4	11.0	10.7	11.9	15.1
RoCE (%)	19.9	17.9	15.2	17.1	22.2
RoE (%)	13.9	12.7	12.2	13.7	17.6
Solvency					
Total Debt / Equity	0.0	0.0	-	-	-
Interest Coverage	271.4	129.9	NM	NM	NM
Current Ratio	3.2	4.4	4.1	3.1	3.3
Quick Ratio	2.5	3.5	3.2	2.2	2.4
Valuation Ratios (x)					
EV/EBITDA	44.9	36.8	38.8	28.1	19.0
P/E	67.3	56.1	52.6	41.9	27.9
P/B	9.4	7.1	6.4	5.7	4.9
EV/Sales	9.9	9.1	9.2	7.7	5.8

Source: Company, ICICI Direct Research

PI Industries (PIIND)

CMP: ₹ 2033 | Target: ₹ 2450 (21%) | Target Period: 12 months | BUY

October 9, 2020

Initiating Coverage

ICICI Securities – Retail Equity Research

Pharma opens up another stream of growth ahead

Incorporated in 1947, PI Industries focuses on complex chemistry solutions in agri and pharma sciences. The revenues of the company can be subdivided into custom synthesis manufacturing (CSM, CRAMs) and domestic formulation business with the former contributing ~73% to overall revenue in FY20 and rest coming from domestic formulation business. Going ahead, order backlog of US$1.5 billion in the CSM business along with increasing presence in the pharma value chain through recent QIP should bode well for the future growth of the high value business. We expect pharma, the better RoCE business, to inch up group margins and return ratios in the years to come, thereby aiding the company in demanding better valuations in the medium to long run. We initiate coverage on the stock with a **BUY** rating.

Robust order book in CSM bodes well for future growth

PI industries caters to international market through its CSM business vertical, which is involved in manufacturing active molecule for innovators. The company normally works on 45-50 molecules every year of which 10-15 molecules scale up to the next level at the end of the year while it was able to commercialise three to five molecules in CSM business per year since 2014. This has helped it have around 24 molecules under CSM business currently. The order book of the CSM business is currently at around $1.5 billion, providing revenue visibility of around four to five years. We believe this can help PI to maintain growth in high teens for the CSM vertical at least for the next three years. Hence, this can support the group topline performance given that CSM constitutes ~73% of overall revenues.

New venture in pharma value chain likely to diversify revenue stream ahead

The management has decided to increase its presence in the pharma value chain. We believe this can diversify business risk, to a greater extent, in the next five years. The company is expected to manufacture first/second stage of pharma intermediates. We believe this has limited domestic competition and is mainly imported into India. PI has recently mobilised ₹ 2000 crore from QIP. We believe a part of that should be for inorganic opportunities in the new venture while a part would be used for organic expansion in the CSM/domestic business. The asset turn would largely be maintained at the present level. Thus, the same should likely translate into overall revenues growing by 2x in the next five years resulting in a CAGR of at least high teens. Further, better margins along with efficient cash conversion cycle should bode well in terms of strong FCF in the years to come.

Valuation and outlook

We value the company at 35x FY23E PER (~1.1x PEG) and arrive at a target price of ₹ 2450/share, a potential upside of 26% from a CMP of ₹ 2033. We initiate coverage on the stock with a **BUY** recommendation.

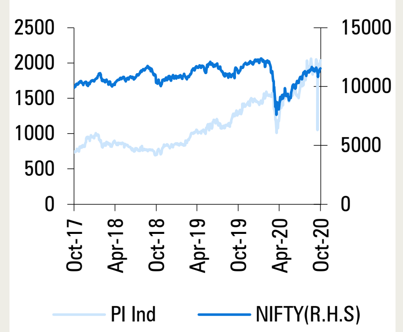
Particulars

Particular	Amount
Market cap (₹ Crore)	30,828
FY20 Total Debt (₹ Crore)	508
FY20 Cash & Inv (₹ Crore)	267
EV (₹ Crore)	31,069
52 Week H/L	2154/974
Equity Capital (₹ Crore)	13.8
Face Value (₹)	1

Key Highlights

- Robust order book in the CSM bodes well for future growth
- New venture into pharma value chain likely to diversify the revenue stream ahead
- Initiate with BUY

Price movement



Source: ICICI Direct Research, Company

Research Analyst

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Key Financial Summary

(₹ Crore)	FY18	FY19	FY20	FY21E	FY22E	FY23E	CAGR (FY20-23E)
Net Revenue	2,277.1	2,840.9	3,366.5	4,370.2	5,340.6	6,472.6	24.3
EBITDA	493.5	576.4	717.8	961.4	1,239.0	1,534.0	28.8
EBITDA Margins (%)	21.7%	20.3%	21.3%	22.0%	23.2%	23.7%	
Adj.PAT	367.6	410.2	456.6	631.4	835.9	1,061.3	32.5
Adj. EPS (₹)	26.6	29.7	33.1	41.6	55.1	70.0	
EV/EBITDA	56.4x	48.4x	39.4x	30.2x	23.1x	18.4x	
P/E	76.3x	68.4x	61.5x	48.8x	36.9x	29.0x	
ROE (%)	19.1	17.9	17.4	20.0	21.6	22.3	
ROCE (%)	23.4	23.2	20.2	24.5	27.9	28.5	

Source: ICICI Direct Research; Company (Note: ₹ 2000 crore proceeds from QIP not considered while calculating return ratios)

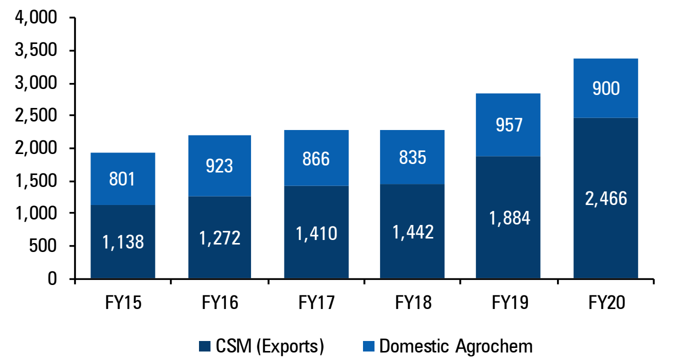
Company background

Incorporated in 1947, PI Industries focuses on complex chemistry solutions in agri and pharma sciences. With a strength of over 3000 employees, PI Industries currently operates a strong infrastructure set-up consisting of five formulation facilities and 13 multi-product plants under its four manufacturing locations. These state-of-the-art facilities have integrated process development teams with in-house engineering capabilities. The company maintains a strong research presence through its R&D facility at Udaipur, where it has a dedicated team of over 300 scientists and chemists. The facility includes advanced research and development labs, kilo plants and pilot plants with NABL certification. Over the years, PI has successfully leveraged its capabilities across the agri-sciences value chain by providing integrated and innovative solutions to its customers by partnering with innovators. Some key strengths of the company are its strong technical capabilities in the area of research & development, manufacturing services, brand building, strong distribution presence in India and customer connect initiatives.

The revenues of the company are subdivided into the CSM and domestic formulation business with former contributing ~73% to the overall revenue and rest coming from the domestic formulation business. The CSM business registered growth at 17% CAGR over FY15-20 while the same from domestic formulation remained at 2% CAGR for the same period.

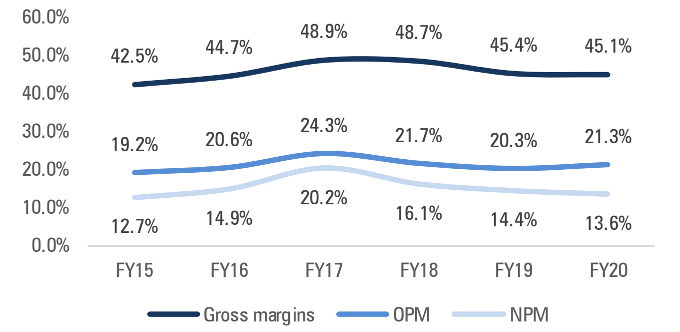
Business snapshot

Exhibit 52: Segmental revenue break up (₹ crore)



Source: Company, ICICI Direct Research

Exhibit 53: Margins trend (%)

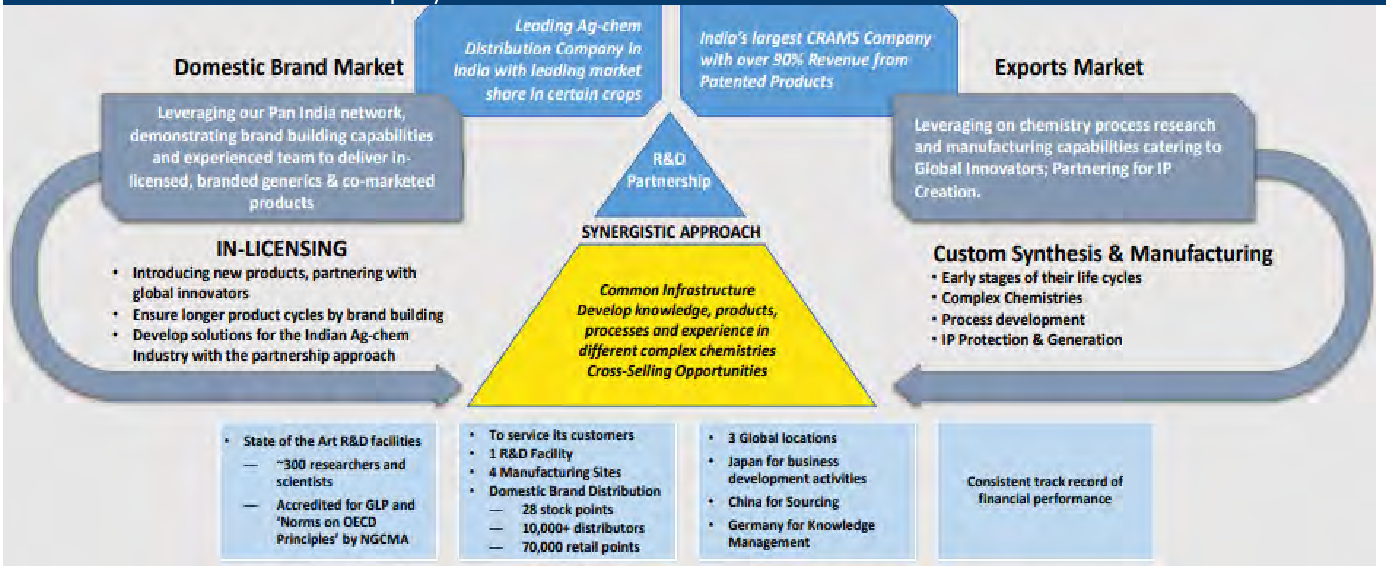


Source: Company, ICICI Direct Research

Exhibit 54: Business timeline

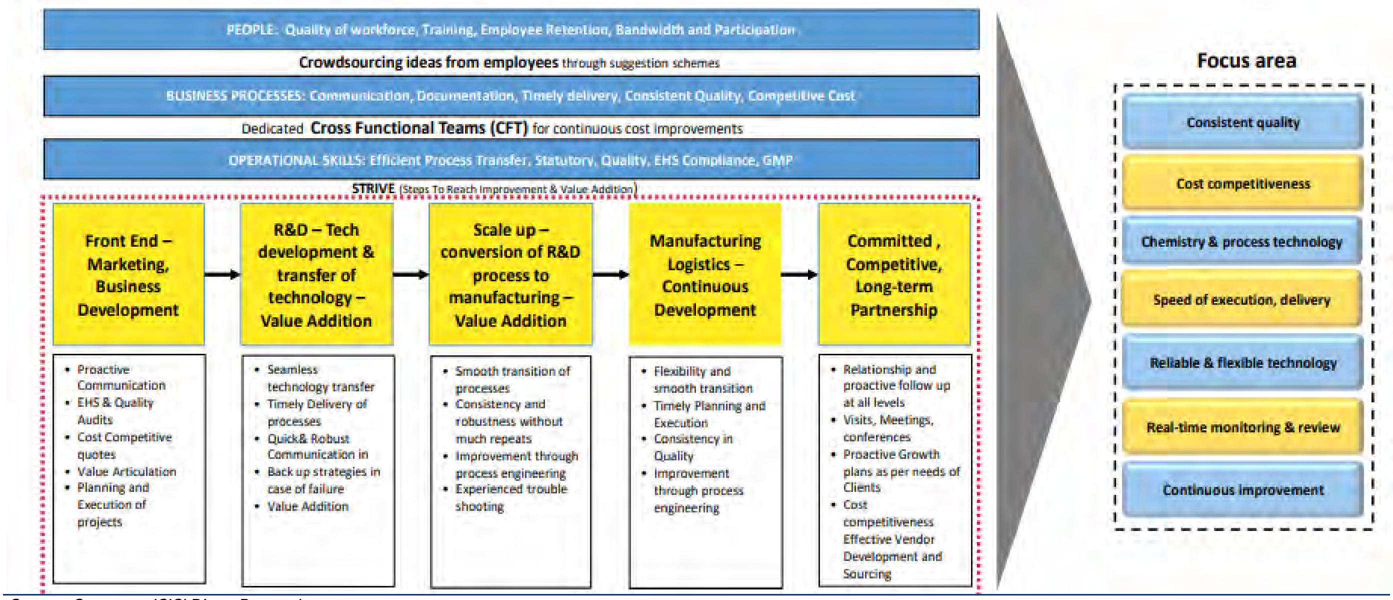
Source: Company, ICICI Direct Research

Exhibit 55: Business model of company



Source: Company, ICICI Direct Research

Exhibit 56: CSM business model



Source: Company, ICICI Direct Research

Investment Rationale

Robust order book in CSM bodes well for future growth

The global agrochemical market size was pegged at US$62.5 billion in 2019. It grew at a CAGR of 5% over 2014-19. The same is expected to grow at a CAGR of 6.6% in 2019-24E and reach US$84 billion. In terms of market segregation, Latin America, North America, Europe are one of the largest crop protection chemical markets globally. The India crop protection chemical market has been playing a pivotal role in terms of exports of many agrochemicals to those geographies.

In terms of domestic market size, the same was around US$4.2 billion in 2019 and is expected to grow to US$5.7 billion by 2024E (CAGR of 8%) The growth would be largely driven by the exports market, which currently constitutes 50% of the India crop protection market but would likely to inch up to ~55% in the next five years. We believe the export market growth can also be supported due to anti-China sentiments, resulting in India's generic players capturing the potential market in the aforementioned key geographies. We also believe that with an increase in population across the world along with a fall in crop area and acreages/hectare, it would be evident that the world has to find effective crop nutrients to improve the yield per hectare. This can also support the branded formulations market in years to come. Thus, players like PI should benefit from this transformation.

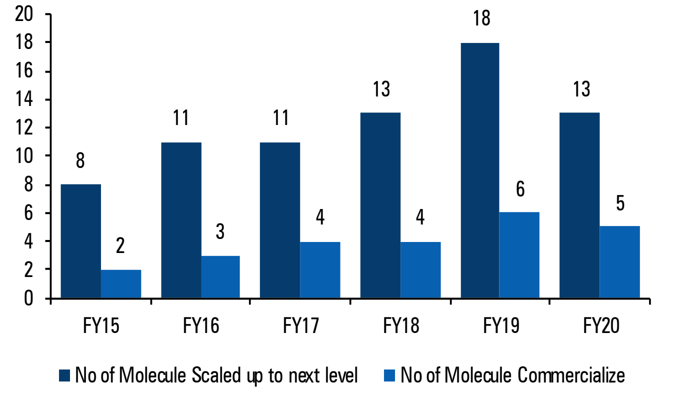
PI Industries caters to the international market through its CSM business vertical, which is involved in manufacturing active molecule for innovators. The patented and proprietary crop protection market size is estimated at around US$20-26 billion and likely constitutes ~30-40% of the global crop protection market. Since active molecule costs ~25-30% of the end product, we expect the global CSM business size to be at US$5-7 billion. PI's CSM business registered revenues of ~US$330 million in FY20, growing at a CAGR of 17% over FY15-20.

We tried to envisage growth in CSM business through its R&D pipeline and molecule development every year. We found that the company normally works on 45-50 molecules every year of which 10-15 molecules scale up to the next level at the end of the year. PI was able to commercialise three to five molecules in the CSM business per year since 2014. This has helped it to have around 24 molecules under CSM business since FY15. We believe since the growth stage of the patented molecules commences at the end of three/fourth year, the same should likely materialise well for PI, going ahead, given that it had commercialised ~13 molecules since FY17.

The order book of the CSM business is currently at ~US$1.5 billion, providing revenue visibility of around four/five years. Historically, the company entered into a JV with Mitsui and Kumai Chemicals from Japan, which helped it to garner potential market share in the global CSM industry. PI manufactures Bispyribac Sodium for Kumai, which is expected to grow at decent pace on account of its entrance into potential newer markets. Going ahead, any such development like entering into JV with some innovator should likely to boost order book growth further and thereby revenues.

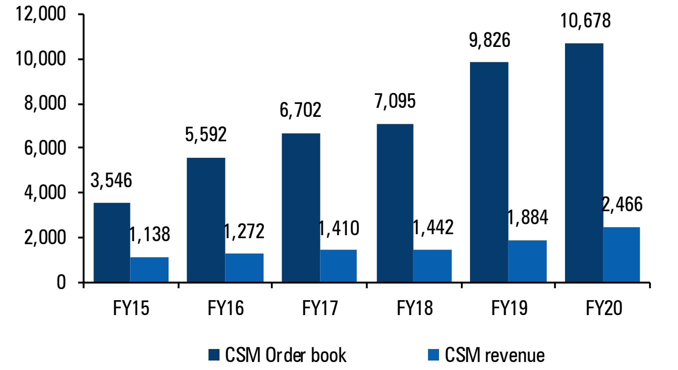
We expect CSM business revenues to grow at a CAGR of 24% over FY20-23E. It is likely to contribute 73% to overall revenue. ***(Note: we have not factored in any incremental revenues from the recent QIP of ₹ 2000 crore since the allocation of those proceeds is still not finalised).*** We also believe the CSM business is margin accretive to the overall group. Thus, any progress towards increasing share of CSM either into agrochemical or pharma value chain should likely expand the OPM for the business and thereby return ratios.

Exhibit 57: Number of molecules commercialised in the period



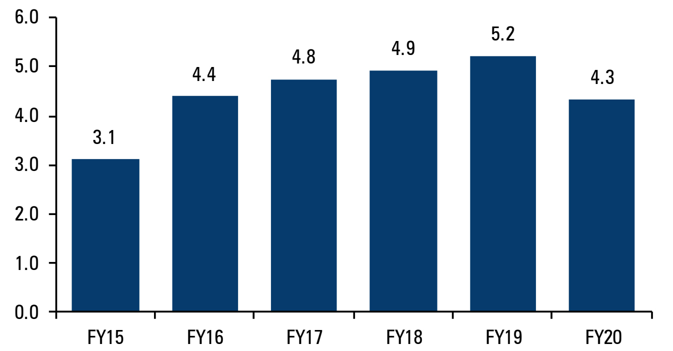
Source: Company, ICICI Direct Research

Exhibit 58: CSM order book, revenue trend (₹ crore)



Source: Company, ICICI Direct Research

Exhibit 59: Book to bill of CSM business over 4x…



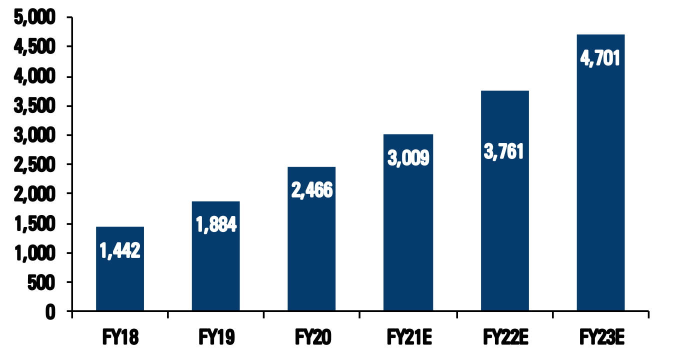
Source: Company, ICICI Direct Research

Exhibit 60: Global CSM market, PI Industries market share

Global Agrochemicam market in FY19	**$ 62.5 billion**
% share of patented and proprietary crop protection market	30-40%
Global patented & proprietary crop market in FY19	$ 20-26 billion
Active molecule cost in finish product	25-30%
Global CSM market	**$ 5-7 billion**
PI Industries Revenue in FY20	**$ 350 million**
PI industgries market share (%)	**~6%**

Source: Company, ICICI Direct Research

Exhibit 61: CSM business likely to grow at 20% CAGR ahead



Source: Company, ICICI Direct Research

Isagro acquisition along with strong domestic product portfolio likely to aid India business

PI Industries acquired Isagro Asia in 2019 at a deal value of ₹ 443 crore. The company acquired net assets to the tune of ~₹ 360 crore of which cash & liquid investment was at ~ ₹ 114 crore. Isagro recognised revenues of €37 million (~ ₹ 290 crore), EBITDA of ~€3.8 million (~₹ 28 crore) and net profit of €3 million (~₹ 22 crore) in 2018, representing a deal valued at EV/revenue of ~ 1.5x, EV/EBITDA of 15.8x and PE of 14x. We believe the acquisition happened at a very economical cost given the plant of Isagro is located at Panoli, which is adjacent to PI's present facility. Further, the plant is located across 30 acres and utilisation at the time acquisition was mere 30-40%. Thus, this should help PI to utilise it for value added products in the years to come, resulting in visibility of improvement in operational performance. The management had envisaged increasing Isagro's revenue to ~₹ 1000 crore in the medium to long run with an OPM of ~20% against single digit at the time of acquisition. The growth would largely be driven by few 9(3) products in the portfolio along with CSM business.

Exhibit 62: Isagro financial performance (₹ crore)

₹ crore	FY14	FY15	FY16	FY17	FY18	FY19
Revenue	314.1	325.5	323.7	282.2	299.5	234.7
EBITDA	43.1	56.0	54.5	27.8	27.5	5.4
PBT	45.0	59.2	60.6	30.8	31.5	52.9
PAT	30.6	39.1	39.6	21.3	22.0	9.0
OPM%	13.7%	17.2%	16.8%	9.9%	9.2%	2.3%
PBT%	14.3%	18.2%	18.7%	10.9%	10.5%	22.6%
PAT%	9.7%	12.0%	12.2%	7.6%	7.3%	3.8%

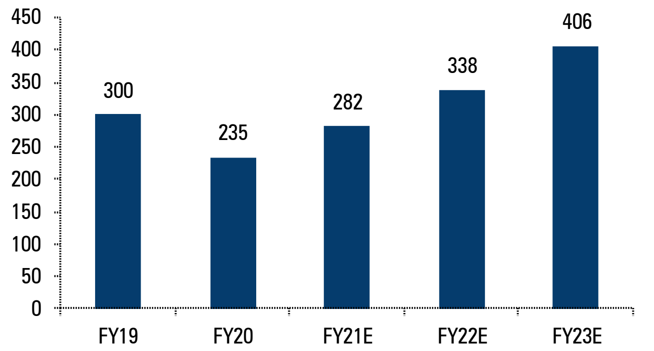
Source: Industry, ICICI Direct Research

Exhibit 63: Isagro purchase price allocation (₹ crore)

Purchase price allocation table	
Cash and cash equivalents	8.7
Fixed Deposits	1.1
Current Investments	103.7
Property, plant and equipment including Intangibles Assets	75.0
Intangibles	32.7
Capital Work in Progress	1.4
Inventories	78.0
Trade and other assets	147.5
Trade and other payables	-91.8
Net deferred tax assets	4.1
Net identifiable assets acquired	360.4
Add : Goodwill	82.8
Total purchase consideration	443.2

Source: Company, ICICI Direct Research

Exhibit 64: Isagro revenue to grow in double digit ahead



Source: Company, ICICI Direct Research

Further, for the traditional domestic business, we believe continuous efforts by the PI Industries team to move up the value chain of crop protection across major crops in food grains along with recent key focus area towards growing market such as bio stimulant and plant nutrient should likely aid the growth outlook of the business in the years to come. We tried to envisage the key product launches and tie-ups by PI Industries with global major players since 2014 and found that, the company, on an average, launched two to three crop protection chemicals for the domestic market every year. Of this, majority were in the wheat and rice portfolio since these two crops are the major contributor to the domestic food grain industry.

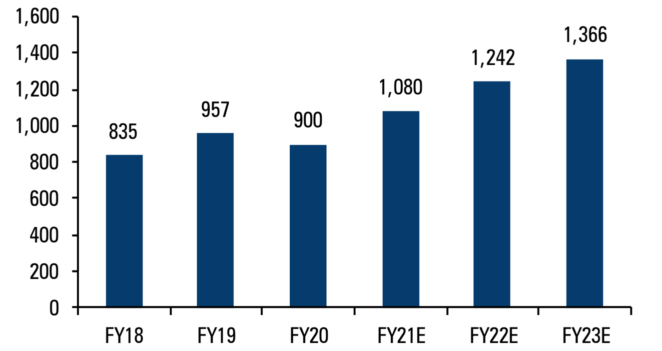
The company also entered into a tie up with BASF in 2017 to launch four crop protection chemicals in the domestic market, which were launched in 2018. We expect majority of those launches to have been fungicides. Given the fungicide category is expected to grow in double digits, the same should likely materialise well for PI Industries' domestic market growth in the medium to long run. Further, the company also launched Cosko and Fantom during 2019 and Awkira (Pyroxasulfone) in FY20. The management expects Pyroxasulfone to have huge potential owing to its application on other crops as well apart from wheat. We expect all these launches since 2018 to gain traction in the next two to three years. Thus, this bodes well for the India business growth, going ahead. The revenue from the domestic market grew at a CAGR of 4% in FY18-20 to ₹ 900 crore. We expect the same to touch ₹ 1366 crore by FY23E.

Exhibit 65: At least two formulations per year launched in domestic market in past period

Year	Brand name	Pesticides for
2014	MELSA	Wheat Herbicide
	PIMIX	Rice Herbicide
2015	KEEFUIV	Novel Insecticide
	BUNKER	Herbicide
2016	VIBRANT	Rice Insecticide
	BIOVITA	Plant Nutrient
	PERIOD	Wheat & Rice Fungicide
2017	LEGACEE	Rice Herbicide
2018	HEADER	Fungicide
	FENDER	Fungicide
	VISMA	Fungicide
	HUMESOL	Bio Stimulant
	ELITE	Herbicide
2019	COSKO	Insecticide
	FANTOM	Fungicide for Rice & Chilli
2020	AWKIRA	Pre emergant Herbicide for wheat
	COSKO SC	Insecticide

Source: Company, ICICI Direct Research

Exhibit 66: Domestic formulations business likely to grow in high teens



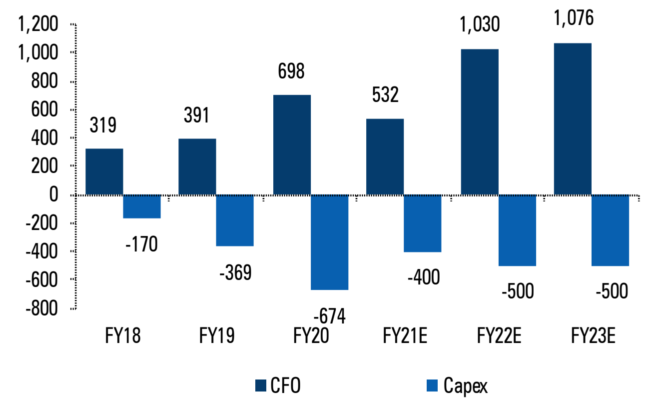
Source: Company, ICICI Direct Research

New venture into pharma value chain likely to diversify revenue stream ahead

Agrochemical being a key sector for PI Industries' revenue stream, plays a threat to the future growth in case of any slowdown in the global crop protection chemical. Further, many molecules are also going to be off patented in the next five years, which could dent the performance of the company. For the same reason, the management has decided to increase their presence in the pharma value chain. We believe this can diversify the business risk, to a greater extent, in the next five years. PI is expected to manufacture first/second stage of pharma intermediates, which, we believe, have limited domestic competition and are mainly imported into India.

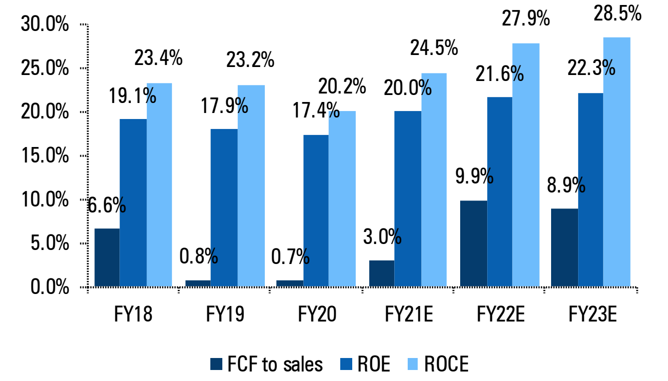
The company has recently mobilised ₹ 2000 crore from QIP at a price of ₹ 1470/share. The management is expected to allocate the entire proceeds in the next six to eight quarters. We believe part of this should be for inorganic opportunities in the new venture while part would be used for organic expansion in the CSM/domestic business. The management envisages better RoCE for the new vertical against the present RoCE of ~20%. We expect the asset turn to largely be maintained at present levels. Thus, the same should likely translate into overall revenues growing by 2x in the next five years resulting in CAGR of at least high teens. Further, better margins along with efficient cash conversion cycle should bode well in terms of strong FCF in the years to come.

Exhibit 67: CFO to improve in years to come (₹ crore)



Source: Company, ICICI Direct Research

Exhibit 68: FCF, RoE & RoCE trend…



Source: Company, ICICI Direct Research (Note: ₹ 2000 crore proceeds from QIP not considered while calculating return ratios)

Key risks and concerns

Slowdown in global agrochemical sector to impact growth

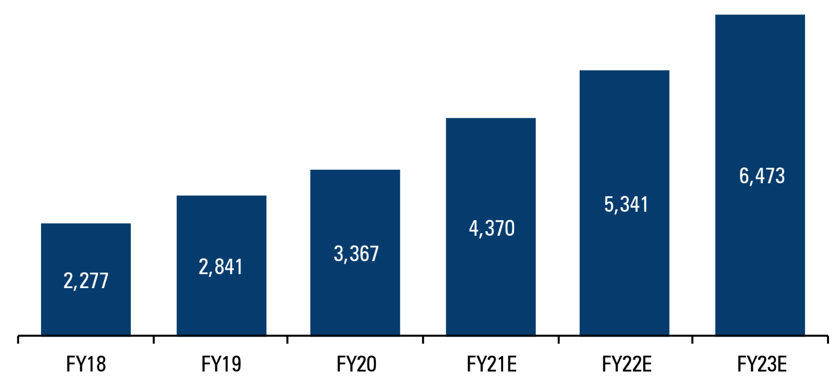
The CSM business of the company caters to the international market, of which North America constitutes ~35% of overall revenues followed by the Rest of Asia (26%), Europe (8%) and RoW (4%). Despite the company having a strong order backlog for the CSM business, any slowdown in the global agrochemical market due to adverse weather situation could, in turn, impact the execution for CSM and, thereby, revenues ahead.

Adverse weather situation in domestic market to impact topline

PI Industries derives around 30% of revenues from the domestic formulation market. The domestic market revenue has increased at a mere 2% CAGR in FY15-20, impacted by poor agri season in FY17, FY18. Thus, any such kind of adverse scenario can impact domestic formulation market revenue and thereby the group performance.

Financial overview

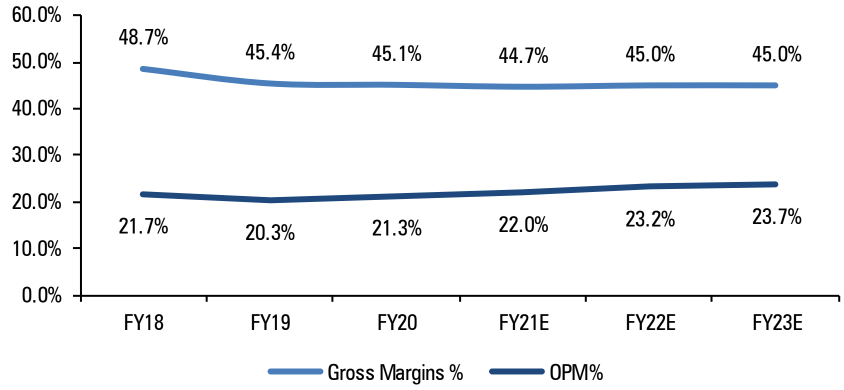
Exhibit 69: Revenues likely to grow at a 24% CAGR over FY20-23E (₹ Crore)



Source: Industry, ICICI Direct Research

Revenues are likely to grow at a CAGR of 24% over FY20-23E due to better growth across all business verticals. We expect CSM business revenue to grow at 24% CAGR while the same for domestic formulation and Isagro is expected to remain at 15% CAGR & 24% CAGR, respectively

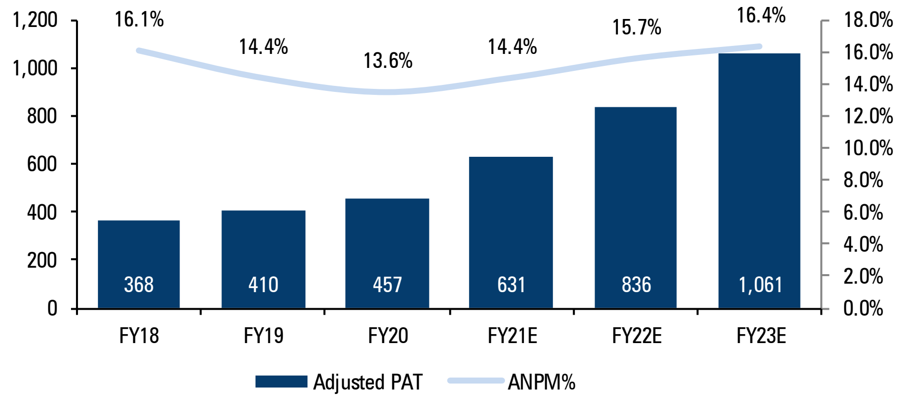
Exhibit 70: Gross margins, OPM likely to improve owing to better operating leverage



Source: Industry, ICICI Direct Research

OPM likely to improve on the back operating leverage

Exhibit 71: PAT likely to grow at CAGR of 32% over FY20-23E (₹ crore)



Source: Industry, ICICI Direct Research

PAT is expected to grow at a CAGR of 32% over FY20-23E largely on the back of better operational performance from Isagro along with decent contribution from other business verticals

Financial Summary

Exhibit 72: Profit & Loss statement (₹ crore)

Year end March	FY19	FY20	FY21E	FY22E	FY23E
Total Operating Income	**2,840.9**	**3,366.5**	**4,370.2**	**5,340.6**	**6,472.6**
Growth (%)	**24.8**	**18.5**	**29.8**	**22.2**	**21.2**
Raw Material Expenses	1,550.2	1,847.4	2,416.7	2,937.3	3,559.9
Employee Cost	264.7	320.9	402.1	470.0	569.6
Other Expenses	449.6	480.4	590.0	694.3	809.1
Total Operating Expenditure	2,264.5	2,648.7	3,408.7	4,101.6	4,938.6
EBITDA	**576.4**	**717.8**	**961.4**	**1,239.0**	**1,534.0**
Growth (%)	16.8	24.5	33.9	28.9	23.8
Other Income	59.5	49.7	81.8	90.1	115.3
Depreciation	93.0	136.7	174.7	204.4	234.2
Net Interest Exp.	5.0	17.0	26.8	10.1	0.0
Other exceptional items	0.0	0.0	0.0	0.0	0.0
PBT	537.9	613.8	841.8	1,114.6	1,415.1
Total Tax	127.7	157.2	210.5	278.6	353.8
PAT	**410.2**	**456.6**	**631.4**	**835.9**	**1,061.3**
Adjusted PAT	410.2	456.6	631.4	835.9	1,061.3
Growth (%)	11.6	11.3	38.3	32.4	27.0
Adjusted EPS (₹)	29.7	33.1	41.6	55.1	70.0

Source: Company, ICICI Direct Research

Exhibit 73: Cash flow statement (₹ crore)

Year end March	FY19	FY20	FY21E	FY22E	FY23E
PBT & Extraordinary	537.9	613.8	841.8	1,114.6	1,415.1
Add: Depreciation	93.0	136.7	174.7	204.4	234.2
After other adjustments					
(Inc) / Dec in Working Capital	-150.3	25.5	-300.5	-20.9	-219.9
Taxes	-118.3	-104.8	-210.5	-278.6	-353.8
Others	28.5	26.9	26.8	10.1	0.0
CF from operating activities	**390.8**	**698.1**	**532.3**	**1,029.6**	**1,075.7**
Purchase of Fixed Assets	-368.5	-674.3	-400.0	-500.0	-500.0
Others	46.9	-310.8	0.0	0.0	0.0
CF from investing activities	**-321.6**	**-985.1**	**-400.0**	**-500.0**	**-500.0**
Issue/(Buy back) of Equity	2.9	8.0	2,000.0	0.0	0.0
Inc/(dec) in loan funds	-39.9	456.2	-200.0	-307.7	0.0
Dividend paid & dividend tax	-83.1	-74.8	-94.7	-125.4	-159.2
Others	-5.0	-39.4	-26.8	-10.1	0.0
CF from financing activities	**-125.1**	**350.0**	**1,678.5**	**-443.2**	**-159.2**
Net cash flow	-55.9	63.0	1,810.8	86.4	416.5
Opening cash	130.7	89.2	134.2	1,945.0	2,031.4
Closing cash	89.2	134.2	1,945.0	2,031.4	2,447.9

Source: Company, ICICI Direct Research

Exhibit 74: Balance Sheet Statement (₹ crore)

Year end March	FY19	FY20	FY21E	FY22E	FY23E
Liabilities					
Equity Capital	13.8	13.8	15.2	15.2	15.2
Reserves & Surplus	2,271.6	2,605.3	5,140.6	5,851.2	6,753.3
Total Shareholders Funds	**2,285.4**	**2,619.1**	**5,155.8**	**5,866.3**	**6,768.5**
Minority Interest	0.0	0.0	0.0	0.0	0.0
Long Term Borrowings	9.9	399.4	249.4	0.0	0.0
Net Deferred Tax liability	0.0	10.2	10.2	10.2	10.2
Other long term liabilities	19.0	83.2	108.0	132.0	160.0
Long term provisions	29.0	12.4	16.1	19.7	23.8
Current Liabilities and Provisions					
Short term borrowings	0.0	108.3	58.3	0.0	0.0
Trade Payables	513.0	590.9	838.1	995.0	1,205.9
Other Current Liabilities	285.9	358.9	465.9	569.4	690.0
Short Term Provisions	12.6	42.4	55.0	67.3	81.5
Total Current Liabilities	811.5	1,100.5	1,417.4	1,631.6	1,977.4
Total Liabilities	**3,154.8**	**4,224.8**	**6,956.8**	**7,659.8**	**8,939.9**
Assets					
Net Block	1,185.7	1,857.5	2,319.9	2,615.5	2,881.3
Capital Work in Progress	154.4	237.1	0.0	0.0	0.0
Intangible assets under devl.	28.4	33.6	33.6	33.6	33.6
Goodwill on Consolidation	0.0	0.0	0.0	0.0	0.0
Non-current investments	17.2	17.9	17.9	17.9	17.9
Deferred tax assets	14.1	0.0	0.0	0.0	0.0
Long term loans and advances	19.0	14.3	18.6	22.7	27.5
Other Non Current Assets	45.1	41.1	53.4	65.2	79.0
Current Assets, Loans & Advances					
Current Investments	111.9	132.5	132.5	132.5	132.5
Inventories	535.7	798.9	1,077.6	1,170.5	1,418.6
Sundry Debtors	661.8	748.7	1,089.5	1,243.7	1,507.3
Cash and Bank	89.2	134.2	1,945.0	2,031.4	2,447.9
Loans and Advances	6.3	8.3	8.3	8.3	8.3
Other Current assets	286.0	200.7	260.5	318.4	385.9
Current Assets	1,690.9	2,023.3	4,513.5	4,904.9	5,900.6
Total Assets	**3,154.8**	**4,224.8**	**6,956.8**	**7,659.8**	**8,939.9**

Source: Company, ICICI Direct Research

Exhibit 75: Key Ratios

Year end March	FY19	FY20	FY21E	FY22E	FY23E
Per share data (₹)					
Adj. EPS	29.7	33.1	41.6	55.1	70.0
Adj. Cash EPS	36.5	43.0	53.2	68.6	85.5
BV	165.6	189.8	340.1	386.9	446.5
DPS	4.0	4.0	6.2	8.3	10.5
Operating Ratios (%)					
Gross Margin (%)	45.4	45.1	44.7	45.0	45.0
EBITDA Margin (%)	20.3	21.3	22.0	23.2	23.7
PAT Margin (%)	14.4	13.6	14.4	15.7	16.4
Debtor Days	85	81	91	85	85
Inventory Days	69	87	90	80	80
Creditor Days	66	64	70	68	68
Cash Conversion Cycle	88	104	111	97	97
Return Ratios (%)					
Return on Assets (%)	13.0	10.8	9.1	10.9	11.9
RoCE (%)	23.2	20.2	24.5	27.9	28.5
RoE (%)	17.9	17.4	20.0	21.6	22.3
Solvency					
Total Debt / Equity	0.0	0.2	0.1	-	-
Interest Coverage	108.6	37.1	32.4	111.3	NM
Current Ratio	2.1	1.8	3.2	3.0	3.0
Quick Ratio	1.4	1.1	2.4	2.3	2.3
Valuation Ratios (x)					
EV/EBITDA	48.4	39.4	30.2	23.1	18.4
P/E	68.4	61.5	48.8	36.9	29.0
P/B	12.3	10.7	6.0	5.3	4.6
EV/Sales	9.8	8.4	6.6	5.4	4.4

Source: Company, ICICI Direct Research (Note: ₹ 2000 crore proceeds from QIP not considered while calculating return ratios)

Sudarshan Chemical Industries (SUDCHE)

ICICI direct Research

CMP: ₹ 462 | Target: ₹ 550 (19%) | Target Period: 12 months | BUY

October 9, 2020

Initiating Coverage

Banking on leadership in pigments...

Established in 1951 by the Pune-based Rathi Group, Sudarshan Chemical Industries (Sudarshan) is a leading player in the Indian colour pigment industry with ~35% market share and is also among the top four players globally. It owns a wide portfolio of 4,000+ varieties mainly organic followed by inorganic and effect pigments. Over the years, it has solidified its position both in the domestic and global markets. We like the company's focused approach (divested non-core businesses), dominating market share, strong past record and technical capabilities that could be the major aspects for being a prime beneficiary to tap opportunities panning out from global consolidation and China plus one strategy.

Favourable competitive landscape for Indian players

Indian pigment production has increased at a CAGR of ~8% in FY13-19 compared to global growth of 3-4%. This was on the back of: 1) strong demand from domestic end users, 2) global consolidation and exits of top players like BASF, Clariant to focus on different priorities besides unfavourable economies of scale and 3) diversification of end users' preference to India from China due to supply disturbances amid recurring issues like pollution concerns, US-China trade war and now Covid. Apart from the above factors, focus on fast growing organic segment (~84% of domestic production), cheap labour, strong technical capability and chemistry knowledge are add-on advantages for the Indian players.

Prime beneficiary due to leadership, capex

Sudarshan's estimated pigment volumes grew ~10% during same period, outpacing industry growth propelled by huge product offerings, robust cost and technical capability for consistent launches of new and customised products besides strong environmental compliance record. We believe the company is finely poised to reap the benefits of favourable macro factors and increasing domestic demand. Looking at the opportunities, Sudarshan has already earmarked an aggressive capex plan of ₹ 1000 crore (₹ 450 crore spent) for backward integration for key products and capacity expansion (60-70% of capex) mainly in margin accretive HPP and speciality segments. Post pandemic, we expect the company to grow at ~16% CAGR in FY21-23E amid 20-25 annual new launches, capacity addition and strong demand.

Valuation & Outlook

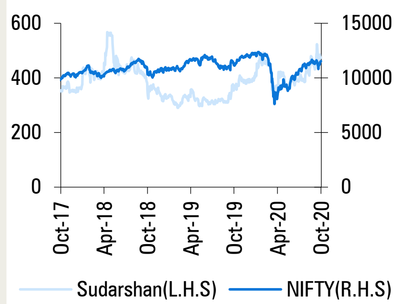
The pandemic has put the pigment industry on the back foot due to lack of demand from end users. However, the company has maintained its long term capex plan of ₹ 1000 crore (though delayed by six months), which shows its strong visibility and commitment towards future growth. Sudarshan's strong track record, with favourable macro factors and strong domestic demand are key catalysts for it. Margins are also likely to improve due to backward integration and change in product mix towards margin accretive products. We assign **BUY** recommendation with a target price of ₹ 550 (22x FY23E EPS of ₹ 25).

Particulars	
Market Capitalisation	₹ 3198 crore
Debt (FY20)	₹ 499 crore
Cash (FY20)	₹ 16 crore
EV	₹ 3681 crore
52 week H/L	505\286
Equity capital	₹ 13.8 crore
Face value	₹ 2

Key Highlights

- We like the company's focused approach, dominating market share, strong past record and technical capabilities
- It is a prime beneficiary to tap opportunities panning out from global consolidation and China plus one strategy
- Strong track record, with favourable macro factors, strong domestic demand key catalyst for stock
- Assign BUY

Price movement



Source: ICICI Direct Research, Company

Research Analyst

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ICICI Securities – Retail Equity Research

Key Financial Summary

₹ Crore	FY20	FY21E	FY22E	FY23E	CAGR FY20-23 (%)
Revenues	1708.2	1633.7	1970.3	2203.2	8.9
EBITDA	246.3	251.0	318.1	365.7	14.1
EBITDA Margins (%)	14.4	15.4	16.1	16.6	
Net Profit	145.1	110.6	145.5	173.3	6.1
EPS (Adjusted)	18.5	16.0	21.0	25.0	
PE (x)	22.0	28.9	22.0	18.5	
EV to EBITDA (x)	14.9	14.9	12.2	10.5	
RoCE (%)	15.2	12.0	14.2	15.4	
RoE (%)	21.3	16.2	18.4	18.8	

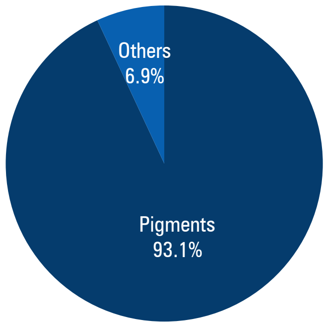
Source: ICICI Direct Research; Company

Company Background

Sudarshan Chemicals is a significant part of the Pune-based Rathi Group, established in 1951. The company is currently a market leader in the Indian pigment industry with 35% market share and fourth-largest player (will become 3rd largest post completion of BASF business acquisition by DIC) in the world. It has a wide portfolio of 4,000+ varieties of products of Azos, blue and green, high performance pigments (HPPs), effects, pigment preparations and inorganics. Among end users, coatings industries contribute highest followed by plastics, Inks, cosmetics other applications. It produces a range of classical organic pigments for coloration of publication and commercial printing inks for magazines, direct mail and other commercial printing. Sudarshan offers its pigments under various brands, including Sudaperm, Sudafast, Sudacolor, Sudadur, Sudafine, Sumicos, Prestige and Sumica. The company exports (45% of revenues) to 85+ countries and has offices in the US, Europe, China, Mexico and Japan. Apart from increasing end user demand of pigments in Asian markets, Sudarshan is also prime beneficiary of exit of global giants (BASF, Clariant), recurring issues in China (including China-US trade war) mainly due to its leadership position, low cost advantage, wide product basket and technical capability.

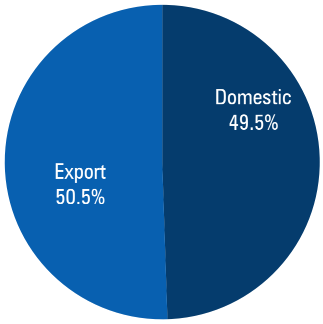
The company owns two manufacturing plants in Roha and Mahad, Maharashtra. Sudarshan manufactures azo, HPPs and effect pigments at the Roha plant. At the Mahad plant it manufactures blue and green, HPPs and effect pigments. The company's plants have been '5-Star Certified' by British Safety Council and have also been awarded the prestigious Sword of Honour. Sudarshan has an R&D centre in Sutarwadi (Pune), which houses over 50 technologists and has additional 50 chemists in the R&D and quality control labs in Roha & Mahad who are working on new and customised solutions.

Revenue Bifurcation



Source: ICICI Direct Research; Company

Geographical Bifurcation



Source: ICICI Direct Research; Company

Exhibit 76: Timeline of events

Years	Details
1951	Established as Sudarshan Chemical Industries Private Limited
1952	Started first manufacturing facility in Swargate, Pune
1967	Commenced exporting globally
1973	Inaugurated manufacturing facility at Roha
1976	Got listed on BSE
1989	Collaborated with the world leader, DIC, Japan
1994	Initiated manufacturing plant in Mahad for Pthalos and Effect pigments
2006	Created a state of-the-art technology R&D centre at Sutarwadi
2007	Established subsidiary Sudarshan Europe BV
2009	Expanded footprints in the USA, incorporation of Sudarshan North America
2018	Established Sudarshan Mexico
2018	Became number 4 in pigment industry
2019	Sudarshan established laboratory in Germany
2020	Established Sudarshan Japan K.K.

Source: ICICI Direct Research, Company

Colour pigment industry

Pigment colours can be used to give colour to other objects by coating them or blending them with the product ingredients. As per an industry report, the global colour pigment market is estimated to be ~US$10 billion (excluding carbon black and titanium dioxide), It is expected to grow at 3% CAGR over the next five years. Among this, Sudarshan's target opportunity size is ~US$8.6 billion. Some key players in the global dyes & pigments market are BASF SE (Germany), Clariant AG (Switzerland), Atul Ltd (India), Sudarshan (India), DIC Corporation (Japan), Huntsman Corporation (US), Kiri Industries (India), Kronos Worldwide, Inc. (US), Lanxess AG (Germany) and Tronox Ltd (US).

Organic, inorganic and effects pigments are types of pigments based on their method of formulation. Organic pigments are made up of carbon rings and carbon chains. It is derived from coal tars and other petrochemicals. Inorganic Pigments are consisting of dry ground minerals, usually metals and metallic salts. Sudarshan is mainly into organic pigments. Due to increasing environmental awareness, global demand is also shifting to safe organic pigment from cheap toxic inorganic pigments.

Exhibit 77: Type of pigments

Organic Pigments

- Azo
- Phthalos
- HPPs
- Dispersions
- Coloured material made of organic compound with pigment properties
- Commonly used for coatings, plastics, inks & textile applications

Inorganic Pigments

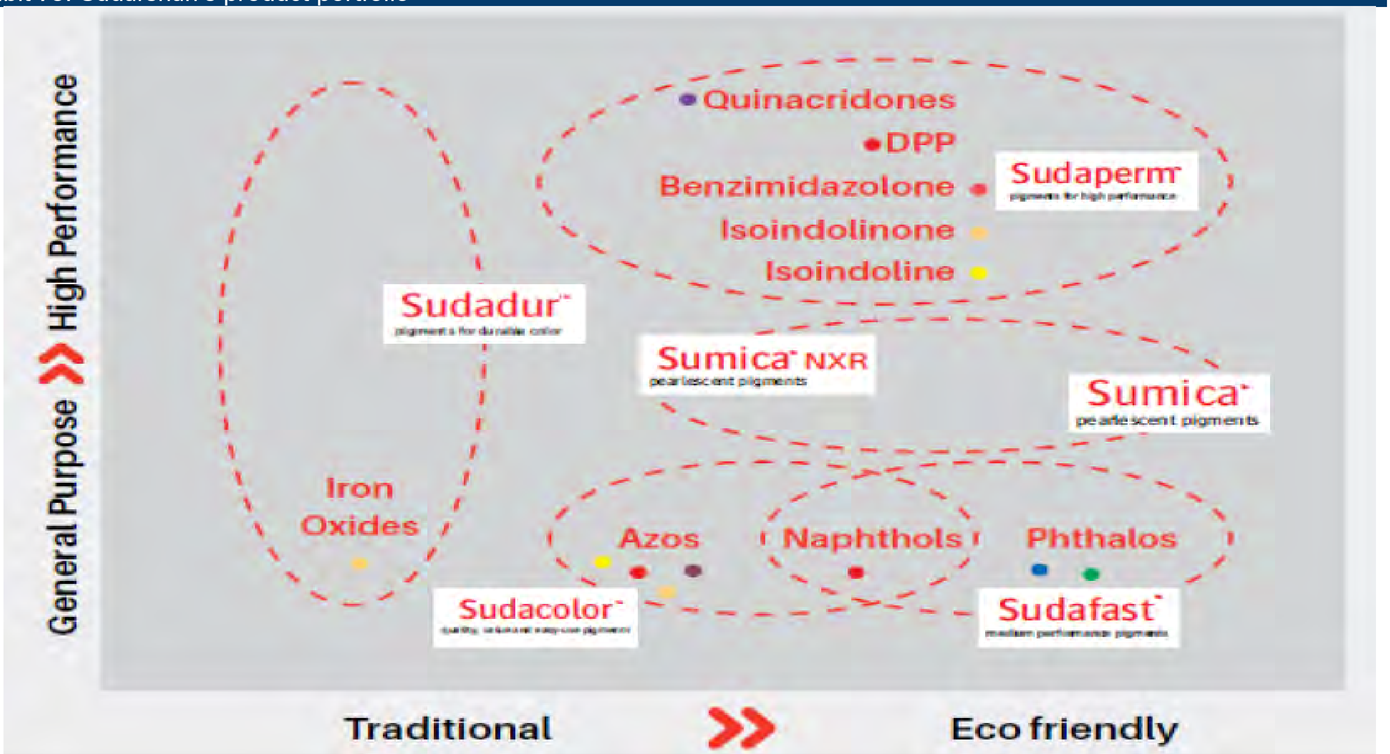
- Chromes
- Cadmiums
- Iron Oxides
- Made of mineral compounds
- Mainly oxides, sulphides of one or more than one metals
- Used for plastics and industrial coatings

Effect Pigments

- Mica base for industrial and cosmetics
- Pigments with mica base and coated with oxides to give shimmer and glow
- Mainly used in plastics,
- automotive coatings and cosmetics applications

Source: ICICI Direct Research, Company

Exhibit 78: Sudarshan's product portfolio



Source: ICICI Direct Research, Company

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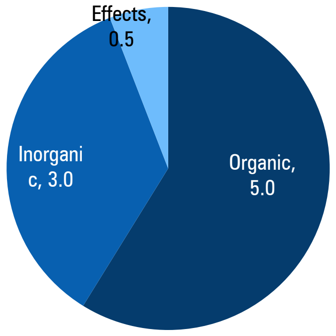
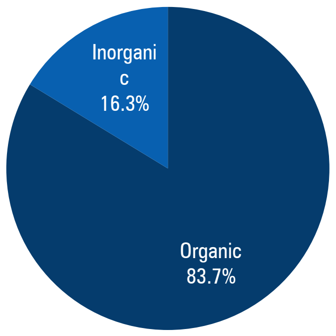
Exhibit 79: Sudarshan's global target opportunity size (US$ bn)



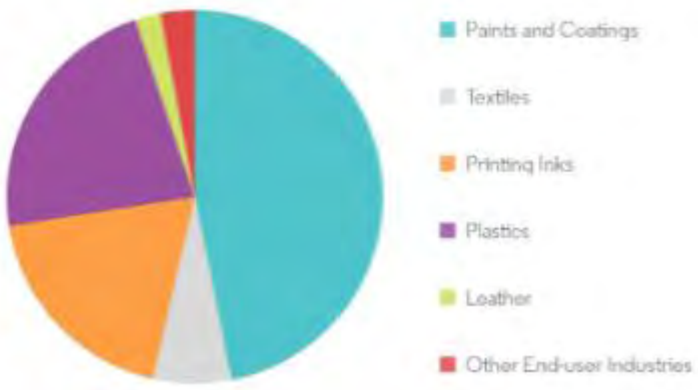
*Source: ICICI Direct Research, Company; *Ex demerged entity*

Exhibit 80: Indian colour pigment bifurcation (based on FY19 production capacity)



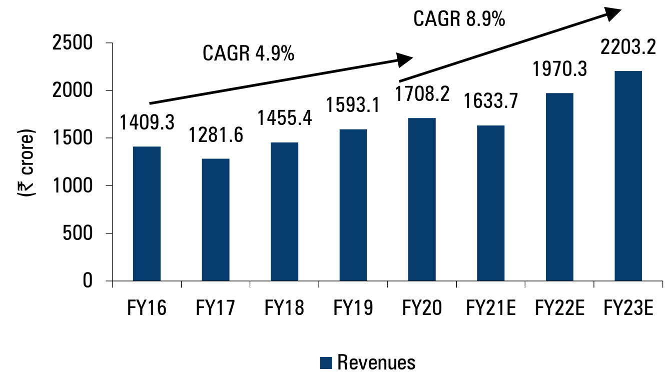
Source: ICICI Direct Research, Company

Exhibit 81: Global pigment markets, revenues (%), by application, 2019



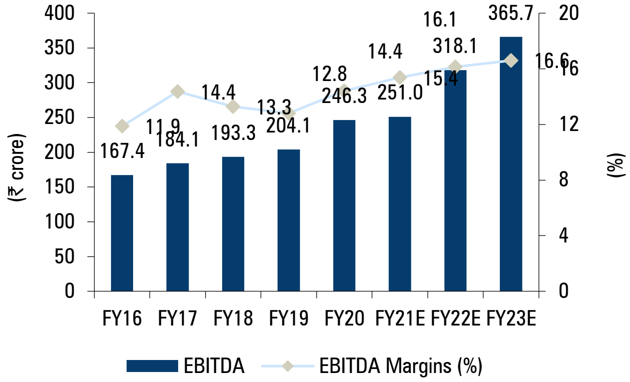
Source: Mordor intelligence; ICICI Direct Research

Exhibit 82: Revenues to grow at 9% CAGR in FY20-23E



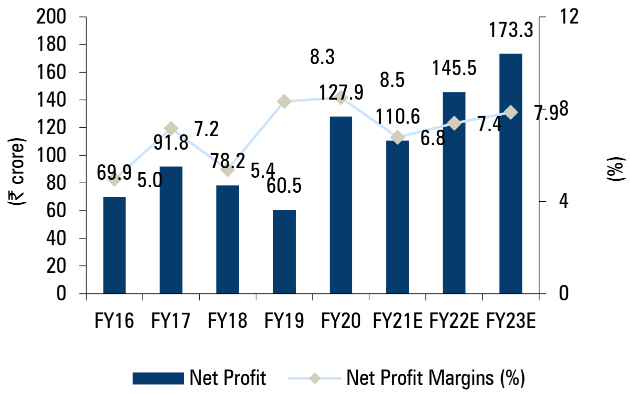
Source: ICICI Direct Research, Company; *Ex demerged entity

Exhibit 83: EBITDA & EBITDA margins trend



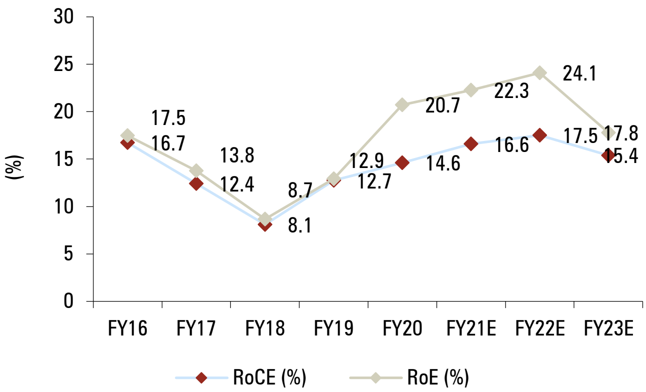
Source: ICICI Direct Research, Company

Exhibit 84: PAT & PAT margins trend



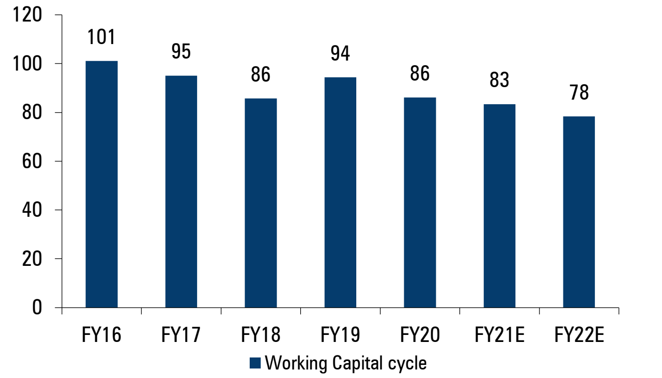
Source: ICICI Direct Research, Company

Exhibit 85: RoE & RoCE trend



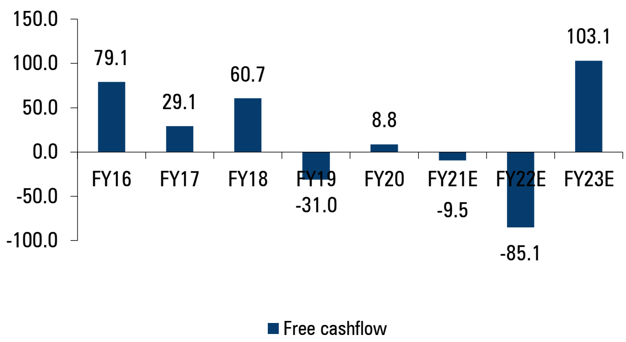
Source: ICICI Direct Research, Company

Exhibit 86: Working capital cycle



Source: ICICI Direct Research, Company

Exhibit 87: Aggressive capex to impact free cash flow



Source: ICICI Direct Research, Company

Key Risk

Dependency on China for raw material sourcing

The company sources ~25% of its raw material requirement from China. Due to volatility in raw material availability from China due to multiple reasons including Covid, any increases in prices of such materials would have an impact on cost of production. The company generally has been able to pass on the increase in prices of such raw materials to customers even with a lag. It is looking for alternative sources and backward integration. However, its inability or delay to do so in future could adversely affect its financial condition and results of operations.

Growth reliance on end user

The company's products have applications in industries such as coatings, plastics, inks and cosmetics. Consequently, its revenues are dependent on end user industries that use the company's products as an input. Factors affecting any of these industries in general like Covid 19, or any of its customers in particular, could have a cascading adverse effect on the company's business and results of operations.

Financial Summary

Exhibit 88: Profit and loss statement ₹ crore

(Year-end March)	FY20	FY21E	FY22E	FY23E
Total Operating Income	1,708.2	1,633.7	1,970.3	2,203.2
Growth (%)	7.2	-4.4	20.6	11.8
Raw Material Expenses	976.2	927.6	1,103.4	1,233.8
Gross Profit	732.0	706.1	866.9	969.4
Gross Profit Margins (%)	42.9	43.2	44.0	44.0
Employee Expenses	145.8	152.1	183.5	202.7
Other Expenditure	340.0	303.0	365.4	401.0
Total Operating Expenditure	1,461.9	1,382.7	1,652.2	1,837.5
EBITDA	**246.3**	**251.0**	**318.1**	**365.7**
Growth (%)	20.7	1.9	26.7	15.0
Interest	14.2	19.6	19.6	19.6
Depreciation	73.5	80.1	99.4	109.9
Other Income	4.7	3.1	3.0	4.4
PBT before Exceptional Item	**163.2**	**154.3**	**202.0**	**240.7**
Less: Exceptional Items	-17.2	0.0	0.0	0.0
PBT after Exceptional Items	180.4	154.3	202.0	240.7
Total Tax	35.4	43.8	56.6	67.4
PAT before MI	145.1	110.6	145.5	173.3
PAT	**145.1**	**110.6**	**145.5**	**173.3**
Growth (%)	9.3	-23.8	31.6	19.1
EPS (Adjusted)	**18.5**	**16.0**	**21.0**	**25.0**

Source: ICICI Direct Research

Exhibit 89: Cash Flow Statement ₹ crore

(Year-end March)	FY20	FY21E	FY22E	FY23E
Profit/(Loss) after taxation	101.7	110.6	145.5	173.3
Add: Depreciation & Amortiza	73.5	80.1	99.4	109.9
Net Increase in Current Asset	-51.0	44.6	-124.6	-102.2
Net Increase in Current Liabili	101.8	-14.4	75.1	52.5
Others	36.6	19.6	19.6	19.6
CF from Operating activities	**262.6**	**240.5**	**214.9**	**253.1**
Investments	0.0	0.0	0.0	0.0
(Purchase)/Sale of Fixed Ass	-253.8	-250.0	-300.0	-150.0
Others	41.4	-0.5	-0.5	-0.5
CF from Investing activities	**-212.4**	**-250.5**	**-300.5**	**-150.5**
(inc)/Dec in Loan	75.1	200.0	0.0	0.0
Dividend & Dividend tax	-100.2	-28.5	-37.5	-44.6
Other	-14.2	-19.6	-19.6	-19.6
CF from Financing activities	-39.4	151.9	-57.0	-64.2
Net Cash Flow	**10.9**	**142.0**	**-142.6**	**38.4**
Cash and Cash Equivalent	4.8	15.6	157.6	15.0
Cash	**15.6**	**157.6**	**15.0**	**53.4**
Free Cash Flow	**8.8**	**-9.5**	**-85.1**	**103.1**

Source: ICICI Direct Research

Exhibit 90: Balance Sheet ₹ crore

Equity Capital	13.9	13.9	13.9	13.9
Reserve and Surplus	586.9	669.0	777.0	905.7
Total Shareholders funds	600.8	682.9	790.9	919.5
Total Debt	498.6	698.6	698.6	698.6
Deferred Tax Liability	50.1	51.1	52.1	53.2
Long-Term Provisions	15.7	16.1	16.4	16.7
Other Non Current Liabilities	3.6	3.7	3.7	3.8
Source of Funds	**1,168.8**	**1,452.2**	**1,561.7**	**1,691.7**
Gross Block - Fixed Assets	870.2	1,120.2	1,420.2	1,570.2
Accumulated Depreciation	245.3	325.5	424.9	534.8
Net Block	624.9	794.7	995.3	1,035.4
Capital WIP	48.0	48.0	48.0	48.0
Fixed Assets	672.8	842.7	1,043.3	1,083.4
Investments	0.9	0.9	0.9	0.9
Other non-Current Assets	92.2	94.1	95.9	97.9
Inventory	410.7	380.4	431.8	482.9
Debtors	364.1	348.2	419.9	469.6
Other Current Assets	73.3	74.8	76.3	77.8
Cash	15.6	157.6	15.0	53.4
Total Current Assets	863.7	961.0	943.0	1,083.6
Creditors	371.7	355.5	428.7	479.4
Provisions	7.1	7.2	7.3	7.5
Other Current Liabilities	82.1	83.7	85.4	87.1
Total Current Liabilities	460.8	446.4	521.5	574.0
Net Current Assets	402.8	514.6	421.6	509.6
Application of Funds	**1,168.8**	**1,452.3**	**1,561.7**	**1,691.7**

Source: ICICI Direct Research

Exhibit 91: Ratio Analysis

(Year-end March)	FY20	FY21E	FY22E	FY23E
Per share data (₹)				
Reported EPS	21.0	16.0	21.0	25.0
Cash EPS	-0.3	11.9	15.6	18.6
BV per share	86.8	98.6	114.2	132.8
Cash per Share	2.3	22.8	2.2	7.7
Dividend per share	18.8	4.1	5.4	6.4
Operating Ratios (%)				
Gross Profit Margins	42.9	43.2	44.0	44.0
EBITDA margins	14.4	15.4	16.1	16.6
PAT Margins	7.5	6.8	7.4	7.9
Cash Conversion Cycle	86.1	83.4	78.4	78.4
Asset Turnover	2.0	1.5	1.4	1.4
EBITDA conversion Rate	106.6	95.8	67.6	69.2
Return Ratios (%)				
RoE	21.3	16.2	18.4	18.8
RoCE	15.2	12.0	14.2	15.4
RoIC	15.6	13.7	14.6	16.1
Valuation Ratios (x)				
P/E	22.0	28.9	22.0	18.5
EV / EBITDA	14.9	14.9	12.2	10.5
EV / Net Sales	2.2	2.3	2.0	1.7
Market Cap / Sales	1.9	2.0	1.6	1.5
Price to Book Value	5.3	4.7	4.0	3.5
Solvency Ratios				
Debt / EBITDA	2.0	2.8	2.2	1.9
Debt / Equity	0.8	1.0	0.9	0.8
Current Ratio	1.8	1.8	1.8	1.8

Source: ICICI Direct Research

Aarti Industries Ltd. (AARIND)

ICICI direct Research

CMP: ₹ 1008 | Target: ₹ 1200 (19%) | Target Period: 12 months | **BUY**

October 9, 2020

Leveraging on strong base of benzene derivatives…

Established in 1984 by first generation technocrat Rajendra Gogri, Aarti Industries (Aarti) is a leading benzene-based speciality chemical company in the world. The company primarily operates in two segments – speciality chemicals (84%) and pharma (14%). Pharma is further divided into APIs, intermediates and xanthine derivatives. The company ranks among the top five companies globally for products that comprise 75% of the portfolio. It owns a de-risked portfolio that is multiproduct (200+), multi-geography, multi-customer and multi-industry. We are keen on the stock on the back of strong visibility in both segments with continuous endeavour to climb up in the value chain to improve margins.

Strong visibility in speciality chemical segment

The company is a preferred partner for customers from multiple industries for benzene-chain based solutions due to strong chemistry prowess, backward integration, larger products basket that is backed by continuous innovation and leadership position in its key products. It is the only domestic player to have products until the sixth level derivative of benzene chemistry. The company also expects to leverage on its existing clientele to promote its toluene and other derivatives. Most contracts are long term cost+ contracts that offer better control on the overall cost structure. Recently, it signed three multiyear CRAMs contracts. Owing to strong order book visibility, Aarti is in an aggressive expansion mode. Focus on value-added products (~75% of FY20 revenues), integrated model and better operating leverage are likely to improve its margin profile. Speciality chemical segment revenues are expected to grow at 16% CAGR in FY20-23E.

Aggressive expansion to support long term growth

Aarti has spent >₹ 3000 crore in capex in FY17-20, on three multiyear projects. Of this, one was recently cancelled (expects to receive ₹ 900-975 crore as compensation) while the remaining two projects have multiyear peak annual potential of ₹ 590 crore (exhibit 3). Apart from this, it has spent on new R&D unit, expansion of hydrogenation, NCB, de-bottlenecking in various specialty chemicals, and pharma. Going ahead, Aarti is likely to spend at least ₹ 1000-1200 crore per annum in the next three to four years to complete existing pipeline, expansion in value added, pharma segments in the backdrop of strong demand visibility to drive long-term growth.

Valuation & Outlook

The company is a key beneficiary of China substitute factor besides improving domestic demand. Leveraging on core knowledge of benzene-based derivatives, Aarti is expanding its product basket towards value added products up the value chain. In pharma, it expects strong growth from developed markets backed by integrated model and new launches. Margins are also expected to improve due to incremental addition of high-value products. We like the company's leadership position and strong visibility on order book. We assign **BUY** with a TP of ₹ 1200 (22x of FY23E EPS of ₹ 54.5).

AARTI INDUSTRIES LIMITED

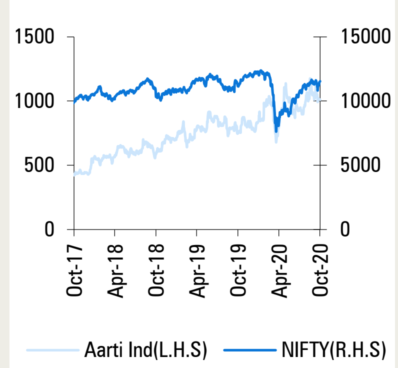
Particulars

Particular	Amount
Market Capitalisation	₹ 17560 crore
Debt (FY20)	₹ 2094 crore
Cash (FY20)	₹ 247 crore
EV	₹ 19407 crore
52 week H/L	1229\662
Equity capital	₹ 87.1 crore
Face value	₹ 2

Key Highlights

- We like Aarti's leadership position, strong visibility and order book
- The company is also a key beneficiary of China plus one strategy and improving domestic demand
- Initiate with BUY

Price movement



Source: ICICI Direct Research, Company

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Key Financial Summary

₹ Crore	FY20	FY21E	FY22E	FY23E	CAGR FY20-23 (%)
Revenues	4186.3	4258.9	5132.9	6654.1	16.7
EBITDA	977.3	1009.4	1262.3	1653.9	19.2
EBITDA Margins (%)	23.3	23.7	24.6	24.9	
Adj. Net Profit	536.1	517.1	678.0	950.0	21.0
EPS (Adjusted)	30.8	29.7	38.9	54.5	
PE (x)	32.7	33.9	14.8	18.5	
EV to EBITDA (x)	19.8	19.5	15.6	12.0	
RoCE (%)	13.5	11.5	12.3	14.7	
RoE (%)	18.0	15.1	15.1	17.8	

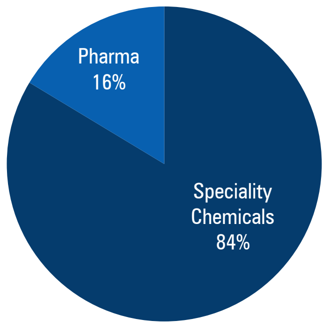
Source: ICICI Direct Research; Company

Company Background

Aarti Industries (Aarti), established in 1984 by first generation technocrats Rajendra Gogri, is a leading benzene-based speciality chemical companies globally. The company primarily operates in two business segments – speciality chemicals (84%) and pharmaceuticals (14%). In speciality chemicals, the company is mainly into feedstock materials such as benzene, toluene, nitric acid, chlorine, methanol, aniline sulphur. In the pharmaceutical segment, Aarti is present in APIs, intermediates and xanthine derivatives for the pharmaceutical and food/beverages industry. Also, it has a de-risked portfolio that is multiproduct, multi-geography, multi-customer and multi-industry. The company ranks among the top five globally for 75% of its portfolio. Its 200+ products are sold to 700+ domestic and 400+ export customers across the globe in 60 countries with a major presence in the US, Europe and Japan. Also, among end user sectors, agrochemicals, pharmaceuticals and FMCG contribute 50-60% of Aarti's revenue while other end-user industries include polymers, pigments, printing inks, dyes, fuel additives, aromatics, etc.

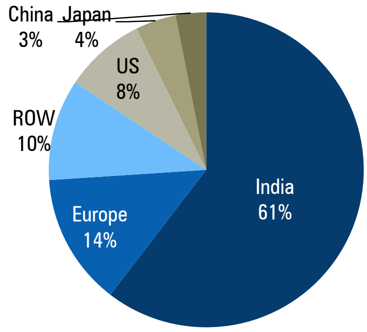
Aarti has 13 manufacturing units for speciality chemicals; five for pharma (two USFDA and three WHO/GMP), mostly located in close proximity to the large ports of western India. The company also has four R&D centres – one in Navi Mumbai, two in Vapi and one in Dombivali – which focus on innovations in new speciality chemicals and pharmaceutical applications.

Segment Bifurcation



Source: ICICI Direct Research; Company

Geographical Bifurcation



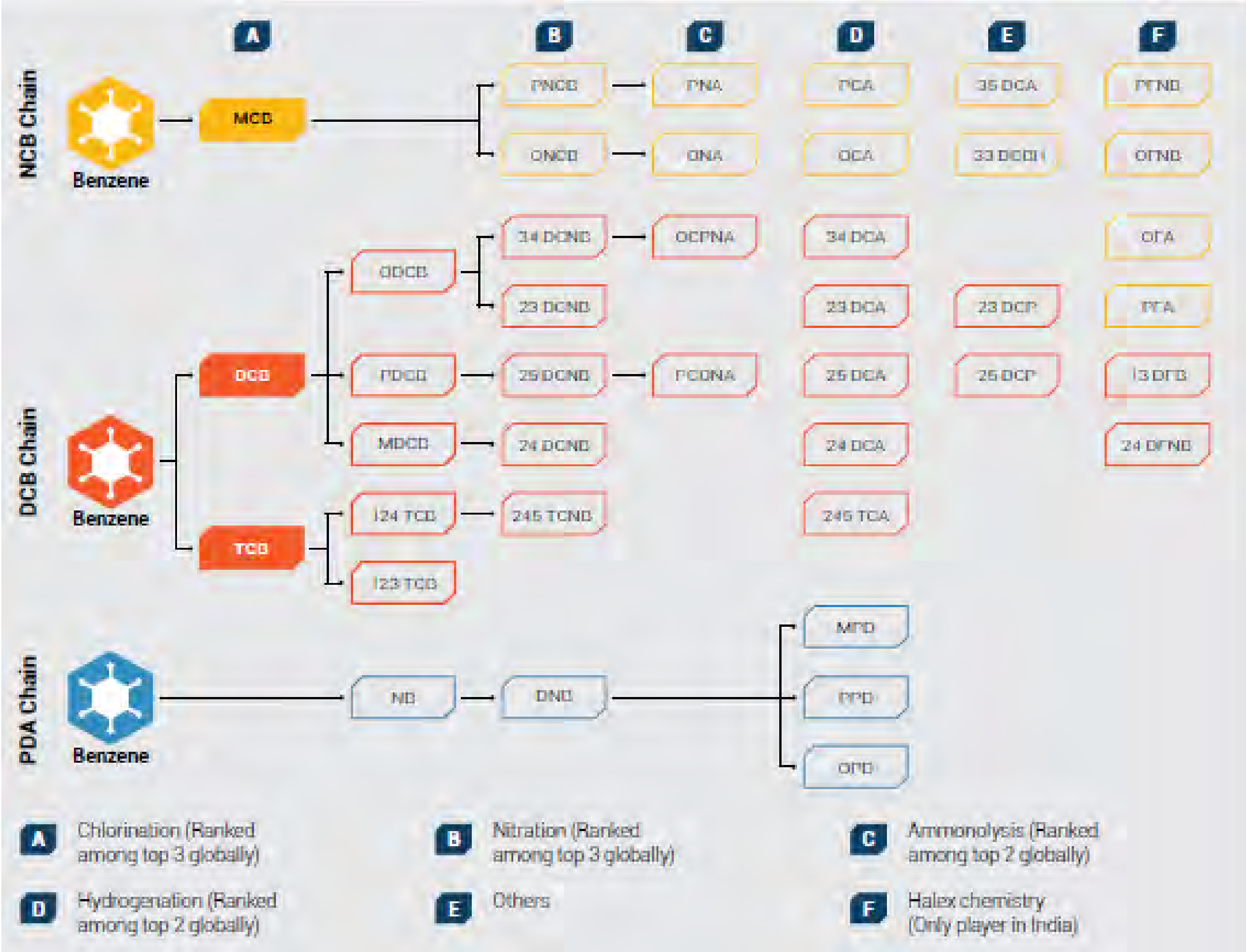
Source: ICICI Direct Research; Company

Exhibit 92: Timeline of company events

Years	Details
1984	Incorporated Aarti Organics Private Limited
1986	Commenced a 1,200 Tonnes Per Annum (TPA) unit for Nitro Chloro Benzenes (NCB) in Sarigram, Gujarat
1990	Set up the first large-scale organic plant in Vapi – a 4,500 TPA unit for NCB
2001	Set up a large-scale hydrogenation and nitration unit at Jhagadia (hydrogen gas via pipeline)
2005-08	Expanded the NCB and sulphuric acid capacity
	Set up a large-scale speciality chemical unit in Kutch
	Received US FDA approval for an Active Pharmaceutical Ingredient (API) unit in Tarapur
2011	Upgraded the hydrogenation unit from batch to continuous
	Received US FDA approval for the custom synthesis division at Vapi
	Commenced bulk shipment for global markets
2016	Commissioned an ethylation facility at Dahej SEZ (ethylene gas via pipeline)
	Expanded the NCB capacity from 57 KTPA to 75 KTPA
2017	Commenced the functioning of the calcium chloride facility
	Started operations at co-generation and solar power plants
2018	Commissioned the Nitro Toulene plant
	Signed two large multi-year contracts with global players
	Manufacturing facility being set up at Dahej SEZ
2019	Commissioned the Nitro Toulene hydrogenation facility at Jhagadia
	Signed another multi-year contract with a global player
2020	Operationalised Aarti Research and Technology Centre (ARTC) at Mahape, Navi Mumbai
	Commissioned two units at Dahej SEZ for high-value speciality chemicals

Source: ICICI Direct Research, Company

Exhibit 93: Benzene value chain -- Aarti has presence in all six chains



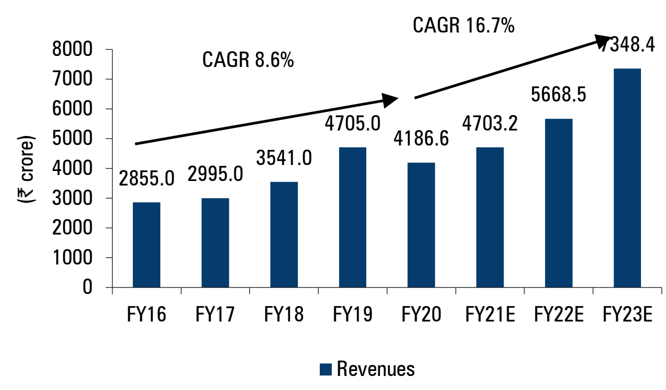
Source: ICICI Direct Research, Company

Exhibit 94: Multi-year projects

Projects	Project size (₹ cr)	nure (yea	Peak annual potential (₹ cr)	Product	Status
Project 1	4,000	10.0	400.0	agro chemical	Cancelled, expects to get US$ 120-130 mn as competition (US$ 20 each in FY21E and FY22E and remaining US$ 80-90 million in end of FY22E)
Project 2	10,000	20.0	500.0	polymer application	Guided to commissioned in FY21E
Project 3	900	10.0	90.0	NA	Guided to commissioned in FY22E

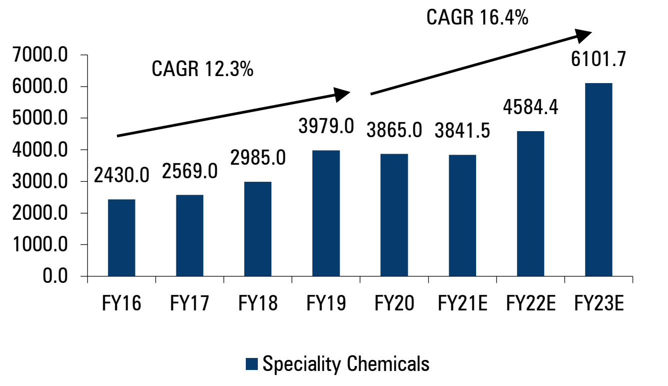
Source: ICICI Direct Research, Company

Exhibit 95: Revenues to grow at 17% CAGR in FY20-23E



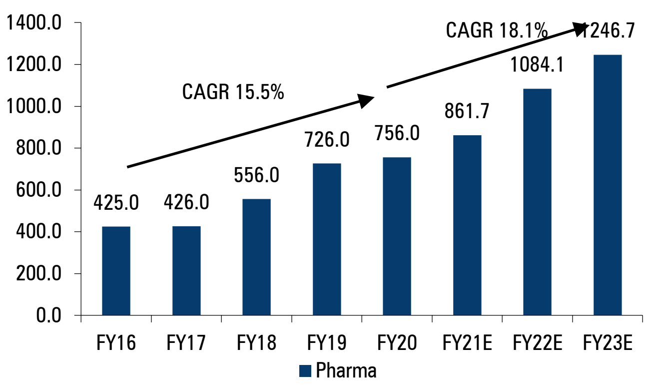
*Source: ICICI Direct Research, Company; *Ex demerged entity*

Exhibit 96: Chemicals to grow at 16% CAGR in FY20-23E



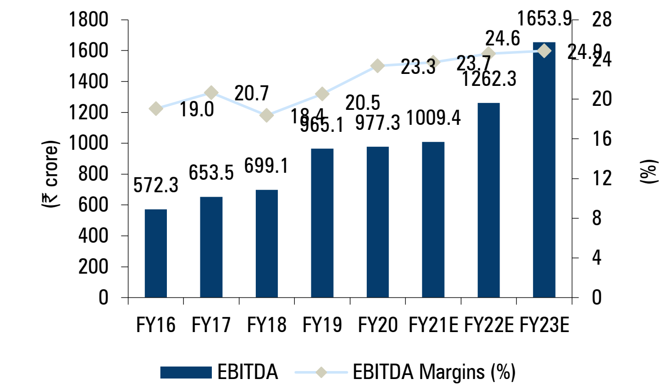
Source: ICICI Direct Research, Company

Exhibit 97: Pharma to grow at 18% CAGR in FY20-23E



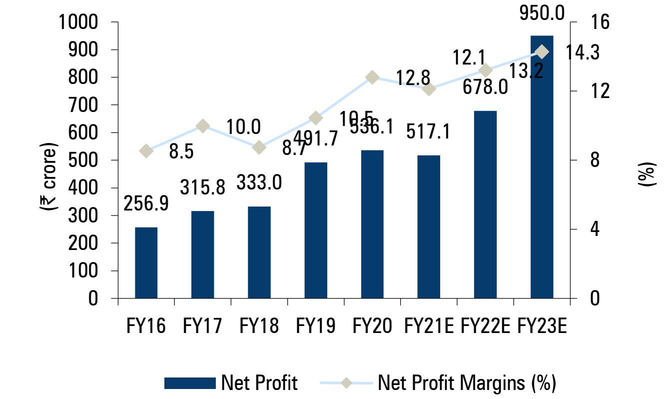
Source: ICICI Direct Research, Company

Exhibit 98: EBITDA & EBITDA margins trend



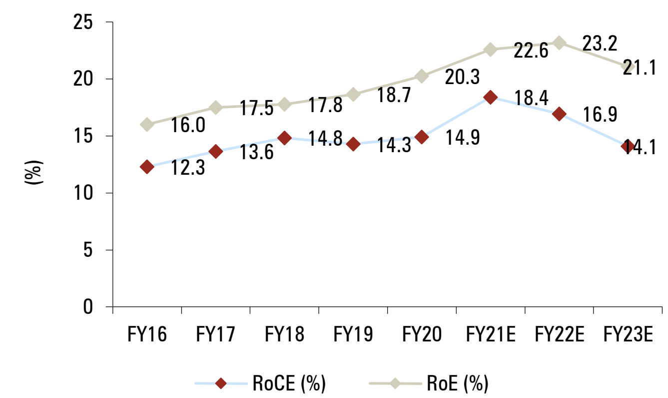
Source: ICICI Direct Research, Company

Exhibit 99: Adjusted PAT & PAT margins trend



Source: ICICI Direct Research, Company

Exhibit 100: RoE & RoCE trend



Source: ICICI Direct Research, Company

Key Risk

Volatility in raw material prices

Most of the company's raw materials are derivatives of crude oil, such as benzene, toluene, etc. Crude prices are volatile and increases in prices of such materials would have an impact on cost of production. While the company has generally been able to pass on increase in prices of such raw materials to customers, its inability or delay in in doing so, going ahead, could adversely affect financial conditions and results of operations.

Growth reliance on end user

The products have applications in industries such as agrochemicals, pharmaceuticals, polymer additives, pigments and dyes, beverages, among others. Consequently, its revenues are dependent on end user industries that use the company's products as an input. Factors affecting any of these industries, in general, like Covid-19, or any of its customers, in particular, could have a cascading adverse effect on the company's business and results of operations.

Financial Summary

Exhibit 101: Profit and loss statement ₹ crore

(Year-end March)	FY20	FY21E	FY22E	FY23E
Total Operating Income	4,186.3	4,258.9	5,132.9	6,654.1
Growth (%)	-11.0	1.7	20.5	29.6
Raw Material Expenses	2,056.3	2,107.8	2,566.5	3,327.0
Gross Profit	2,130.0	2,151.1	2,566.5	3,327.0
Gross Profit Margins (%)	50.9	50.5	50.0	50.0
Employee Expenses	305.2	407.5	491.1	636.6
Other Expenditure	847.4	734.3	813.1	1,036.5
Total Operating Expenditure	3,209.0	3,249.5	3,870.7	5,000.2
EBITDA	**977.3**	**1,009.4**	**1,262.3**	**1,653.9**
Growth (%)	1.3	3.3	25.0	31.0
Interest	124.8	128.2	138.5	148.8
Depreciation	185.2	237.4	295.2	344.2
Other Income	8.8	10.2	25.7	33.3
PBT before Exceptional Item	**676.2**	**654.0**	**854.2**	**1,194.2**
Less: Exceptional Items	0.0	0.0	-637.5	0.0
PBT after Exceptional Items	676.2	654.0	1,491.7	1,194.2
Total Tax	129.4	131.5	298.3	238.8
PAT after MI	536.1	517.1	1,188.0	950.0
Adjusted PAT	**536.1**	**517.1**	**678.0**	**950.0**
Growth (%)	6.3	-3.5	31.1	40.1
EPS (Adjusted)	**30.8**	**29.7**	**38.9**	**54.5**

Source: ICICI Direct Research

Exhibit 102: Cash Flow Statement ₹ crore

(Year-end March)	FY20	FY21E	FY22E	FY23E
Profit/(Loss) after taxation	512.3	517.1	1,188.0	950.0
Add: Depreciation & Amortiza	185.2	237.4	295.2	344.2
Net Increase in Current Asset	-68.6	-30.9	-224.7	-548.2
Net Increase in Current Liabili	358.8	7.1	73.2	126.6
Others	114.3	128.2	138.5	148.8
CF from Operating activities	**1,102.1**	**858.9**	**1,470.3**	**1,021.4**
Investments	1.3	0.0	0.0	0.0
(Purchase)/Sale of Fixed Ass	-1,125.5	-1,000.0	-1,200.0	-1,000.0
Others	0.2	9.0	9.2	9.4
CF from Investing activities	**-1,124.1**	**-991.0**	**-1,190.8**	**-990.6**
(inc)/Dec in Loan	-303.2	400.0	200.0	200.0
Dividend & Dividend tax	-106.4	-77.6	-118.8	-95.0
Other	-125.4	-128.2	-138.5	-148.8
CF from Financing activities	-534.9	194.2	-57.3	-43.8
Net Cash Flow	**-556.9**	**62.2**	**222.3**	**-13.0**
Cash and Cash Equivalent	804.2	247.3	309.5	531.8
Cash	**247.3**	**309.5**	**531.8**	**518.8**
Free Cash Flow	**-23.4**	**-141.1**	**270.3**	**21.4**

Source: ICICI Direct Research

Exhibit 103: Balance Sheet ₹ crore

(Year-end March)	FY20	FY21E	FY22E	FY23E
Equity Capital	87.1	87.1	87.1	87.1
Reserve and Surplus	2,891.7	3,331.2	4,400.4	5,255.4
Total Shareholders funds	2,978.8	3,418.3	4,487.5	5,342.5
Total Debt	2,094.2	2,494.2	2,694.2	2,894.2
Deferred Tax Liability	211.0	215.2	219.5	223.9
Minority Interest	94.6	96.5	98.4	100.4
Other Non Current Liabilities	550.9	561.9	573.1	584.6
Source of Funds	**5,929.5**	**6,786.1**	**8,072.8**	**9,145.7**
Gross Block - Fixed Assets	3,837.0	5,337.0	6,637.0	7,737.0
Accumulated Depreciation	1,368.6	1,606.0	1,901.2	2,245.4
Net Block	2,468.5	3,731.1	4,735.9	5,491.7
Capital WIP	1,417.6	917.6	817.6	717.6
Fixed Assets	3,886.1	4,648.7	5,553.5	6,209.3
Investments	37.0	37.0	37.0	37.0
Other non-Current Assets	404.5	412.6	420.8	429.2
Inventory	835.7	850.2	914.1	1,185.0
Debtors	753.4	766.5	923.8	1,197.6
Other Current Assets	168.5	171.8	175.3	178.8
Cash	247.3	309.5	531.8	518.8
Total Current Assets	2,004.9	2,098.0	2,544.9	3,080.1
Creditors	345.2	351.1	423.2	548.6
Provisions	39.9	40.7	41.5	42.4
Other Current Liabilities	18.0	18.3	18.7	19.1
Total Current Liabilities	403.1	410.2	483.4	610.1
Net Current Assets	1,601.8	1,687.8	2,061.5	2,470.1
Application of Funds	**5,929.5**	**6,786.1**	**8,072.8**	**9,145.7**

Source: ICICI Direct Research

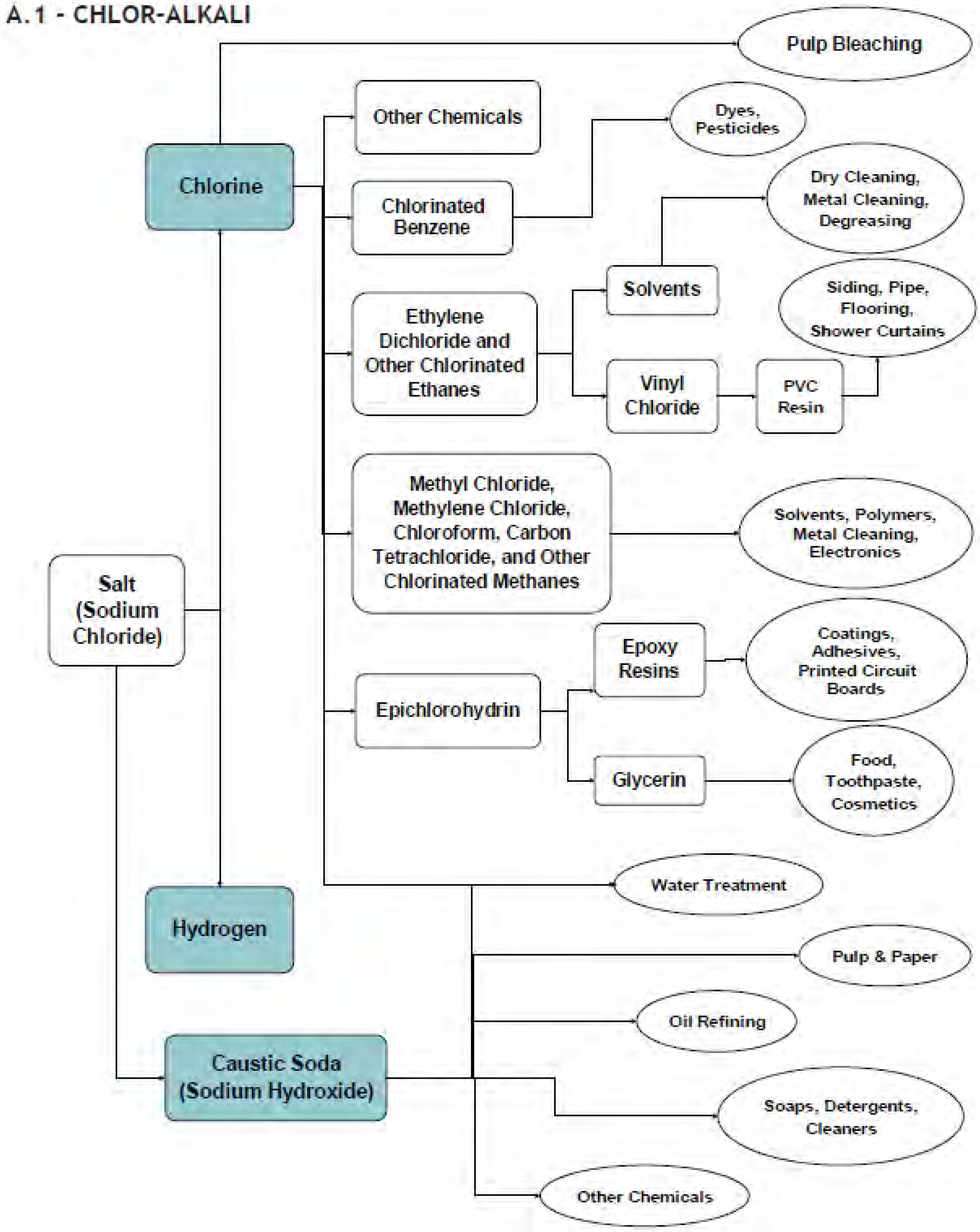
Exhibit 104: Ratio Analysis

(Year-end March)	FY20	FY21E	FY22E	FY23E
Per share data (₹)				
Reported EPS	30.8	29.7	68.2	54.5
Cash EPS	23.3	25.2	32.1	49.1
BV per share	171.0	196.2	257.6	306.6
Cash per Share	14.2	17.8	30.5	29.8
Dividend per share	7.5	4.5	6.8	5.5
Operating Ratios (%)				
Gross Profit Margins	50.9	50.5	50.0	50.0
EBITDA margins	23.3	23.7	24.6	24.9
Adjusted PAT Margins	12.8	12.1	13.2	14.3
Cash Conversion Cycle	108.5	108.5	100.6	100.6
Asset Turnover	1.1	0.8	0.8	0.9
EBITDA conversion Rate	112.8	85.1	116.5	61.8
Return Ratios (%)				
RoE	18.0	15.1	15.1	17.8
RoCE	13.5	11.5	12.3	14.7
RoIC	18.6	13.9	14.4	16.6
Valuation Ratios (x)				
P/E	32.7	33.9	14.8	18.5
EV / EBITDA	19.8	19.5	15.6	12.0
EV / Net Sales	4.6	4.6	3.8	3.0
Market Cap / Sales	4.2	4.1	3.4	2.6
Price to Book Value	5.9	5.1	3.9	3.3
Solvency Ratios				
Debt / EBITDA	2.1	2.5	2.1	1.7
Debt / Equity	0.7	0.7	0.6	0.5
Current Ratio	4.4	4.4	4.2	4.2

Source: ICICI Direct Research

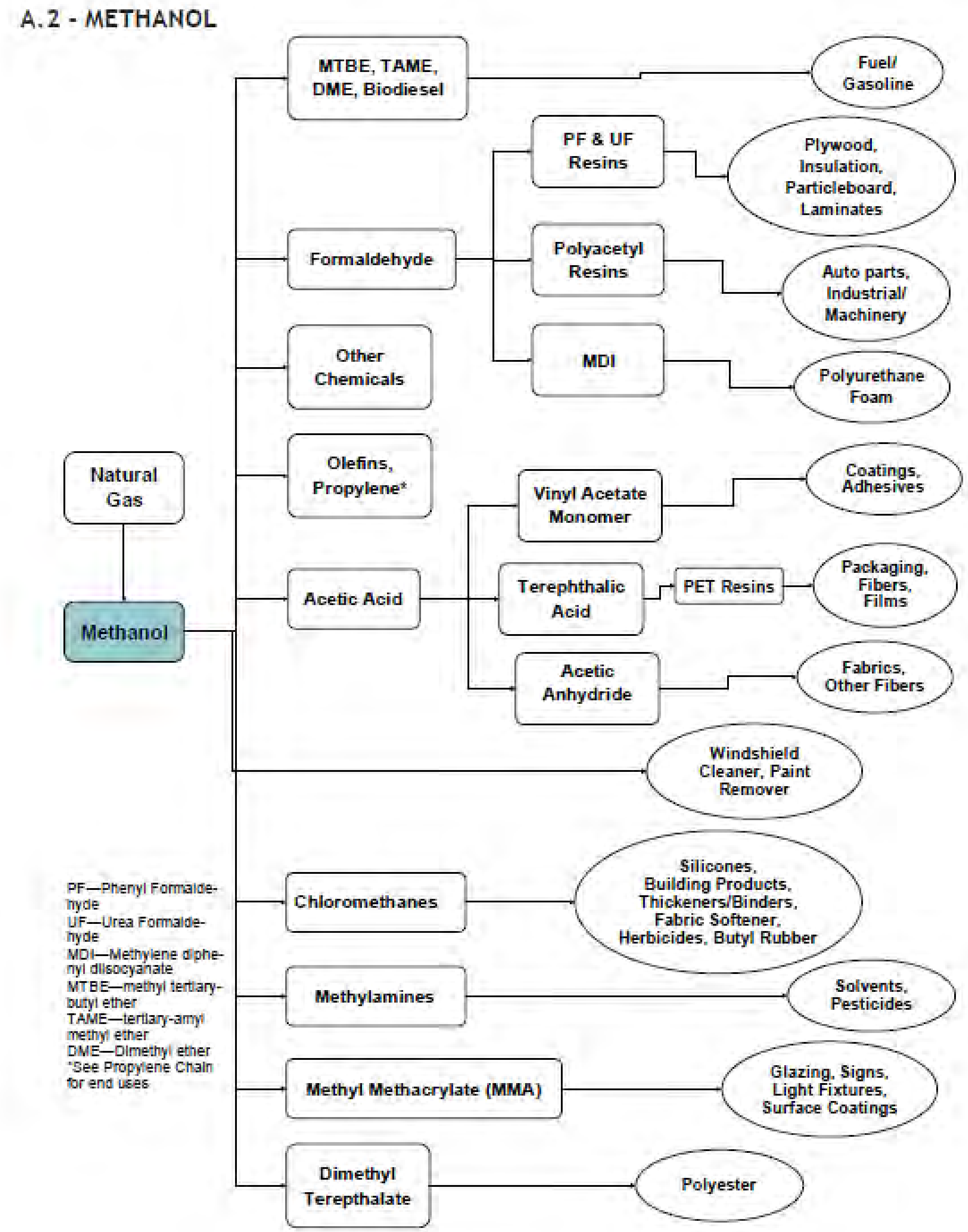
Annexure

Exhibit 105: Chlor Alkali value chain



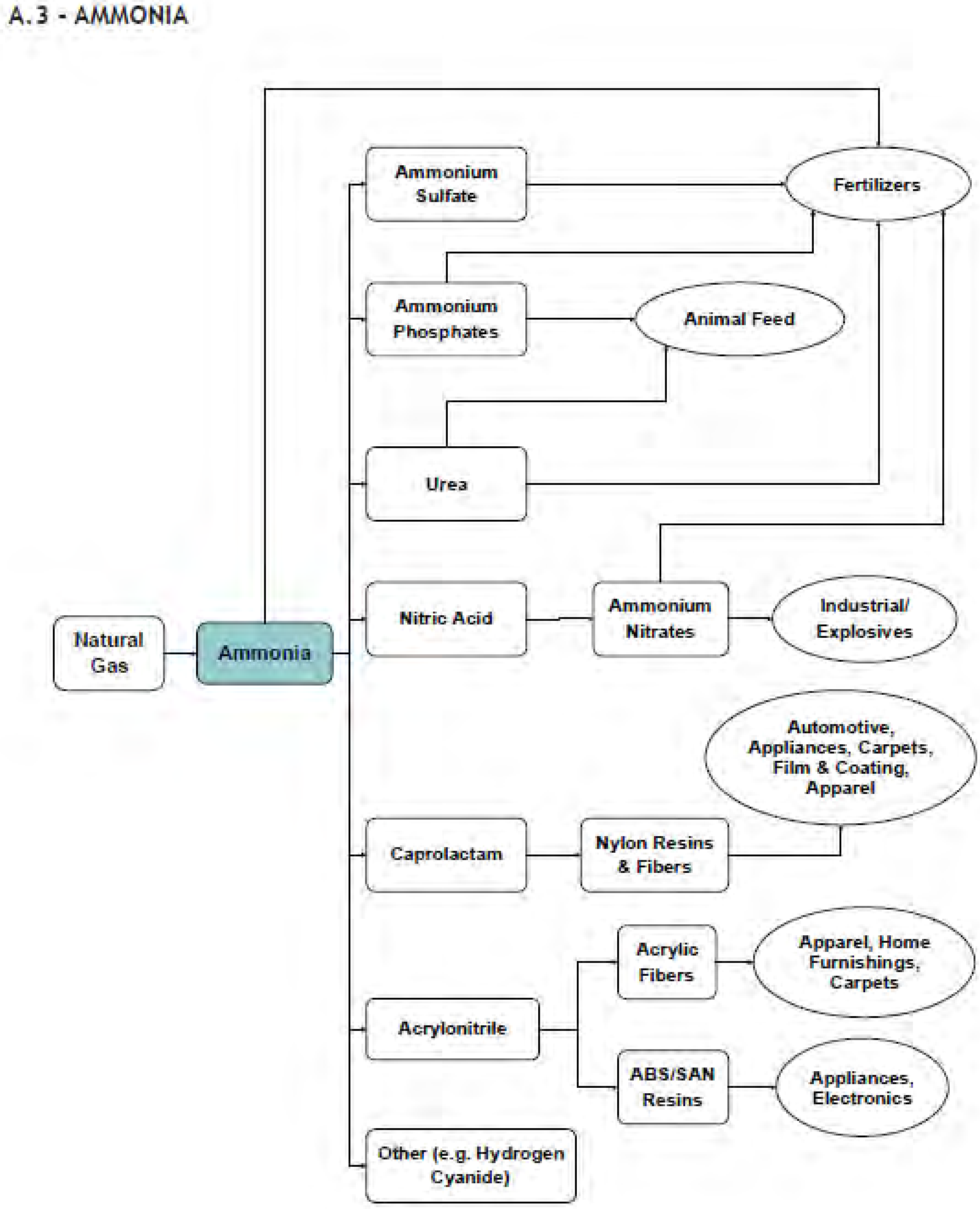
Source: Industry, ICICI Direct Research

Exhibit 106: Methanol value chain…



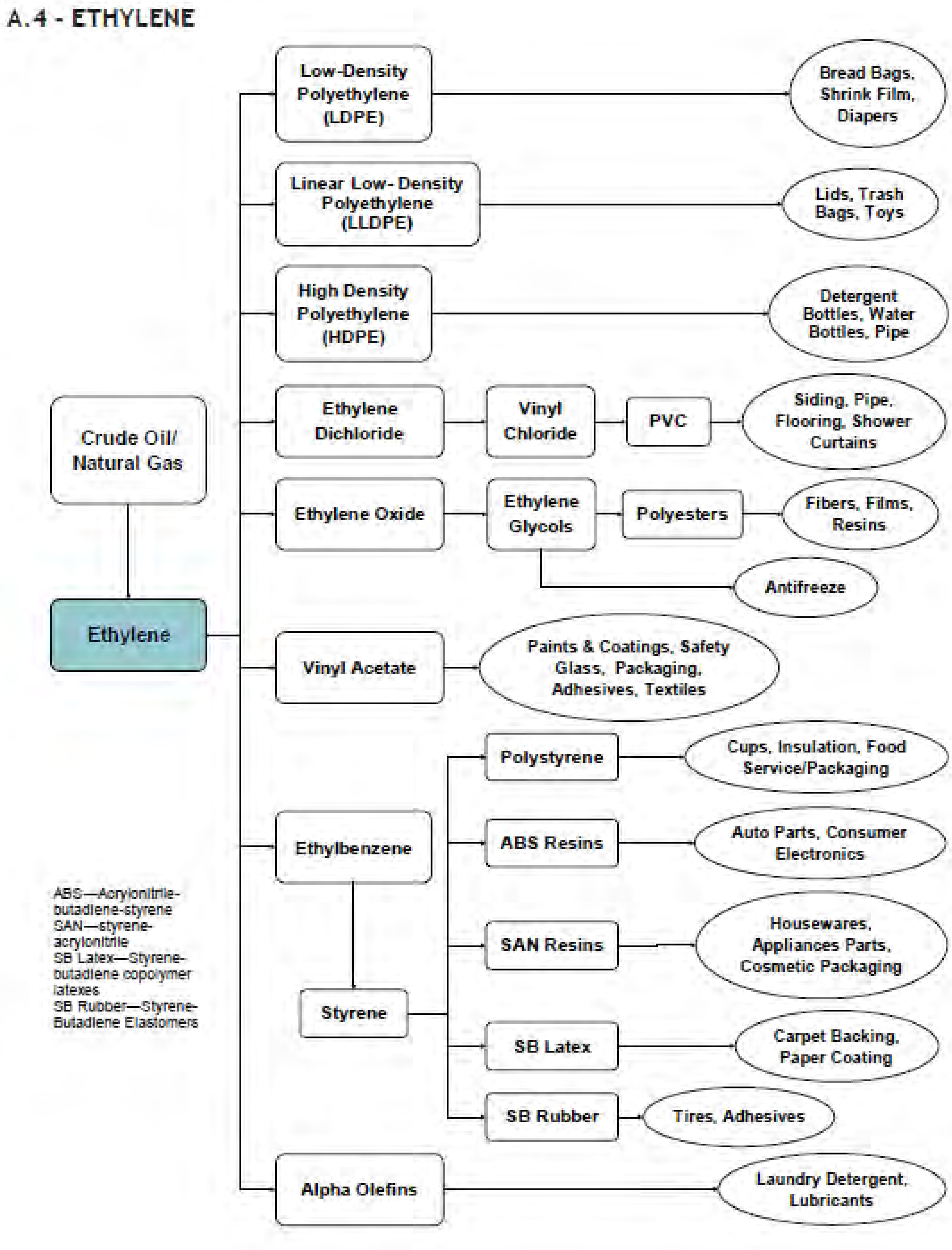
Source: Industry, ICICI Direct Research

Exhibit 107: Ammonia value chain…



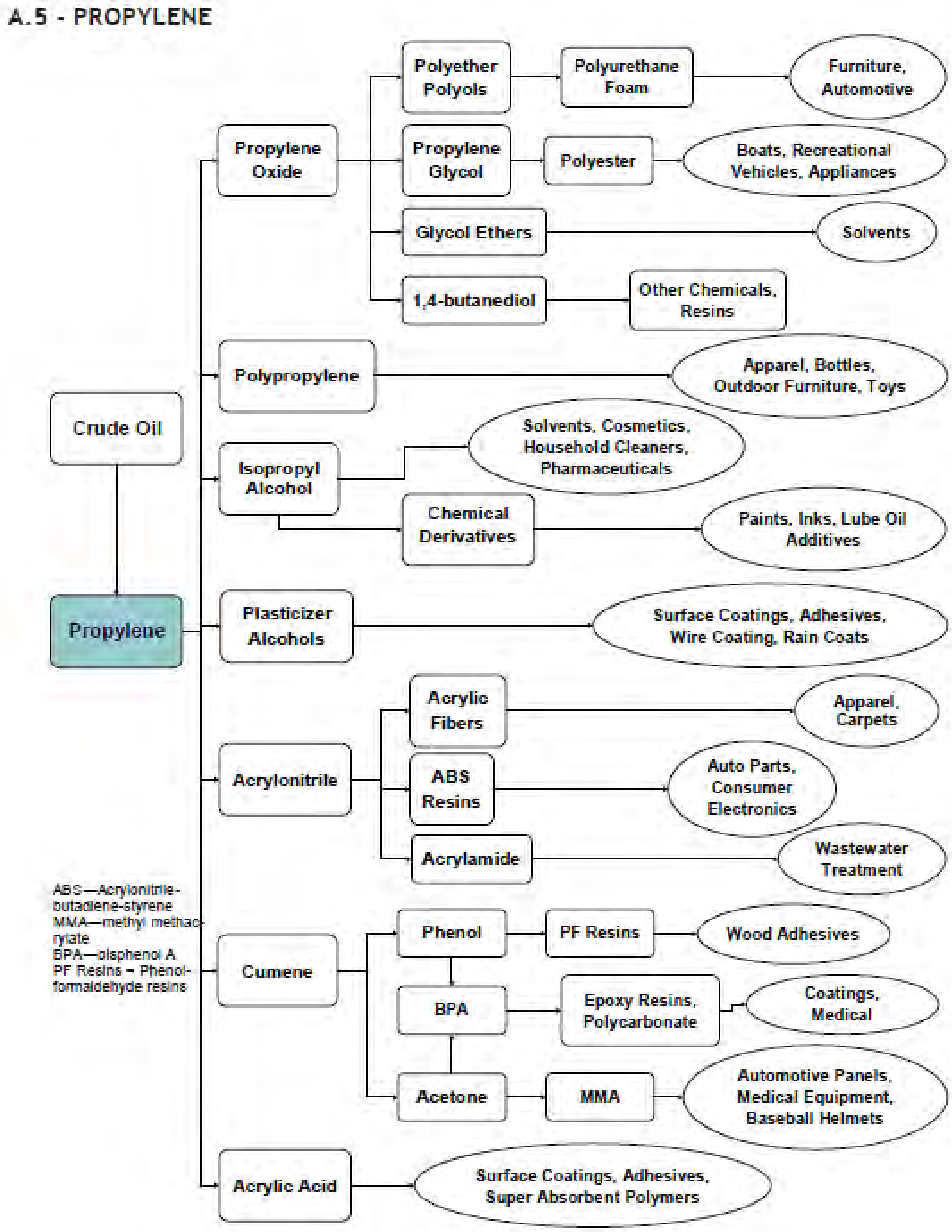
Source: Industry, ICICI Direct Research

Exhibit 108: Ethylene value chain…



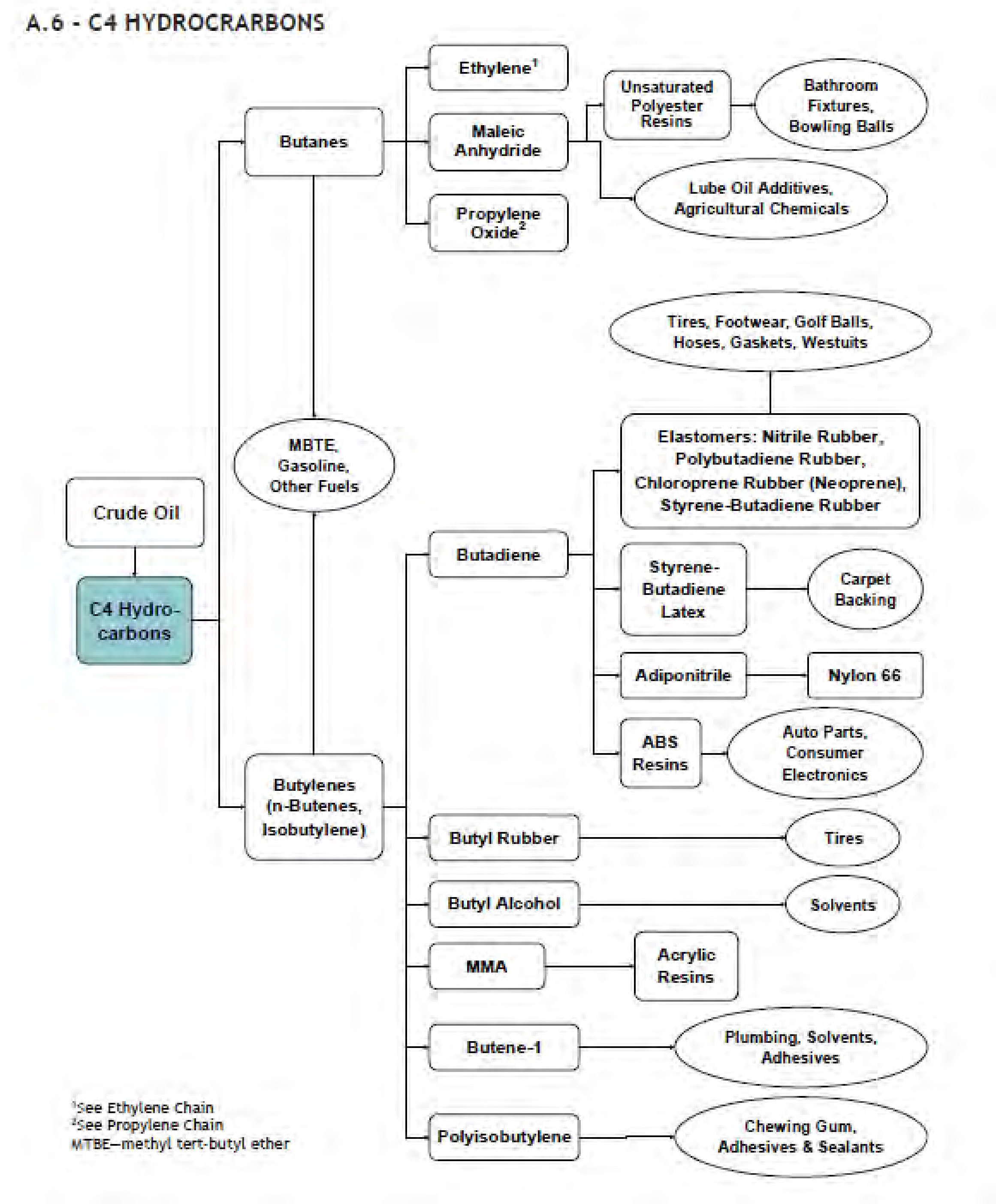
Source: Industry, ICICI Direct Research

Exhibit 109: Propylene value chain…



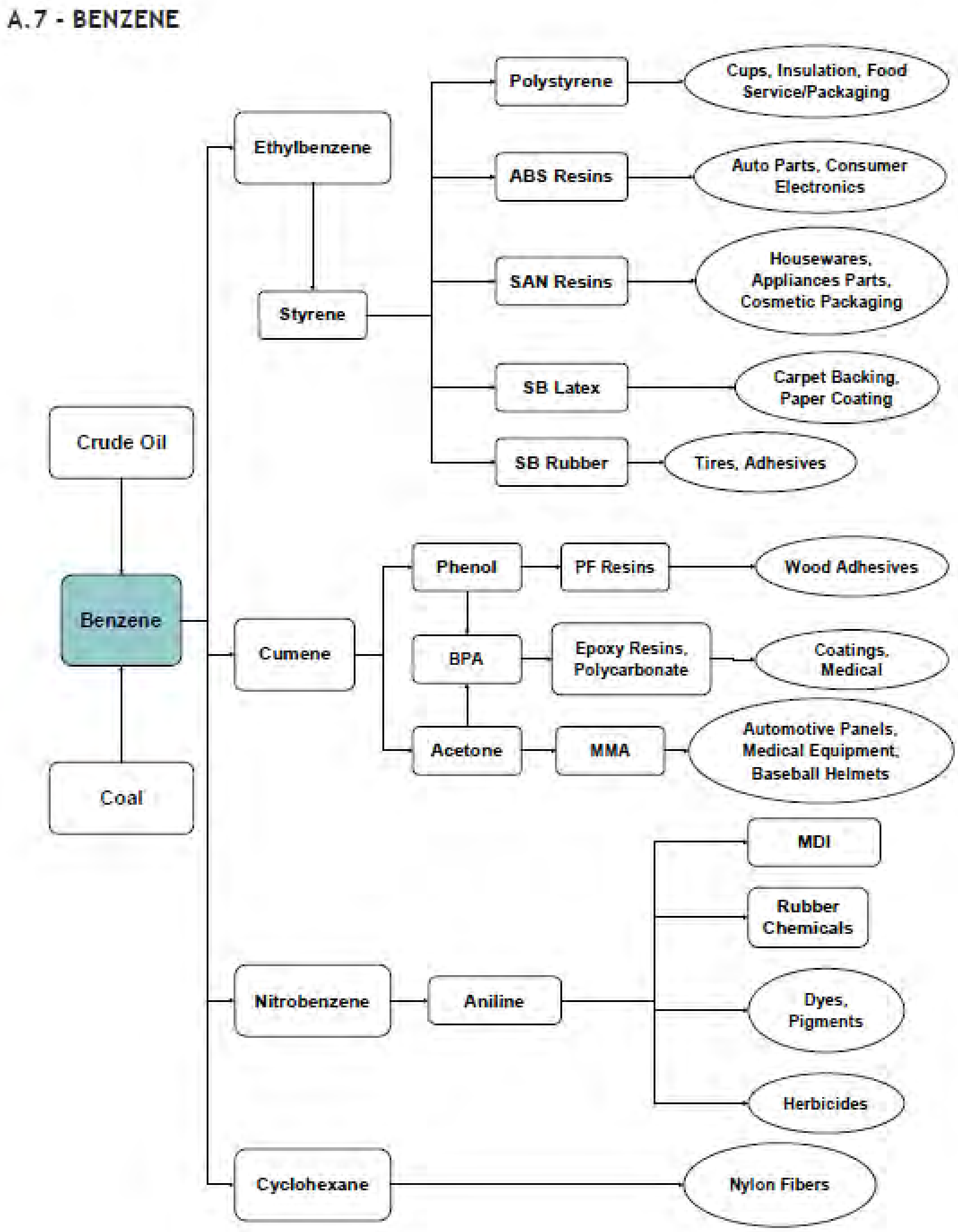
Source: Industry, ICICI Direct Research

Exhibit 110: C4 Hydrocarbons value chain…



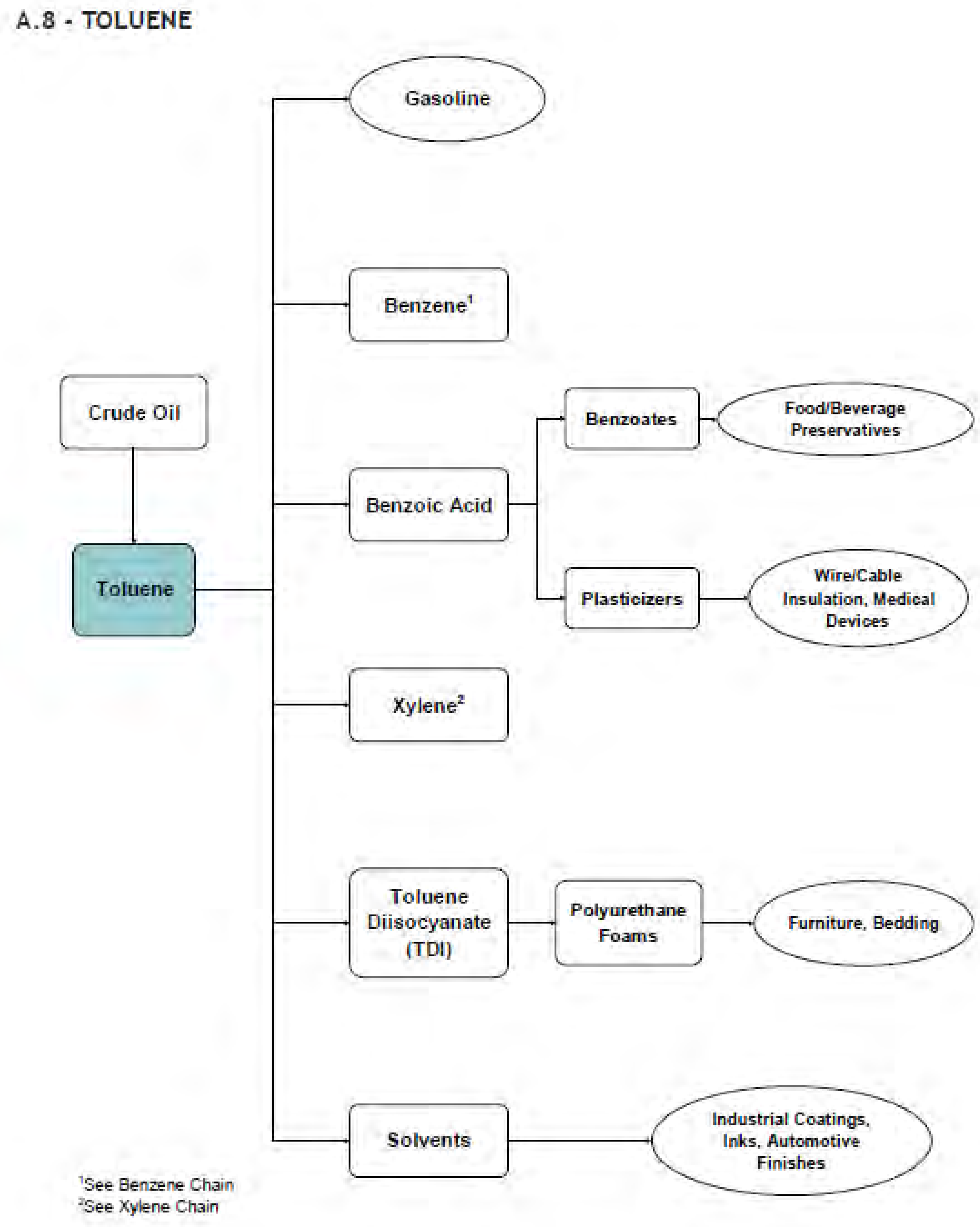
Source: Industry, ICICI Direct Research

Exhibit 111: Benzene value chain…



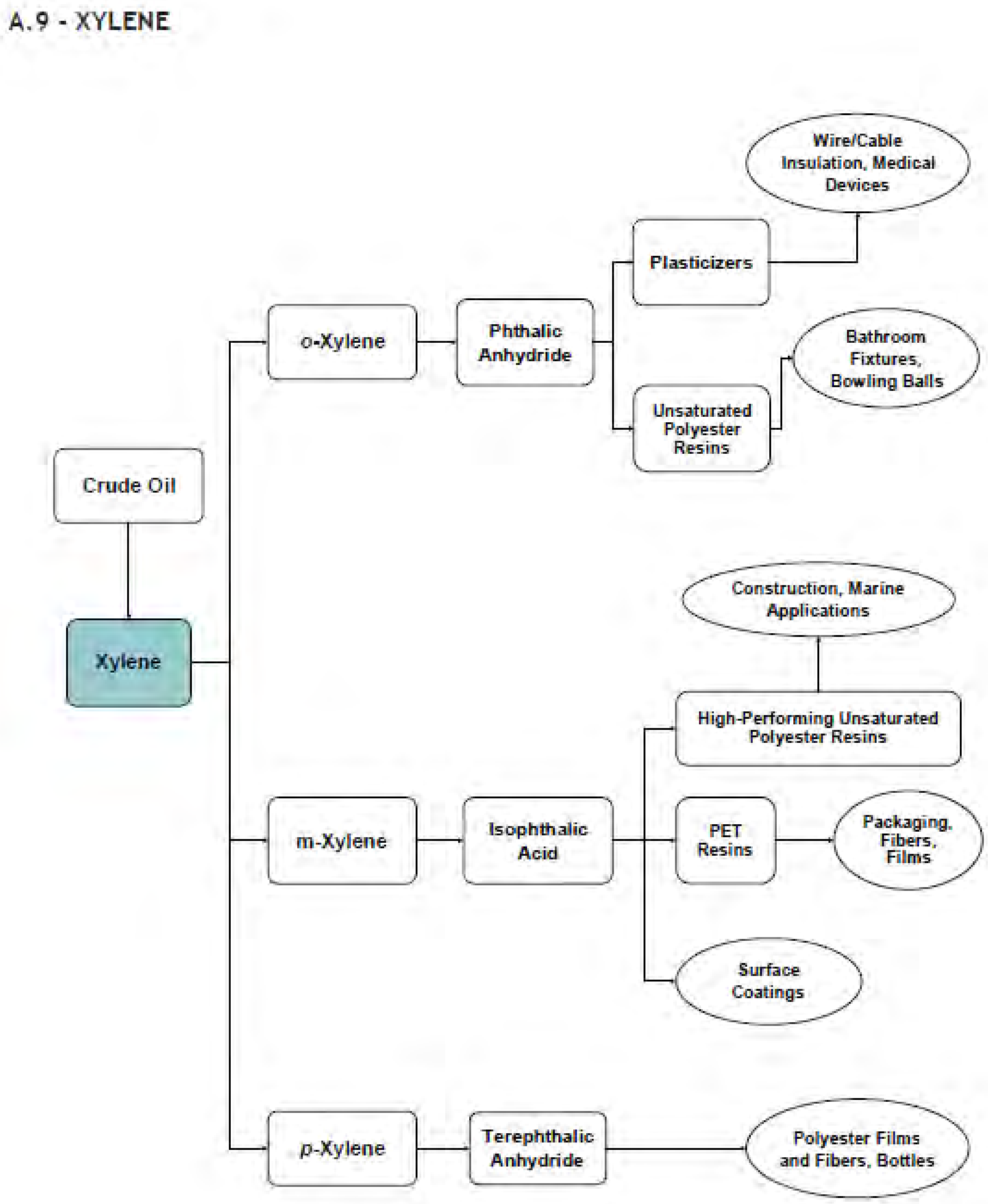
Source: Industry, ICICI Direct Research

Exhibit 112: Toluene value chain…



Source: Industry, ICICI Direct Research

Exhibit 113: Xylene value chain…



Source: Industry, ICICI Direct Research

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