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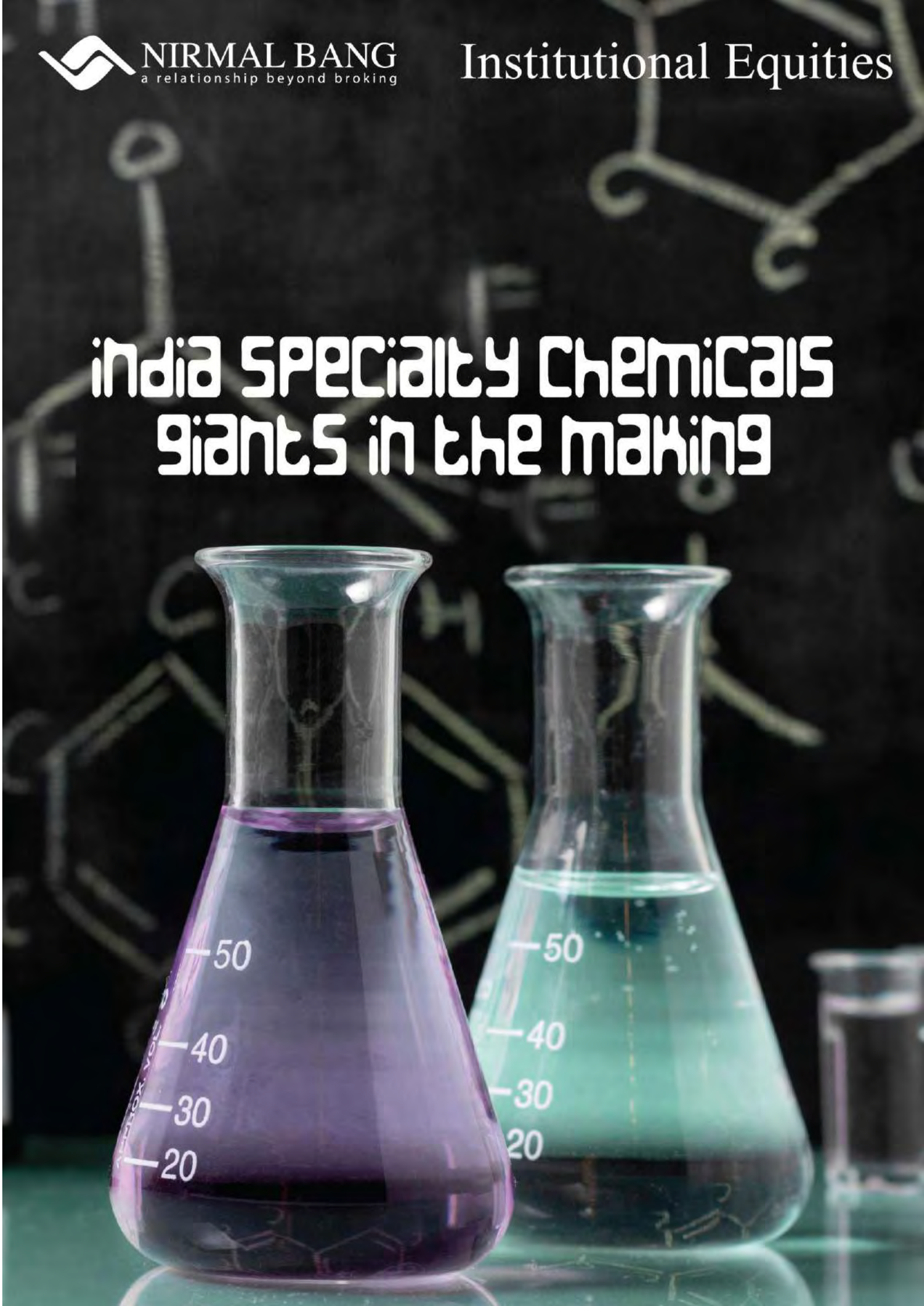
India Specialty Chemicals
Giants in the Making



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India Specialty Chemicals

16 October 2020

Initiating Coverage

Giants in the making

India specialty chemicals industry (US$32bn) forms ~4% of the global pie and is expected to grow at ~12% CAGR over 2019-2025. We highlight that India's Chemicals sector has disproportionately rewarded shareholders over multiple time horizons and consistently outperformed leading indices (both domestic and global). We believe that this outperformance has been the function of revenue & earnings growth, margin expansion and multiple re-rating. Players who have been able to carve out a niche in complex chemistries, adopted environment friendly processes and established themselves at the global level stand to gain significantly over the next decade. 'Plus One' is imperative and not a buzzword in our view as reducing dependency on China is a structural shift, which is happening, especially after the environment crackdown in China. The US-China trade war and the Covid-19 pandemic would accelerate the pace of this shift as global supply chains would want to completely hedge themselves from supply disruptions. India is emerging as a more significant player in the global chemicals supply chain with its scalable low-cost manufacturing ecosystem, improving infrastructure and established VHS compliance framework. We initiate coverage on SRF Ltd (SRF), Navin Fluorine International (NFIL), Aarti Industries (ARTO) and Vinati Organics (VO), which are established players in respective chemistries at a global level. All these companies are not dependent on China for raw materials. We are structurally positive on all the 4 names, but from 1-year stand point we have an Accumulate rating on NFIL and VO as future growth has been largely priced in as per our opinion. SRF and ARTO are our top picks with ~25% and ~28% potential upside from CMP. Our report focusses more on specific companies as specialty chemicals is an ocean and each chemistry undergoes different dynamics with regards to the demand-supply, competitive intensity, raw material dependence etc.

Valuation and outlook: All of these companies have got re-rated over the last 1-2 years, however, we believe these multiples are sustainable as there has been a significant shift in the product mix towards high-value products and acceleration in capex intensity with greater visibility about future growth opportunities. These companies used to trade in low-to-mid single digit PE multiples 10 years back. All these businesses have come a long way and have gained trust of the global majors over the last decade in our view. We believe that the next 10 years could be a dream run for these companies as India strengthens its position in the global chemicals universe. We believe that these companies will not be materially impacted by Covid-19 on account of higher salience towards Pharmaceuticals and Agrochemicals, which are doing well. So far there has been no major delay with regards to future capex plans or execution of long-term contracts. We expect SRF, NFIL and ARTO to nearly double their earnings over FY20-23E despite the challenging FY21.

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Company	Rating	Market cap		CMP (Rs)	TP (Rs)	Upside/(Downside)	EPS		PE (x)		EV/EBITDA (x)		ROE (%)	
		Rsbn	USD bn				FY20	FY23E	FY20	FY23E	FY20	FY23E	FY20	FY23E
SRF	Buy	250	3.3	4,337	5,400	25%	119.9	239.5	23.2	18.1	13.0	10.6	15.2%	17.1%
NFIL	Accumulate	99	1.3	1,999	2,200	10%	36.8	83.5	33.2	24.0	21.6	16.4	14.6%	21.3%
ARTO	Buy	170	2.3	978	1,250	28%	30.8	58.9	24.9	16.6	15.3	11.4	19.1%	24.2%
VO	Accumulate	129	1.7	1,253	1,250	0%	32.5	45.8	23.9	27.3	18.5	19.1	28.6%	24.2%

Source: Company, Nirmal Bang Institutional Equities Research

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Exhibit 1: Key financial parameters of the coverage universe

	FY10-15	FY15-20	FY20-23E
Revenue CAGR			
SRF	12.7%	9.7%	13.8%
NFIL	6.6%	12.4%	26.1%
ARTO	17.4%	7.6%	17.0%
VO	27.2%	5.9%	18.8%
EBITDA CAGR			
SRF	3.0%	15.2%	22.0%
NFIL	-12.8%	29.6%	30.3%
ARTO	18.1%	16.0%	19.1%
VO	29.5%	16.7%	15.6%
PAT CAGR			
SRF	-1.4%	17.9%	25.9%
NFIL	-7.9%	27.2%	31.4%
ARTO	19.8%	21.4%	24.2%
VO	23.7%	23.6%	12.2%
EBITDA margin expansion			
SRF	-896bps	438bps	470bps
NFIL	-2117bps	1261bps	257bps
ARTO	42bps	733bps	128bps
VO	198bps	1547bps	-312bps
Average ROCE			
SRF	17.4%	13.2%	16.6%
NFIL	20.6%	17.1%	20.0%
ARTO	18.4%	19.1%	17.6%
VO	33.0%	33.4%	28.5%
Average ROE			
SRF	17.8%	15.7%	16.9%
NFIL	21.3%	16.2%	18.4%
ARTO	19.4%	22.8%	20.3%
VO	34.1%	25.7%	23.1%
Average working capital days			
SRF	52	45	50
NFIL	52	73	85
ARTO	102	95	110
VO	87	90	85
Average D/E ratio (x)			
SRF	0.7	0.7	0.4
NFIL	0.1	0.0	0.0
ARTO	1.0	1.0	0.5
VO	0.5	0.0	0.0
Total Capex (Rsmn)			
SRF	25,868	50,073	34,000
NFIL	2,081	4,123	5,200
ARTO	10,309	35,584	23,747
VO	3,090	6,150	3,250
Share price performance			
SRF	38.0%	22.9%	24.7%
NFIL	22.7%	48.9%	21.7%
ARTO	48.4%	34.7%	17.7%
VO	48.7%	24.2%	17.3%

Source: Company, Nirmal Bang Institutional Equities Research

Note- Share price performance for FY20-23E is calculated by considering our TP and FY20 closing price.

Exhibit 2: Company grid

	SRF	NFIL	ARTO	VO
Revenue share				
Domestic	51%	55%	57%	26%
Exports	49%	45%	43%	74%
China dependence for RM sourcing	Low/Nil	Low/Nil	Low/Nil for chemicals business	Low/Nil
Management remuneration as % PAT	3.5%	7.6%	5.0%	1.3%
R&D as % relevant revenue	↑ 4.5%	↑ 4.0%	↓ 2.1%	NA
Net importer/exporter	Exporter	Exporter	Exporter	Exporter

Source: Company, Nirmal Bang Institutional Equities Research

India specialty chemicals – a consistent outperformer

We highlight that the Indian chemicals sector has been a consistent value creator over the years with specialty chemicals being a key driver of this growth. We compared average growth to shareholders from key India specialty chemicals companies over multiple time horizons and we see that they have outperformed key indices, global chemical companies and MSCI world chemical index. We believe this is function of all round outpeformance, i.e. earnings growth, margin expansion and multiple re-rating. Considering India's current salience in the global specialty chemicals space, there is huge headroom for growth going forward. We expect leading players in niche chemistries to deliver non-linear growth over the next decade and shareholders of these companies would be rewarded disproportionately. On 'Plus One', we believe that specialty chemicals players would benefit in a big way as they have R&D expetise, skilled manpower, global leadership in niche chemistry capacity etc.

Exhibit 3: India chemical companies have consistently outperformed

Company Name	0.5yr absolute	1yr absolute	1.5yr CAGR	2yr CAGR	3yr CAGR	4yr CAGR	5yr CAGR	10yr CAGR	15yr CAGR
Nifty 50	33	4	1	6	5	9	8	7	11
Sensex 30	33	5	3	8	8	10	8	7	11
Average of Indian chemical companies	36	57	34	32	21	20	25	27	26
MSCI World Chemical Index	35	12	7	8	3	8	8	6	7
Indian chemical companies									
UPL	48	-11	-11	10	-1	3	10	15	15
Coromandel	36	77	38	37	14	28	30	8	25
PI Industries	44	54	57	61	39	26	24	45	47
Rallis India	31	59	42	20	5	4	5	7	19
Bayer Cropscience India	49	70	21	14	15	6	8	18	23
BASF India	28	55	3	-8	-5	4	7	8	13
Navin Fluorine	**45**	**178**	**102**	**80**	**41**	**44**	**51**	**42**	**25**
SRF	**32**	**68**	**47**	**58**	**37**	**24**	**28**	**28**	**19**
Aarti Industries	**8**	**30**	**15**	**25**	**30**	**29**	**31**	**40**	**25**
Vinati Organics	**51**	**22**	**34**	**42**	**39**	**44**	**43**	**42**	**51**
Atul	42	50	43	35	36	26	30	43	30
Sudarshan Chemicals	17	30	20	14	7	6	33	22	23
Global chemical companies									
Du Pont Nemours Inc	65	-10	-20	-16	-17	-6	-3	3	-0
BASF SE	21	-18	-18	-12	-16	-9	-6	0	4
Chemours	139	56	-31	-21	-26	11	27	na	na
Solvay SA	12	-23	-22	-15	-16	-8	-4	-0	-1
Sinopec	-13	-22	-23	-22	-12	-6	-5	-6	2
Exxonmobil Chemical	-16	-51	-44	-35	-25	-21	-16	-6	-4

Source: Bloomberg, Nirmal Bang Institutional Equities Research

Exhibit 4: India chemicals- a consistent value creator

Source:McKinsey, Nirmal Bang Institutional Equities Research

Valuation - recent re-rating reflects strength in these business models

Majority of the leading specialty chemicals companies in India have undergone re-rating over the last 1-2 years. Some of the common concerns from investors revolve around sustainability of these multiples. We believe that players having a strong foothold at the global level in niche chemistries deserve premium valuation as the growth opportunities have widened. Also, there is visibility on strong earnings growth over the next 2-3 years. Companies have started receiving long-term contracts from global majors. Leaders will also benefit from the ongoing trend of reduction in dependence on China. Majority of the players are expected to grow their earnings ~2x over FY20-23. Therefore, benchmarking current valuation to 5-year average PE multiple would not be a correct assessment in our view.

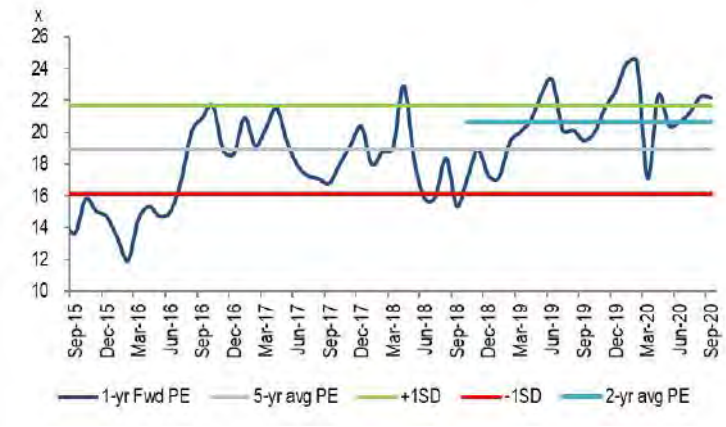
We believe that NFIL, SRF and ARTO from our coverage universe are in a position to deliver 2x earnings over the next 3 years. In case of VO, 3-year CAGR looks weak on account of near-term challenges in its key product. But, capacity addition plans and global leadership make VO a strong candidate for strong earnings growth in the medium to long term.

Exhibit 5: Peer valuation

Company Name	FY20-23E CAGR (%)			EBITDA margin (%)			ROE (%)				P/E (x)			P/B (x)			EV/EBITDA (x)		
	Revenue	EBITDA	PAT	FY20	FY23E	Change	FY20	FY21E	FY22E	FY23E	FY21E	FY22E	FY23E	FY21E	FY22E	FY23E	FY21E	FY22E	FY23E
Indian companies																			
UPL Ltd	9.2	11.9	24.9	20.8	22.4	158bps	15.0	15.4	16.5	17.8	13.4	11.1	9.5	1.9	1.6	1.5	7.6	6.4	5.3
Coromandel International Ltd	7.7	11.4	15.6	12.3	13.6	132bps	25.1	26.4	24.1	22.7	16.4	15.0	13.9	4.0	3.4	2.9	11.0	10.0	9.1
PI Industries Ltd	22.6	25.3	28.2	21.2	22.7	145bps	19.5	19.7	20.5	20.0	44.8	34.5	29.1	6.7	5.8	4.9	32.9	26.1	21.4
Rallis India Ltd	11.6	17.3	17.3	12.8	14.9	207bps	14.6	15.3	16.3	17.1	22.9	19.0	15.8	3.3	2.9	2.5	14.9	12.4	10.5
Bayer CropScience Ltd/India	13.7	21.3	21.8	18.3	22.3	395bps	21.7	24.0	23.6	22.7	37.7	32.8	29.1	8.7	7.2	6.1	27.8	23.9	20.6
BASF India Ltd	11.9	18.8	-284.6	3.0	3.6	59bps	-1.8	5.1	10.1	11.5	38.9	25.0	21.1	4.2	3.7	3.3	19.7	16.0	Na
Navin Fluorine International L	**26.1**	**30.3**	**31.4**	**24.8**	**27.4**	**257bps**	**14.6**	**16.0**	**17.9**	**21.3**	**41.3**	**32.9**	**24.0**	**6.3**	**5.6**	**4.7**	**31.5**	**25.7**	**16.4**
SRF Ltd	**13.8**	**22.0**	**25.9**	**20.2**	**24.9**	**470bps**	**15.2**	**16.4**	**17.3**	**17.1**	**26.9**	**20.9**	**18.3**	**3.9**	**3.4**	**2.9**	**14.8**	**12.6**	**10.3**
Aarti Industries Ltd	**17.0**	**19.1**	**24.2**	**23.3**	**24.6**	**128bps**	**19.1**	**17.1**	**19.7**	**24.2**	**31.5**	**23.8**	**16.6**	**5.1**	**4.4**	**3.7**	**19.2**	**15.3**	**11.4**
Vinati Organics Ltd	**18.8**	**15.6**	**12.2**	**40.3**	**37.2**	**-312bps**	**28.6**	**22.1**	**22.9**	**24.2**	**42.7**	**35.1**	**27.7**	**8.8**	**7.4**	**6.1**	**29.9**	**24.8**	**19.3**
Atul Ltd	5.3	7.6	7.3	22.1	23.6	149bps	20.9	16.9	17.3	17.5	30.6	25.3	22.0	4.9	4.3	3.6	21.0	17.2	15.3
Sudarshan Chemical Industries	11.5	16.2	12.4	15.1	17.2	201bps	22.2	17.5	20.5	22.3	28.5	21.6	17.5	4.7	4.0	3.5	14.3	11.7	9.6
Global companies																			
DuPont de Nemours Inc	0.6	0.0	0.3	26.1	25.7	-42bps	6.4	5.8	6.8	7.5	19.5	17.1	15.0	1.1	1.1	1.0	12.0	10.8	9.9
BASF SE	0.6	2.7	0.5	13.5	14.4	87bps	11.2	3.1	7.1	8.8	21.8	14.9	12.4	1.3	1.3	1.2	9.1	7.7	7.0
Chemours Co/The	-0.4	3.5	5.0	18.3	20.5	220bps	44.8	37.6	44.2	44.5	14.6	10.2	8.1	5.4	4.6	3.9	8.3	6.9	5.8
Solvay SA	-1.4	-2.3	-3.8	22.4	21.8	-62bps	7.6	2.8	7.4	9.3	13.6	12.2	10.1	1.0	1.0	1.0	5.5	5.4	4.8
FMC Corp	4.9	7.6	9.7	26.4	28.5	207bps	27.3	30.4	30.4	30.2	16.8	14.9	13.3	4.7	4.4	4.0	13.1	11.9	11.1
China Petroleum & Chemical Cor	-1.8	-3.0	-4.1	6.8	6.6	-25bps	7.7	2.5	5.0	6.3	31.6	12.9	9.7	0.6	0.6	0.6	4.0	3.0	2.5
Exxon Mobil Corp	-4.9	1.2	3.4	13.9	16.7	285bps	5.3	-1.0	3.0	7.0	-123.7	24.9	12.3	0.8	0.9	0.9	10.8	7.2	5.5

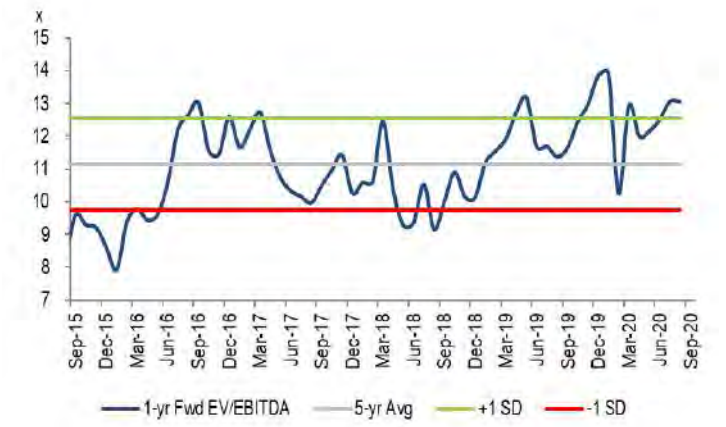
Source: Bloomberg, Nirmal Bang Institutional Equities Research (For companies under coverage, our estimates have been used)

Exhibit 6: SRF 1-year forward PE



Source: UPL, Nirmal Bang Institutional Equities Research

Exhibit 7: SRF 1-year forward EV/EBITDA



Source: UPL, Nirmal Bang Institutional Equities Research

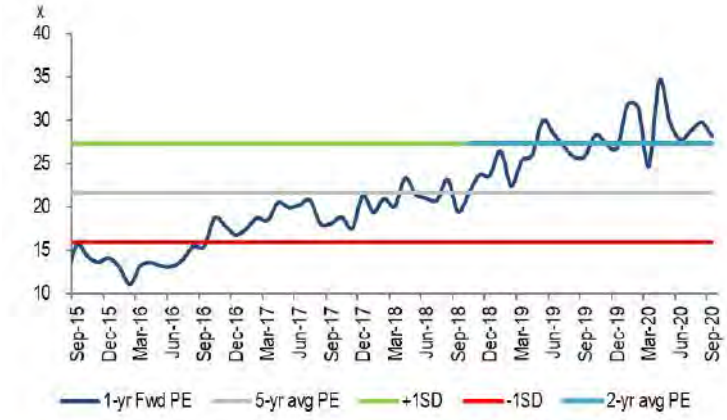
Exhibit 8: NFIL 1-year forward PE

Source: UPL, Nirmal Bang Institutional Equities Research

Exhibit 9: NFIL 1-year forward EV/EBITDA

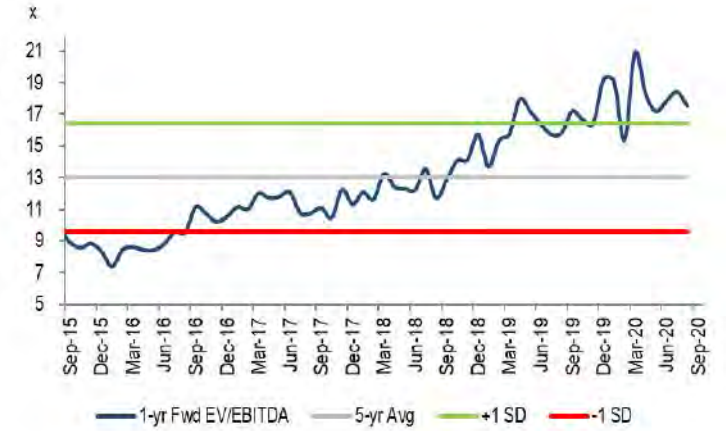
Source: UPL, Nirmal Bang Institutional Equities Research

Exhibit 10: ARTO 1-year forward PE



Source: UPL, Nirmal Bang Institutional Equities Research

Exhibit 11: ARTO 1-year forward EV/EBITDA



Source: UPL, Nirmal Bang Institutional Equities Research

Exhibit 12: VO 1-year forward PE

Source: UPL, Nirmal Bang Institutional Equities Research

Exhibit 13: VO 1-year forward EV/EBITDA

Source: UPL, Nirmal Bang Institutional Equities Research

SRF – Financial summary

Y/E March (Rsmn)	FY19	FY20	FY21E	FY22E	FY23E
Net Sales	70,996	72,094	77,388	91,047	1,06,257
Growth YoY%	*27.0%*	*1.5%*	*7.3%*	*17.7%*	*16.7%*
Gross margin %	*44.1%*	*48.9%*	*49.4%*	*49.5%*	*49.4%*
EBITDA	12,970	14,549	18,487	21,727	26,434
EBITDA margin %	*18.3%*	*20.2%*	*23.9%*	*23.9%*	*24.9%*
Adj PAT	5,916	6,892	9,348	12,062	13,769
Growth YoY%	*28.1%*	*16.5%*	*35.6%*	*29.0%*	*14.2%*
RoCE %	*13.7%*	*13.7%*	*15.5%*	*16.1%*	*18.1%*
RoE %	*15.4%*	*15.2%*	*16.4%*	*17.3%*	*17.1%*
P/E	23.3	23.2	26.7	20.7	18.1
EV/EBITDA	13.0	13.0	15.1	12.8	10.6
P/BV	3.3	3.2	3.8	3.3	2.9

NFIL- Financial summary

Y/E March (Rsmn)	FY19	FY20	FY21E	FY22E	FY23E
Net Sales	9,959	10,616	11,850	14,246	21,279
Growth YoY%	*9.1%*	*6.6%*	*11.6%*	*20.2%*	*49.4%*
Gross margin %	*52.1%*	*54.4%*	*54.7%*	*54.9%*	*56.1%*
EBITDA	2,184	2,635	2,999	3,721	5,829
EBITDA margin %	21.9%	24.8%	25.3%	26.1%	27.4%
Adj PAT	1,491	1,819	2,395	3,010	4,129
Growth YoY%	*-17%*	*22%*	*32%*	*26%*	*37%*
RoCE %	*18.4%*	*18.2%*	*17.2%*	*18.9%*	*24.1%*
RoE %	*14.5%*	*14.6%*	*16.0%*	*17.9%*	*21.3%*
P/E	*23.5*	*33.2*	*41.3*	*32.9*	*24.0*
EV/EBITDA	*15.0*	*21.6*	*31.5*	*25.7*	*16.4*
P/BV	*3.3*	*4.3*	*6.3*	*5.5*	*4.7*

ARTO- Financial summary

Y/E March (Rsmn)	FY19	FY20	FY21E	FY22E	FY23E
Net Sales	41,676	41,863	42,198	50,987	67,105
Growth YoY%	9.5%	0.4%	0.8%	20.8%	31.6%
Gross margin %	*48.3%*	*50.9%*	*51.0%*	*51.5%*	*51.6%*
EBITDA	9,651	9,773	9,795	12,352	16,525
EBITDA margin %	23.2%	23.3%	23.2%	24.2%	24.6%
Adj PAT	4,917	5,361	5,410	7,151	10,270
Growth YoY%	*47.7%*	*9.0%*	*0.9%*	*32.2%*	*43.6%*
RoCE %	*19.5%*	*16.6%*	*14.9%*	*17.0%*	*21.0%*
RoE %	*23.4%*	*19.1%*	*17.1%*	*19.7%*	*24.2%*
P/E	27.6	24.9	31.5	23.8	16.6
EV/EBITDA	15.4	15.3	19.2	15.3	11.4
P/BV	5.2	4.5	5.1	4.4	3.7

VO- Financial summary

Y/E March (Rsmn)	FY19	FY20	FY21E	FY22E	FY23E
Net Sales	11,279	10,289	10,648	13,694	17,248
Growth YoY%	*54.6%*	*-8.8%*	*3.5%*	*28.6%*	*26.0%*
Gross margin %	*53.4%*	*58.3%*	*58.0%*	*55.0%*	*55.0%*
EBITDA	4,246	4,149	4,238	5,067	6,416
EBITDA margin %	*37.6%*	*40.3%*	*39.8%*	*37.0%*	*37.2%*
Adj PAT	2,825	3,338	3,053	3,712	4,711
Growth YoY%	*96.3%*	*18.2%*	*-8.5%*	*21.6%*	*26.9%*
RoCE %	*42.6%*	*32.7%*	*27.3%*	*28.0%*	*30.1%*
RoE %	*32.3%*	*31.1%*	*25.0%*	*26.3%*	*28.4%*
P/E	29.9	23.9	42.2	34.7	27.3
EV/EBITDA	19.7	18.5	29.5	24.5	19.1
P/BV	8.0	6.2	8.7	7.3	6.1

Source: Company, Nirmal Bang Institutional Equities Research

NBIE vs Consensus

SRF

Particulars	NBIE estimates			Consensus estimates			Variance (%)		
	FY21E	FY22E	FY23E	FY21E	FY22E	FY23E	FY21E	FY22E	FY23E
Revenue	77,388	91,047	1,06,257	76,090	92,460	1,09,174	1.7%	-1.5%	-2.7%
EBITDA	18,487	21,727	26,434	16,612	20,405	24,062	11.3%	6.5%	9.9%
EBITDA margin	23.9%	23.9%	24.9%	21.8%	22.1%	22.0%	206bps	179bps	284bps
APAT	9,348	12,062	13,769	8,404	10,972	13,492	11.2%	9.9%	2.1%

NFIL

Particulars	NBIE estimates			Consensus estimates			Variance (%)		
	FY21E	FY22E	FY23E	FY21E	FY22E	FY23E	FY21E	FY22E	FY23E
Revenue	11,850	14,246	21,279	11,652	14,088	19,785	1.70%	1.12%	7.55%
EBITDA	2,999	3,721	5,829	2,894	3,665	5,469	3.64%	1.53%	6.57%
EBITDA margin	25.3%	26.1%	27.4%	24.8%	26.0%	27.6%	47bps	10bps	-25bps
APAT	2,395	3,010	4,129	2,193	2,719	3,934	9.23%	10.72%	4.95%

ARTO

Particulars	NBIE estimates			Consensus estimates			Variance (%)		
	FY21E	FY22E	FY23E	FY21E	FY22E	FY23E	FY21E	FY22E	FY23E
Revenue	42,198	50,987	67,105	45,417	54,525	65,232	-7.1%	-6.5%	2.9%
EBITDA	9,795	12,352	16,525	10,365	13,058	15,462	-5.5%	-5.4%	6.9%
EBITDA margin	23.2%	24.2%	24.6%	22.8%	23.9%	23.7%	39bps	28bps	92bps
APAT	5,410	7,151	10,270	5,360	7,238	9,309	0.9%	-1.2%	10.3%

VO

Particulars	NBIE estimates			Consensus estimates			Variance (%)		
	FY21E	FY22E	FY23E	FY21E	FY22E	FY23E	FY21E	FY22E	FY23E
Revenue	10,648	13,694	17,248	11,356	14,443	17,101	-6.2%	-5.2%	0.9%
EBITDA	4,238	5,067	6,416	4,455	5,344	6,356	-4.9%	-5.2%	0.9%
EBITDA margin	39.8%	37.0%	37.2%	39.2%	37.0%	37.2%	57bps	bps	3bps
APAT	3,053	3,712	4,711	3,327	4,027	4,814	-8.2%	-7.8%	-2.1%

Source: Nirmal Bang Institutional Equities Research

Underlying demand remains robust; near-term disruption on supply side

The global level outbreak of the novel coronavirus (COVID-19) has led to unprecedented disruptions in the manufacturing activity on account of lockdowns imposed across the country. However, specialty chemicals has been among the first few sectors to return to normalcy. Majority of the management during their previous earnings calls indicated that majority of the operations were restored by the end of June'20. Non-availability of labour, stock pile-up at ports and logistic-related issues are the key supply side challenges, which these companies faced during the lockdown. Also, it is important to note that the performance of specialty chemicals is largely dependent on the prospects of end-user industries. Companies catering to Personal Care chemicals, Pharmaceuticals and Agrochemicals are doing well bur there are near term challenges for companies catering to Automobiles, Construction and Textiles in our view.

From our coverage universe, NFIL and SRF are broadly mainly catering to Agrochemicals and Pharmaceuticals and hence will be relatively insulated. Refrigerant Gases and Inorganic Fluorides businesses will face challenges in the near term though. The prospects of the Packaging Films business for SRF have improved, led by a favourable demand-supply scenario. In the case of ARTO, ~60% of the revenue comes from Agrochemicals and Pharmaceuticals and hence it is protected to that extent. In the case of VO, IBB is the key growth driver on account of surge in Ibuprofen demand during the pandemic. New products are expected to drive growth for VO while ATBS, which is a key product, is likely to be under pressure on account of ~30% salience to the Oil & Gas sector and declining input prices. However, we believe that diversification and availability of multi-user products have enabled these companies to navigate through these tough times. No company has announced major delay in expansion plans or execution of long term contracts as the growth potential is huge and these companies are expected to deliver strong double-digit annualised growth over FY20-23E despite a challenging FY21.

Exhibit 14: Specialty chemicals was one of the few sectors which returned to normalcy quickly

Factors	March - April	May onwards
Manufacturing activity	Players with linkages to essential products continued to operate partially, whereas others mostly resumed operations by mid-April	Almost all the manufacturers resumed operations; however, there have been intermittent disruptions on account of local/regional lockdowns
Capacity utilisation	While most players were operational, they continued to operate at less than 50% capacity ufilisation up to April	Players with linkages to essential products reached pre-C OVID levels; whereas others reached capacity utilisation levels of more than 80% by May
Labour	Players with high dependence on contract labour impacted significantly; especially in Maharashtra & Gujarat belt	Certain challenges due fo spread of virus in rural areas; but overall labour related challenges were largely under control by May
Raw materials	Restricted trade flows and lower production in China led to supply shortages for some players; sharp appreciation of dollar led to higher costs	Restoration of normalcy in China coupled with opening up of trade flows eased out the raw material supplies

Source: FICCI Report, Nirmal Bang Institutional Equities Research

'Plus One' is imperative, not a buzzword

As global supply chains are increasingly looking for stable sourcing arrangements outside China in order to reduce dependence, we believe that Indian companies having core R&D expertise, scale and ability to offer products at lower costs (through efficiency measures) stand to benefit significantly over the next decade. We believe that India would be a key beneficiary of this structural upcycle in chemicals wherein global majors would prefer their partners also to be dependent on China in order to effectively reduce their dependence. Also, in our view, post the environmental crackdown in China, aggression on opening new capacities would be lower than the past. Also, old facilities would become irrelevant considering the new environmental and pollution related norms. The US-China trade war and the current pandemic will accelerate the pace of this structural shift from China to other destinations like India and Vietnam.

Where do we stand?

The global chemicals market was estimated at around US$4.0 trillion in 2019. Commodity chemicals make up ~80% of the global chemical industry, with the balance 20% contributed by specialty chemicals. China's share in the global chemicals market has gone up from 6% in 2000 to 36% in 2019. This shift was mainly led by easternization wherein USA and EU shifted production bases to countries like China on account of lower production costs. Also, China has significantly invested in R&D over the last decade in order to gain market share at the global level. China has tripled its capex over the last decade - highest compared to any geography irrespective of base size.

China forms ~25% of the global specialty chemicals industry globally whereas India has a miniscule ~4% share. Globally, around 25% of the total specialty chemical production is exported, amounting to a total of around US$200bn. China accounts for ~18% (~US$35bn) of the global specialty chemicals exports i.e. more than 4x of Indian exports. Even if India could slice off ~5% of the global exports pie, it would translate into incremental business of US$10bn. India's specialty chemicals market is expected to grow at ~12% CAGR over 2019-25 as against the global growth rate of ~6%. We believe this is achievable given the increased interest by global majors to diversify their sourcing requirements.

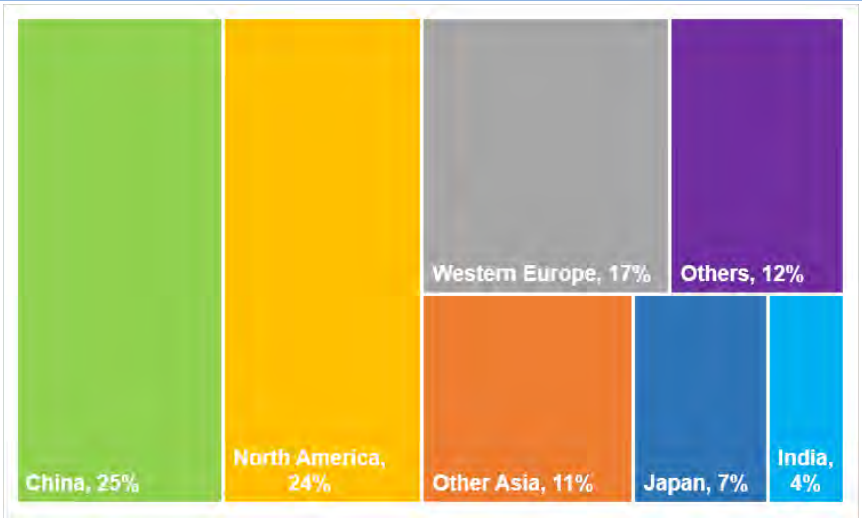
Why India can benefit out of this?

India is emerging as a more significant player in the global chemical supply chain with its scalable low-cost manufacturing ecosystem, improving infrastructure and established VHS compliance framework. India offers low cost operations, availability of feedstock, skilled manpower, access to ports and strong IP protection etc. Going forward, the government's initiatives on making India a manufacturing hub will benefit market leaders in niche chemistries and processes significantly in our view. The country is well positioned to expand its market share globally and there is a huge import substitution play as well. Investment in operational excellence and new product development can create differentiation and strong long-term business visibility. There is a huge appetite for sourcing from India. We believe that the Chinese dominance in bulk chemicals will take more time to reduce but specialty chemicals has always been India's forte and players having sizable capacity on global scale would be obvious choices for majority of the multinational companies wanting to outsource/buy.

Although, overall Chinese costs are still lower, the gap is narrowing. Chinese labour cost is now double than India and environmental costs are similar. So, inherently, there is a cost advantage in India. While no one can accurately quantify the benefit from 'Plus One' theme, we expect select players in the chemicals industries ticking all the right boxes to witness non-linear growth over the next decade.

Key charts

Exhibit 15: Country-wise break-up of specialty chemicals market

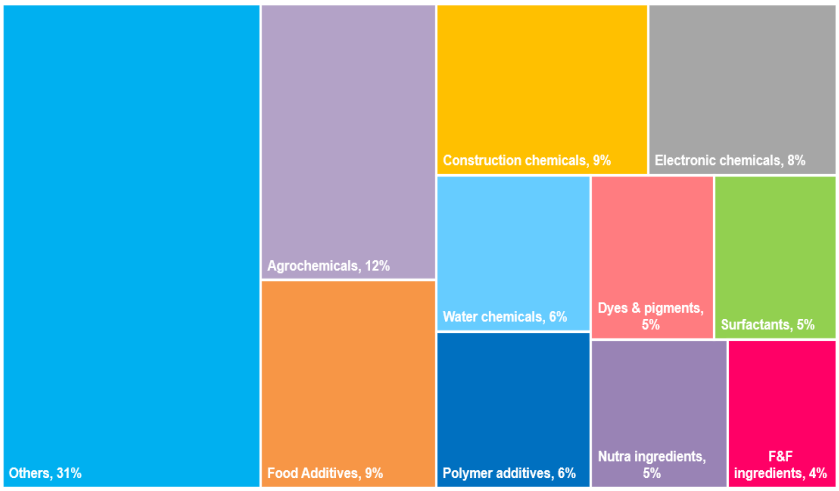


Source: Aarti Industries, Nirmal Bang Institutional Equities Research

Exhibit 16: Global specialty chemicals industry is expected to grow at 6.4% CAGR over 2019-25

Source: FICCI Report, Nirmal Bang Institutional Equities Research

Exhibit 17: Global specialty chemicals industry break-up by end-use industry (2019)



Source: FICCI Report, Nirmal Bang Institutional Equities Research

Exhibit 18: Global specialty chemicals industry break-up by end-use industry (2019)

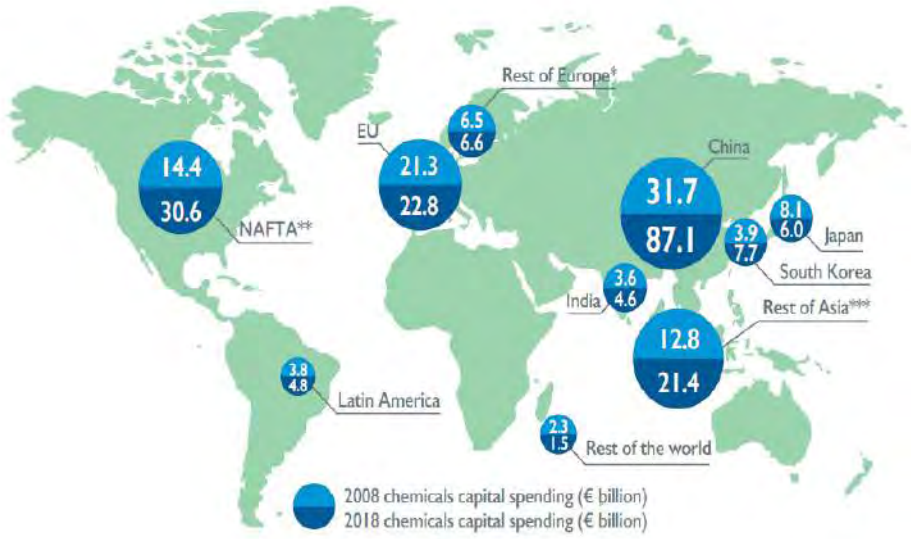
Segments where India can penetrate deeper Potential whitespace opportunities for India

Top segments in specialty chemicals exports	Global Market CAGR 2018–23, Percentage	Global specialty chem exports USD bn	China Global specialty chem exports, Percentage	India Global specialty chem exports, Percentage	Key insights
Intermediates for APIs	6-7%[1]	77	11%	4%	China's export value in top 3 segments is **2.7x** that of India's • India can aim for deeper market penetration in these segments
Agrochemicals	2-3%	72	17%	6%	
Dyes and Pigments	2-3%	66	12%	5%	
Plastic additives	3-4%	15	8%	1%	China's export value in the next 6 segments is **12x** that of India's • These segments provide new opportunities for India to explore
Electronic chemicals	4-5%	15	22%	0.02%	
Food/Feed additives	2-3%	12	19%	2%	
Nutraceuticals	4-5%	10	46%	2%	
Rubber chemicals	2-3%	5	27%	2%	
Flavours and Fragrances	3-4%	5	46%	12%	

[1] Value based CAGR for Manufacture of Basic Pharmaceutical Products and Pharmaceutical Preparations

Source: McKinsey, Nirmal Bang Institutional Equities Research

Exhibit 19: Capital spending by region- China has tripled its spends over last decade

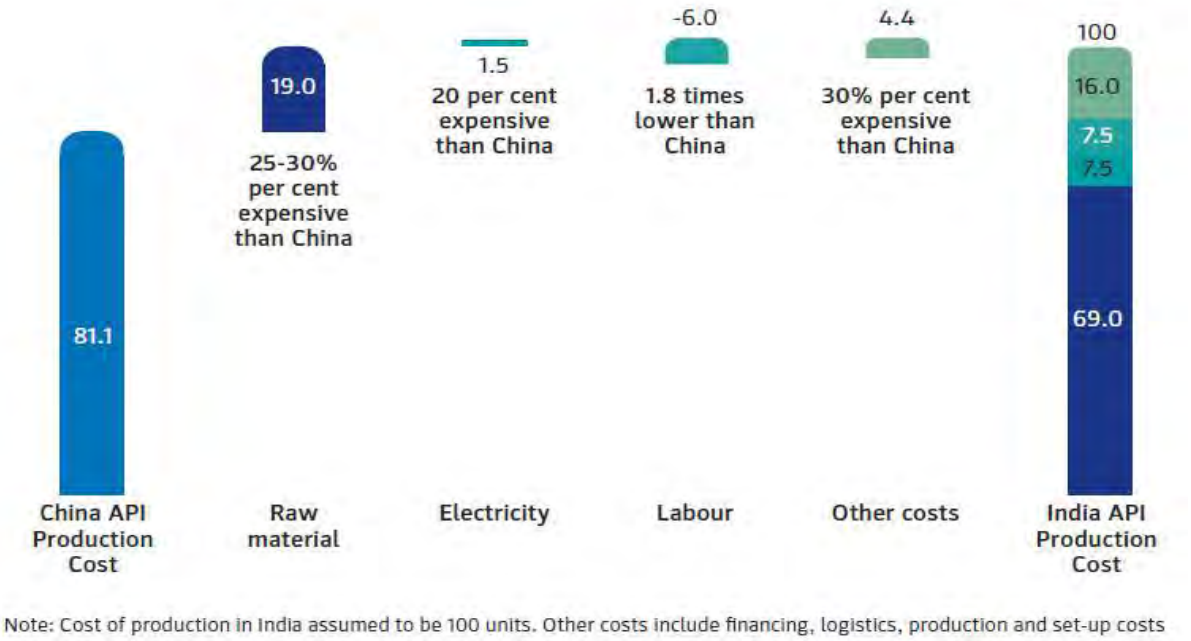


Source: Cefic Chemdata International 2019
* Rest of Europe covers Switzerland, Norway, Turkey, Russia and Ukraine
** North American Free Trade Agreement
*** Asia excluding China, India, Japan and South Korea

Unless specified, chemical industry excludes pharmaceuticals
Unless specified, EU refers to EU28

Source: Cefic, Nirmal Bang Institutional Equities Research

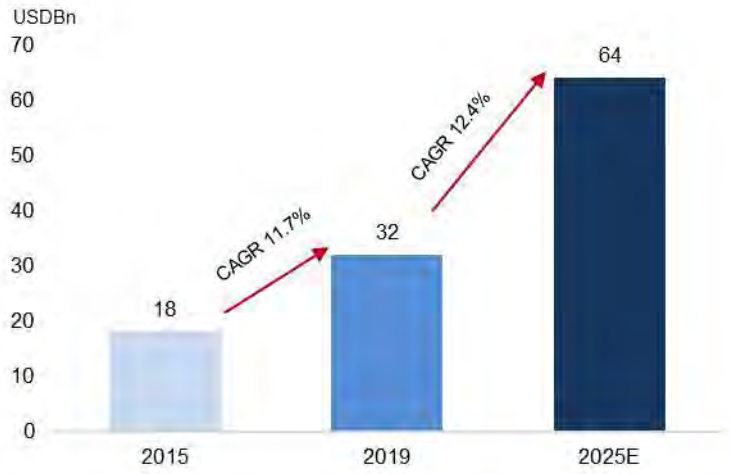
Exhibit 20: Cost comparison with China- cost of production of API in China is ~20% lower than India



Note: Cost of production in India assumed to be 100 units. Other costs include financing, logistics, production and set-up costs

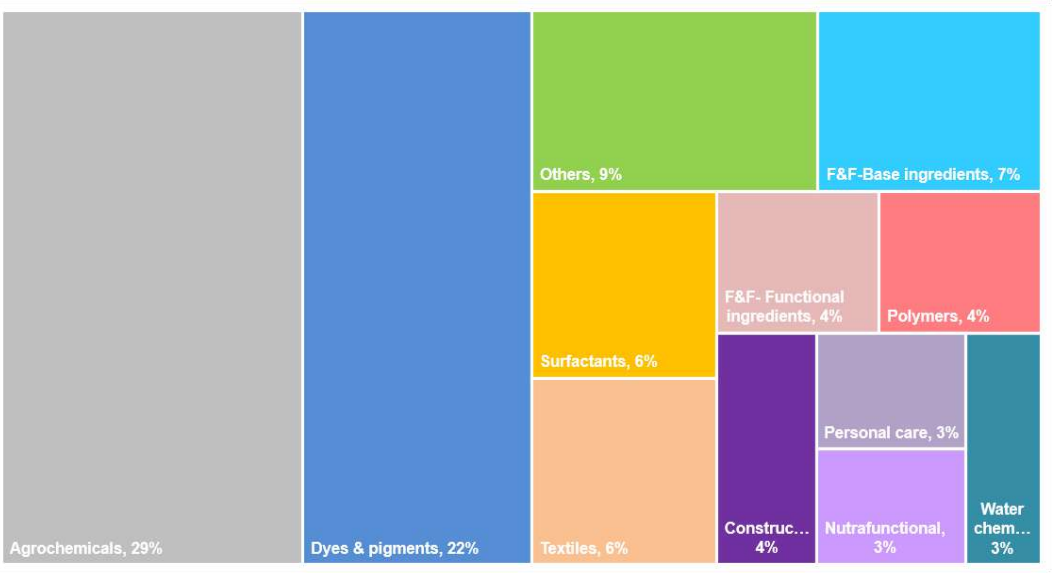
Source: CII, Nirmal Bang Institutional Equities Research

Exhibit 21: Indian specialty chemicals industry is expected to grow at 12.4% CAGR over 2019-25



Source: FICCI Report, Nirmal Bang Institutional Equities Research

Exhibit 22: Indian specialty chemicals industry break-up by end-use industry (2019)



Source: FICCI Report, Nirmal Bang Institutional Equities Research

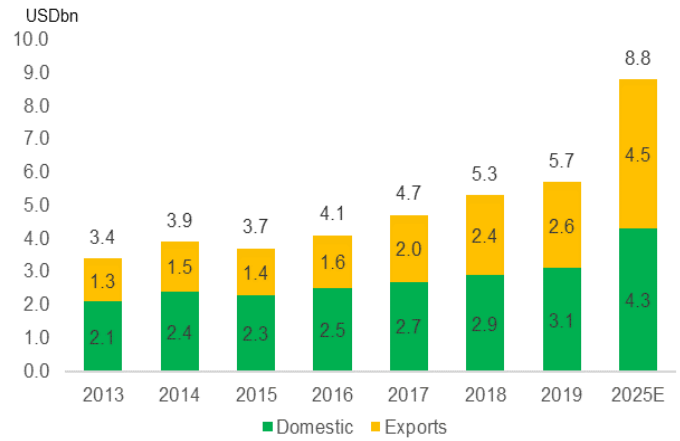
Exhibit 23: Indian specialty chemicals industry break-up by end-use industry (2019)

Segment	Market Size (USD bn)	2014-2019 CAGR	2019-2025 CAGR	Entry Barriers	Product Specialization	Presence of scaled up Indian players	End market growth potential
Agrochemicals	9.2	10.0%	12.0%	H	M	H	M
F&F and Nutra Ingredients	2.4	16.1%	17.1%	H	H	H	H
Dyes and Pigments	7.0	7.3%	10.0%	M	M	H	M
Personal Care Chemicals	1.0	15.5%	15.0%	H	H	L	H
Surfactants	2.0	6.4%	11.0%	M	M	L	M
Textile Chemicals	1.8	10.4%	11.5%	M	M	L	L
Construction Chemicals	1.4	13.5%	15.0%	H	M	L	H
Polymer Additives	1.3	12.8%	10.0%	L	M	M	M
Water Chemicals	0.8	14.9%	15.0%	H	M	L	H

H - High, M - Medium, L - Low

Source: FICCI Report, Nirmal Bang Institutional Equities Research

Exhibit 24: Indian agrochemicals growth outlook (~8% CAGR)



Source: UPL, Nirmal Bang Institutional Equities Research

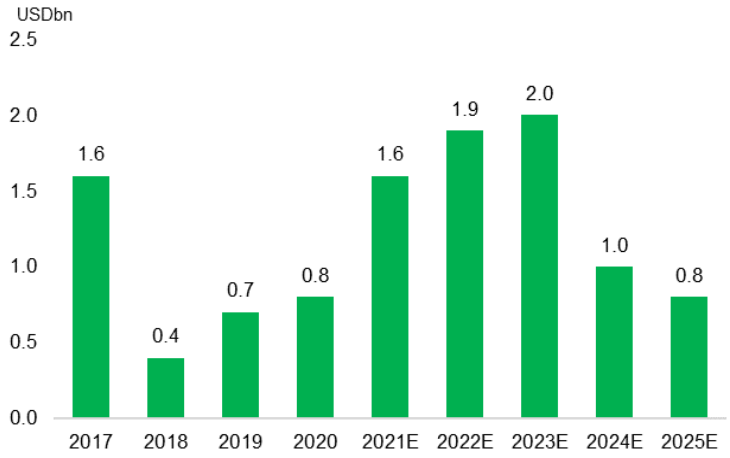
Exhibit 25: Global agrochemicals growth outlook (~3% CAGR)

Source: UPL, Nirmal Bang Institutional Equities Research

Exhibit 26: Revenue at risk from patent expiration

Source: Evaluate Pharma, Nirmal Bang Institutional Equities Research

Exhibit 27: Agrochemicals going off-patent



Source: FICCI, Nirmal Bang Institutional Equities Research

Company Section

SRF

16 October 2020

Reuters: SRFL.BO; Bloomberg: SRF IN

Initiating Coverage

In a different league

SRF is a multi-business entity with presence in Chemicals, Packaging and Technical Textiles. SRF has successfully transformed itself from a Technical Textiles player to a leading chemical company in India. Diversification is in the DNA of SRF as the company is well diversified in terms of geographical presence as well its products. SRF's thrust on R&D and its ability to scale up have enabled the company to emerge as a key player in all its verticals on a global platform. We like its capital allocation strategy with disproportionate focus on Chemicals followed by the Packaging Films business, which are expected to deliver robust growth going forward. Taking the cognizance of future growth opportunities for Indian chemical companies, driven by the increasing efforts of global supply chain majors towards 'Plus One' strategy as well as domestic demand, SRF has raised its capex intensity significantly over the last 5 years. QIP proceeds of up to Rs7.5bn will be utilized for expansion plans. Healthy outlook for Pharma and Agrochemicals sectors is a key positive for SRF's Specialty Chemicals business, which would be the company's fastest growing vertical in our view. SRF's low/nil dependency on China for raw materials is important in terms of getting incremental business from USA and EU clients, who are trying to reduce dependence on China. In the Packaging Films business, SRF has presence in both BOPP and BOPET segments with manufacturing facilities located in India and abroad. Approximately 70% of the company's Packaging revenue comes from value-added products and SRF's cost efficiency measures have been superior than domestic peers in our view. SRF started its journey with the Technical Textiles segment. But, we expect this segment's revenue to decline in the near term as it is broadly linked to growth prospects of sectors like Auto, Steel, Construction etc. Overall, we are building in ~14% revenue CAGR and ~26% earnings CAGR for SRF over FY20-23E.

Initiate coverage with ~25% upside: We initiate coverage on SRF with a TP of Rs5,400 on Sept'22E estimates based on SOTP methodology, indicating a potential upside of ~25% from the CMP. In our view, valuing SRF based on last 5-years' average multiple would not be appropriate considering the size and nature of the business then vs now. We believe that the current multiple of SRF is sustainable as it factors in the future growth potential, led by significant change in the product mix towards the Chemicals business. Indian specialty chemicals sector is at an inflection point. There is large headroom for growth and players like SRF are in a position to gain significant incremental share in our view.

Y/E March (Rsmn)	FY19	FY20	FY21E	FY22E	FY23E
Net Sales	70,996	72,094	77,388	91,047	1,06,257
Growth YoY%	*27.0%*	*1.5%*	*7.3%*	*17.7%*	*16.7%*
Gross margin %	*44.1%*	*48.9%*	*49.4%*	*49.5%*	*49.4%*
EBITDA	12,970	14,549	18,487	21,727	26,434
EBITDA margin %	*18.3%*	*20.2%*	*23.9%*	*23.9%*	*24.9%*
Adj PAT	5,916	6,892	9,348	12,062	13,769
Growth YoY%	*28.1%*	*16.5%*	*35.6%*	*29.0%*	*14.2%*
RoCE	*13.7%*	*13.7%*	*15.5%*	*16.1%*	*18.1%*
RoE	*15.4%*	*15.2%*	*16.4%*	*17.3%*	*17.1%*
P/E	23.3	23.2	26.7	20.7	18.1
EV/EBITDA	13.0	13.0	15.1	12.8	10.6
P/BV	3.3	3.2	3.8	3.3	2.9

Source: Company, Nirmal Bang Institutional Equities Research

BUY

Sector: Chemicals

CMP: Rs4,337

Target Price: Rs5,400

Upside: 25%

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Research Analyst
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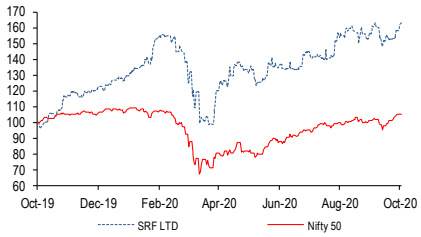
+91-22-6273-8013

Key Data

Current Shares O/S (mn)	57.5
Mkt Cap (Rsbn/US$bn)	251.4/3.4
52 Wk H / L (Rs)	4,475/2,468
Daily Vol. (3M NSE Avg.)	291,937

Share holding (%)	1QFY20	2QFY20	3QFY20
Promoters	52.3	52.3	52.3
Public	47.7	47.7	47.47
Non-Institutions	-	-	-

One Year Indexed Stock Performance



Price Performance (%)

	1 M	6 M	1 Yr
SRF Industry	1.0	29.2	67.4
Nifty Index	1.4	30.9	2.2

Source: Bloomberg

Initiate with Buy with potential upside of ~25%

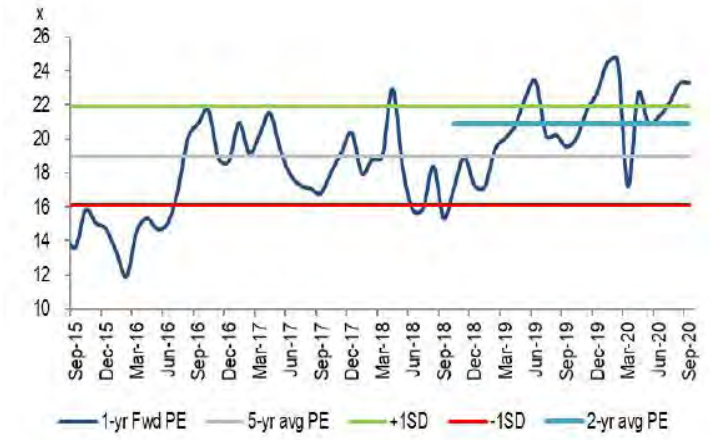
SRF's 5-year and 2-year average PE are ~19x and ~22x, respectively. Currently, the stock is trading above 1 SD based on 5-year average PE. However, we believe that the stock has re-rated over the last one year on account of high capex focus and growth prospects of the Specialty Chemicals business. We expect SRF's product mix to change significantly over the next 5 years and therefore the stock deserves a premium valuation. Average revenue share of the Chemicals business over FY15-20 was ~35% and we expect the same to rise to ~51% over FY20-25. This will improve the overall profitability of the business and return ratios. We are building in ~26% earnings CAGR over FY20-23E. Currently, the stock is trading at ~13x 1-year forward EV/EBITDA. We initiate coverage on SRF with TP of Rs5,400 based on SOTP methodology, indicating an upside of ~25% from CMP.

Exhibit 1: 1-year Forward EV/EBITDA

Particulars	Sept'22 EBITDA	EV/EBITDA multiple	EV
Technical Textiles	1,385	2	2,770
Chemicals	14,244	19	2,70,629
Packaging Film	8,152	8	65,216
Others	300	1	300
Total			**3,38,915**
Less: Net debt			29,431
Equity value			3,09,484
Total number of shares			57
Target price per share			**5,400**
CMP			4,115
Upside			**31%**

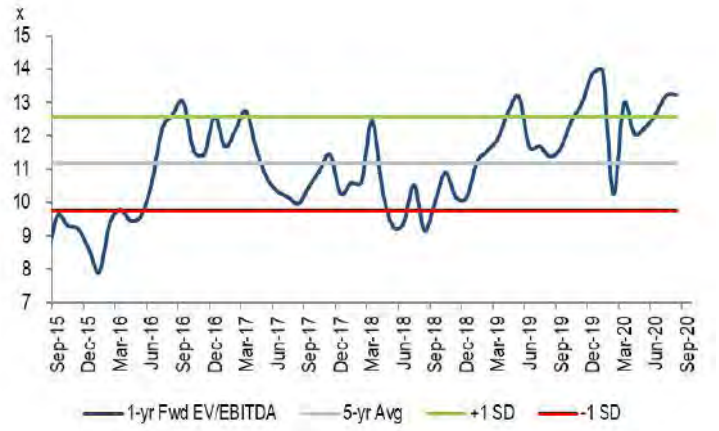
Source: Nirmal Bang Institutional Equities Research

Exhibit 2: 1-yr Forward PE



Source: Bloomberg, Nirmal Bang Institutional Equities Research

Exhibit 3: 1-yr Forward EV/EBITDA



Source: Bloomberg, Nirmal Bang Institutional Equities Research

Multi-business entity with core focus on chemicals business

SRF is a multi-business entity with presence in Chemicals, Packaging and Technical Textiles. It has successfully transformed itself from a Technical Textiles player to a leading chemical company in India. Within the Chemicals segment, the company is involved in the manufacture of Specialty Chemicals, catering to global Agrochemicals and Pharmaceuticals companies. Although SRF has been associated with fluorination for many decades, it started specialty fluorine chemistry in FY04 and has been building on its expertise in fluorine chemistry subsequently. It primarily manufactures fluorine-based intermediates for such companies. It is also present in refrigerant gas and chloromethane, catering to a variety of sectors. In refrigerant gases, SRF is the market leader in the domestic market and only manufacturers select gases, giving it an edge over its peers.

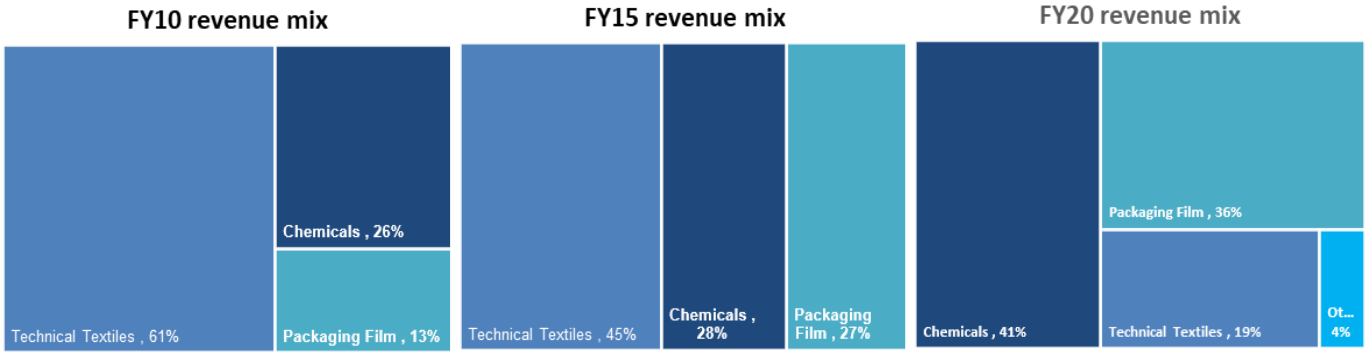
In the Packaging segment, the company manufactures BOPET and BOPP films and has manufacturing operations in India, Thailand, South Africa and Hungary. Our analysis shows that despite Packaging Films being cyclical in nature, SRF has consistently done better than domestic peers, led by higher focus on value-added products, strategic expansion and efficiency measures. From a growth perspective, SRF has disproportionately allocated its capital budget for Chemicals followed by the Packaging Films business. In the Technical Textiles segment, it primarily manufactures nylon tyre cord fabric and belting fabric. Apart from this, the company manufactures laminated and coated fabrics which are classified in other segment.

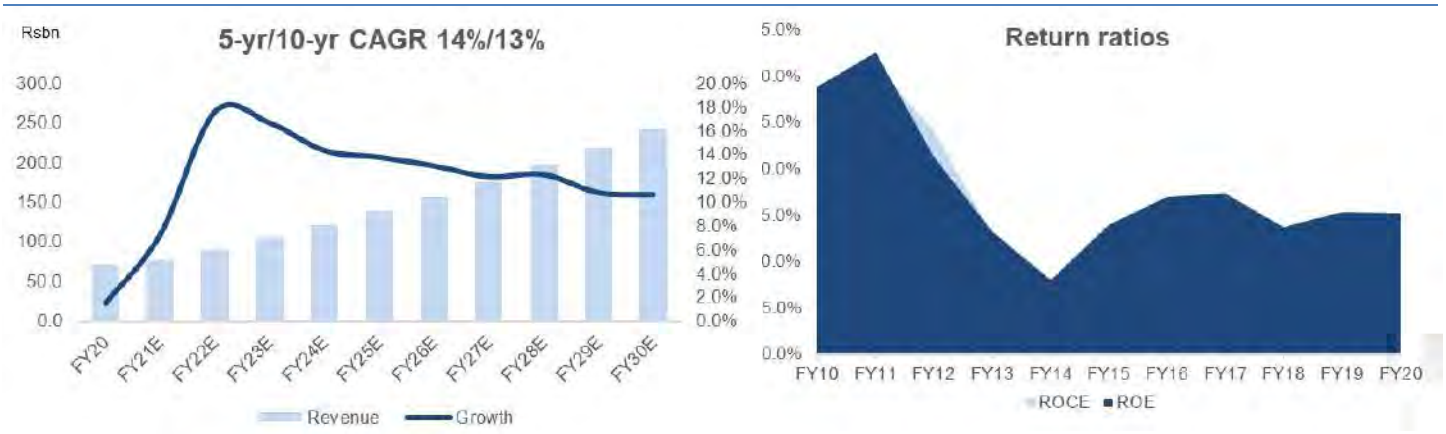
Exhibit 4: Product grid

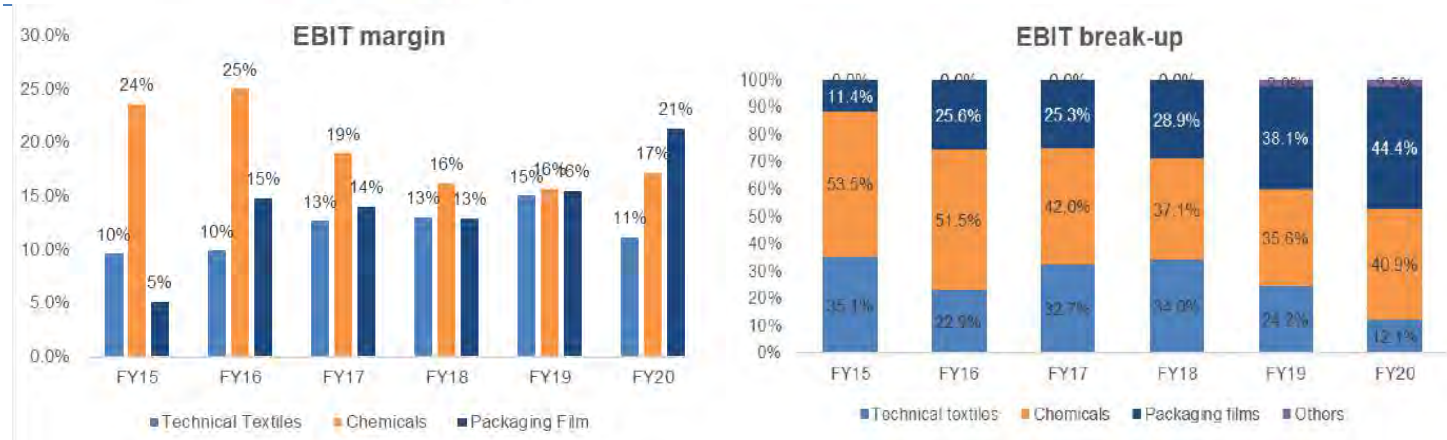
Particulars	Technical textiles	Chemicals	Packaging films
Revenue share (FY11)	53%	21%	25%
Revenue share (FY20)	19%	41%	36%
Revenue share (FY23E)	10%	51%	36%
Revenue share (FY30E)	6%	62%	30%
Revenue CAGR FY10-20	1%	16%	23%
Revenue CAGR FY20-23E	-7%	22%	13%
Revenue CAGR FY20-30E	1%	18%	11%
EBITDA margin	Low	High	Moderate
Future capex intensity	Low	High	High
Competitive positioning	Strong	Strong (in fluorine segment)	Moderate
Market share	Domestic market leader (>50% share)	One of the key players in fluorine segment, >40% domestic market share in refrigerants	NA
Applications	Construction, Tyres	Agrochemicals, Pharma, HVAC etc	FMCG, Pharma
Key clients	NA	Bayer, BASF, Syngenta, Pfizer	NA
Peers	Century Enka, Supreme Industries	NFIL, PI, GFL	Jindal Poly, Polyplex, Cosmo Films, Uflex etc

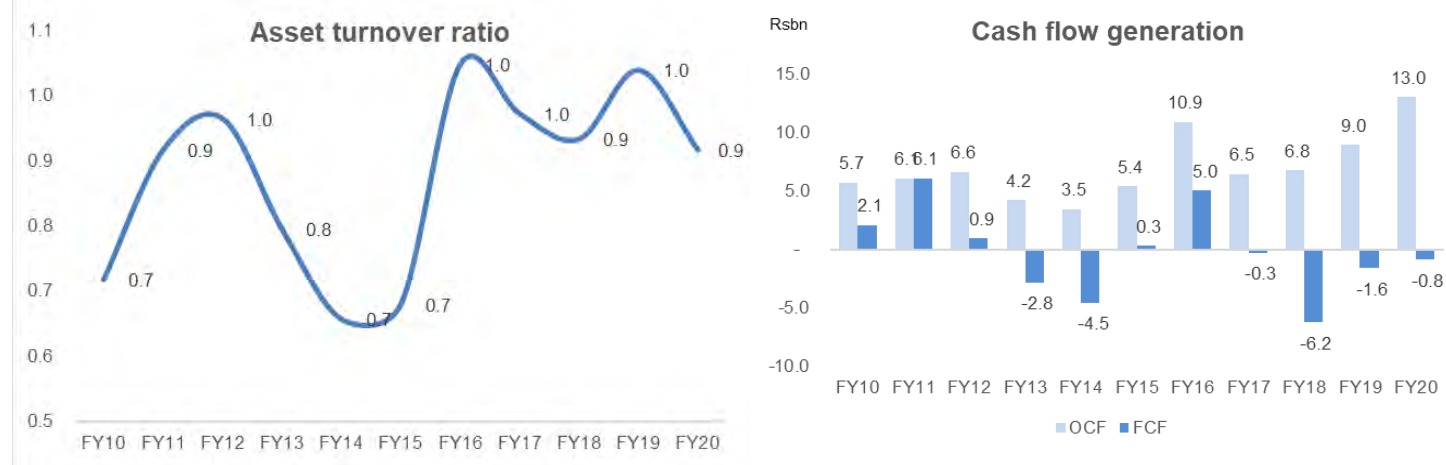
Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 5: FY10-20 Dashboard - journey over the last decade



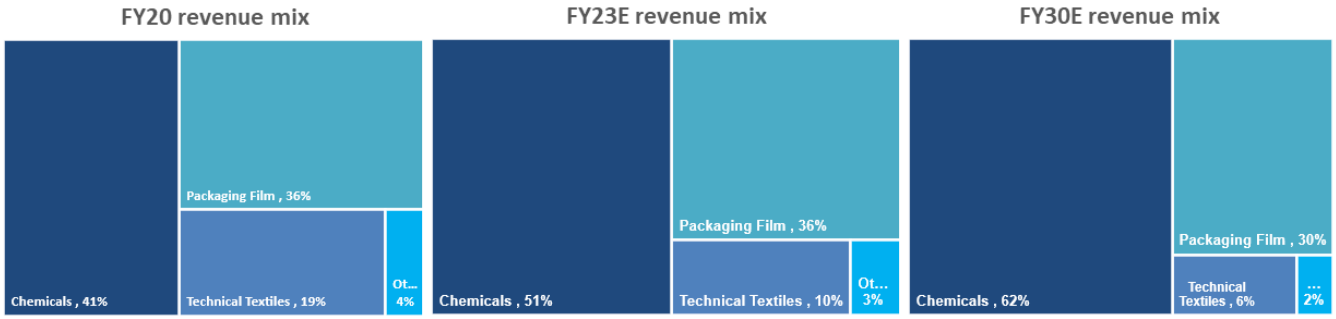


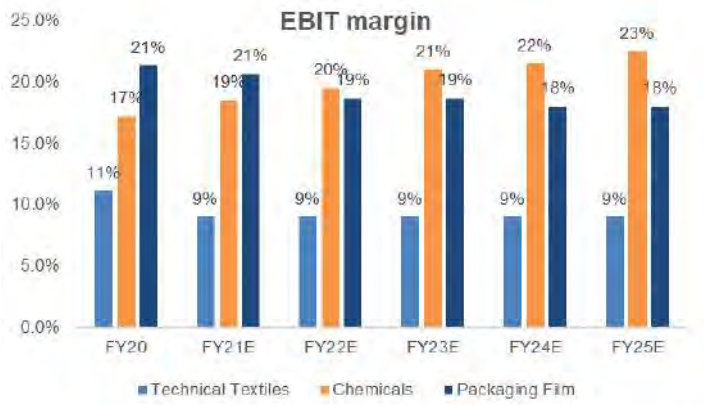


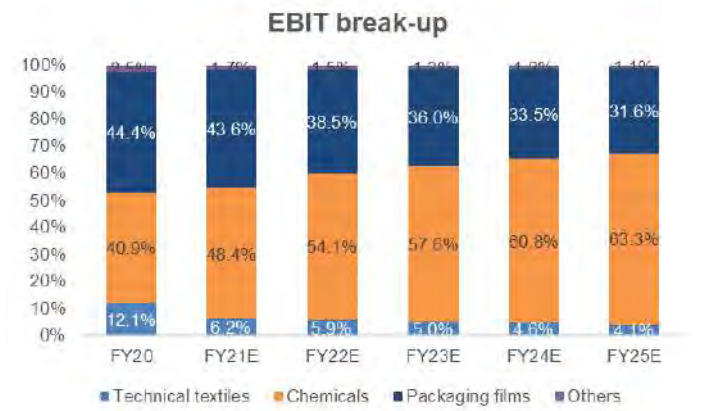


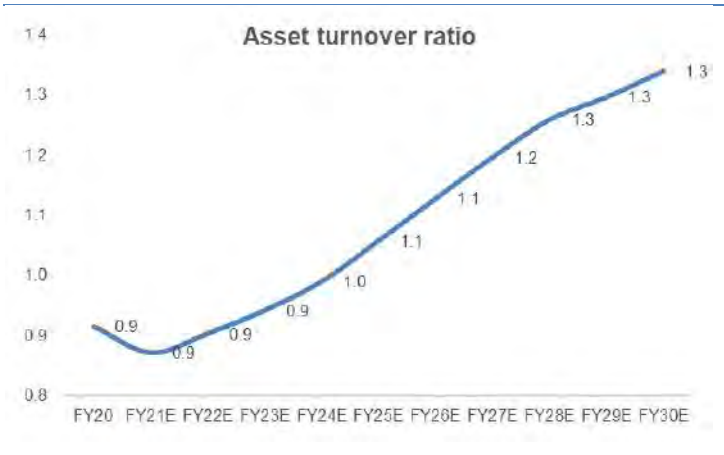
Source: Company, Nirmal Bang Institutional Equities Research

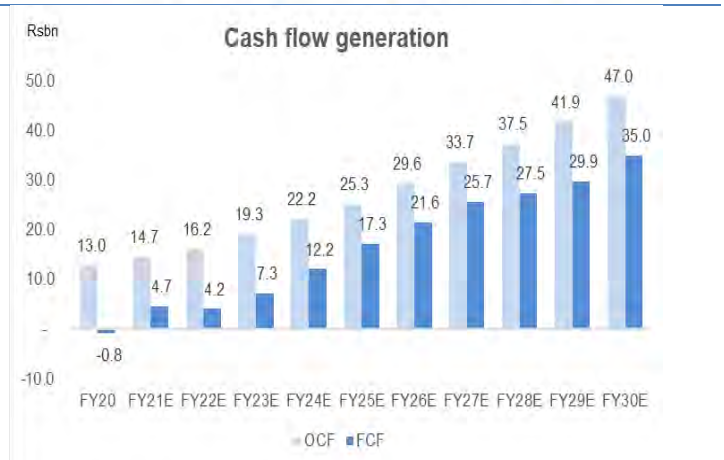
Exhibit 6: Where are we headed?











Source: Company, Nirmal Bang Institutional Equities Research

Chemicals segment - Specialty segment is the future growth driver

Although SRF is a multi-business entity, it is heavily invested in the Chemicals business, which has ~41% revenue share and ~46% EBITDA share of the overall consolidated entity. The manufacturing operations of Fluorochemicals Business (FCB) are present at two locations, Bhiwadi in Rajasthan and a greenfield site at Dahej in Gujarat. The business derives its revenue from the sale of fluorine-based refrigerants and chlorinated solvents. Overall, we expect the company's Chemicals business to grow at ~22% CAGR over FY20-23 in terms of revenue while annualized growth in EBIT would be ~28% during the same period.

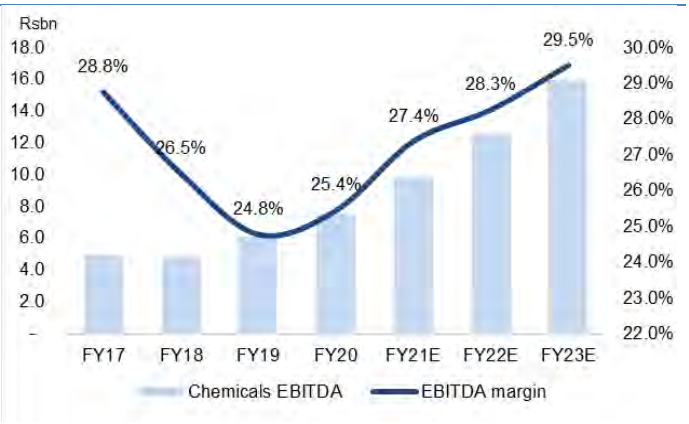
While we remain positive on the entire Chemicals business, Specialty Chemicals would be a key growth driver for SRF, led by increased capex intensity, expertise in fluorine chemistry and strong relationships with global majors. Revenue share of Specialty Chemicals was ~26% in FY20, which we expect to rise to ~34% by FY23. Positive outlook for its key end-user industries namely, Agrochemicals and Pharma will enable SRF to grow rapidly as it has done in the past.

In refrigerant gases, SRF is the domestic leader and we expect very low competition from domestic players considering the strength of SRF's product portfolio and upcoming expansion plans. Recent announcement of prohibition on import of Air conditioners (AC) with refrigerants is positive for SRF as it has the entire HFC product portfolio which is mainly being used in ACs. Also, SRF has doubled its HFC capacity. On the other hand, chloromethanes is an import substitution opportunity; SRF has strategically expanded its capacity meaningfully over the last 5 years. Refrigerant Gases and Chloromethanes formed ~15% and ~5% of the consolidated revenue in FY20.

Exhibit 7: Chemicals revenue growth- we are building in ~22% CAGR over FY20-23E

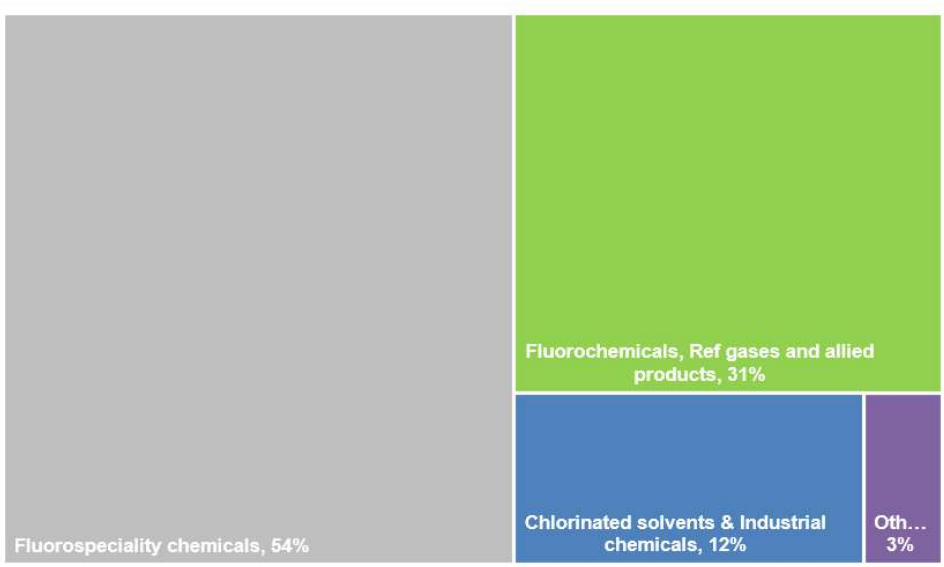
Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 8: Chemicals EBITDA growth- we are building in ~28% CAGR over FY20-23E



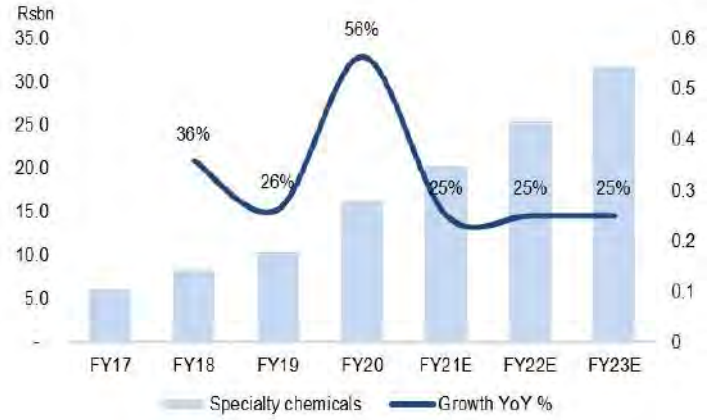
Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 9: Break- up of SRF's chemicals segment



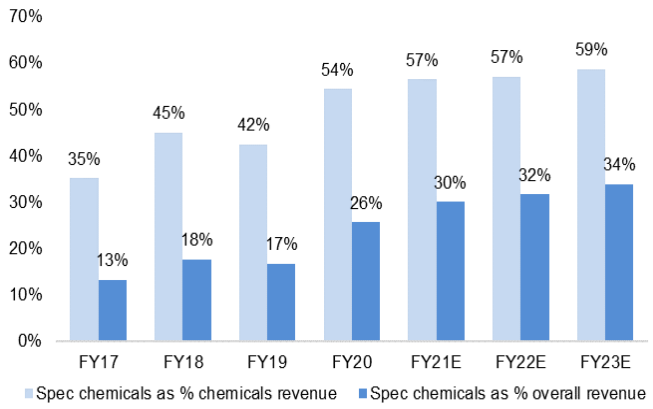
Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 10: Specialty chemicals revenue growth- we are building in ~25% CAGR over FY20-23E



Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 11: Specialty chemicals segments to gain revenue share meaningfully over FY20-23E



Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 12: Ref gases revenue share has been range bound; we expect the same to remain at current levels

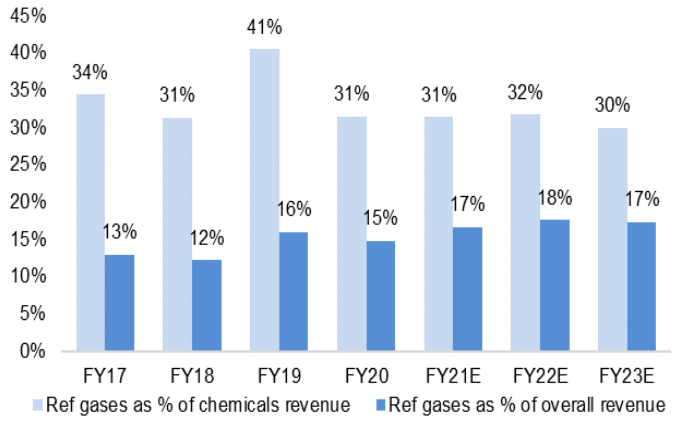
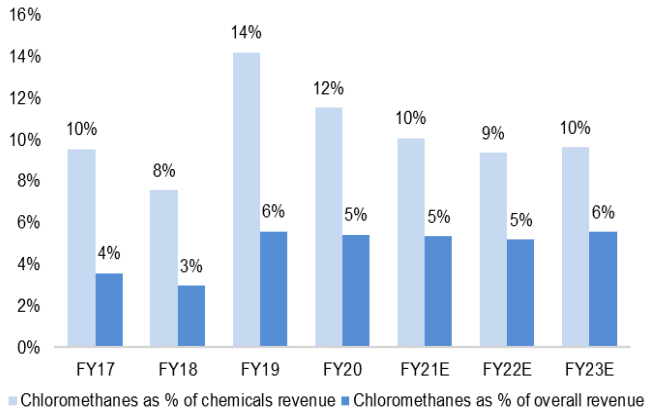


Exhibit 13: Chloromethane revenue share is expected remain flat

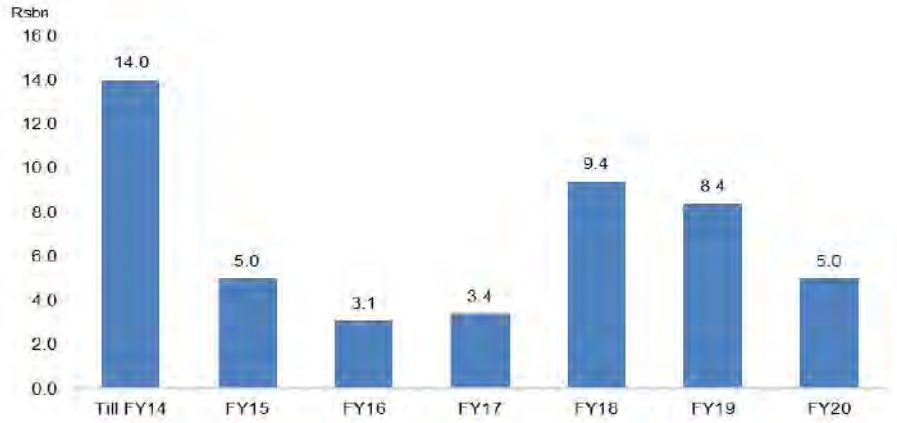


Source: Company, Nirmal Bang Institutional Equities Research

Source: Company, Nirmal Bang Institutional Equities Research

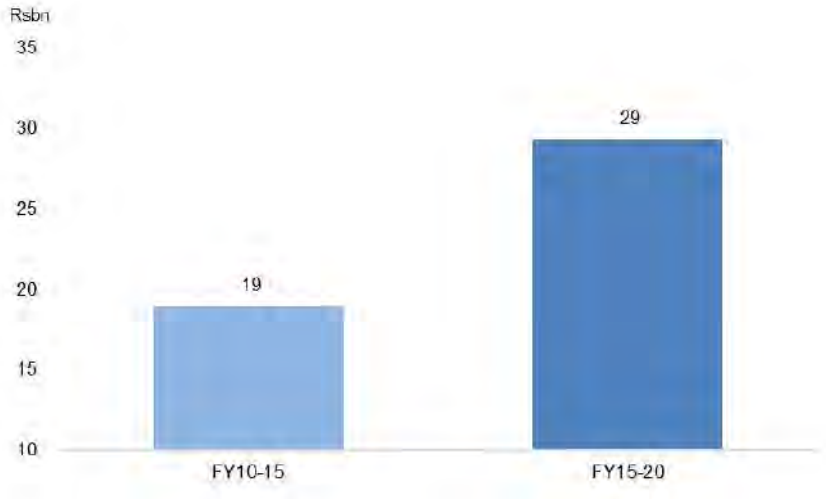
SRF's greenfield expansion in Dahej has turned around the overall prospects of the Chemicals segment. The capacity was commissioned in FY12 and took 2 more years to achieve optimum utilisation. Chemicals revenue has grown at ~20% CAGR over FY14-20, outperforming all other segments. Commissioning of the Dahej chemicals park has resulted in a significant shift in the company's product mix. The Chemicals segment's share in total revenue has risen from ~28% in FY14 to ~47% in FY20. Naturally, the stock got re-rated considering the high-value business gaining share besides greater thrust on R&D and capex concentrated on the same. We expect consistent revenue growth in the coming years, driven by ongoing capex. We highlight that the Chemicals business has been a key focus area for SRF over the last 10 years, but last 5 years have witnessed a significant jump in overall capex and we expect similar disproportionate allocation to continue.

Exhibit 14: Capex at Dahej over the years



Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 15: Capex by chemicals division; majority of the last 5-yr capex was done at Dahej



Source: Company, Nirmal Bang Institutional Equities Research

Specialty Chemicals - we are building in ~25% revenue CAGR over FY20-23E

SRF entered the space of specialty fluorine chemistry in FY04 and has been building on its expertise in fluorine chemistry subsequently. The focus has been to leverage the company's expertise in products used in the Agrochemicals and Pharmaceuticals industries.

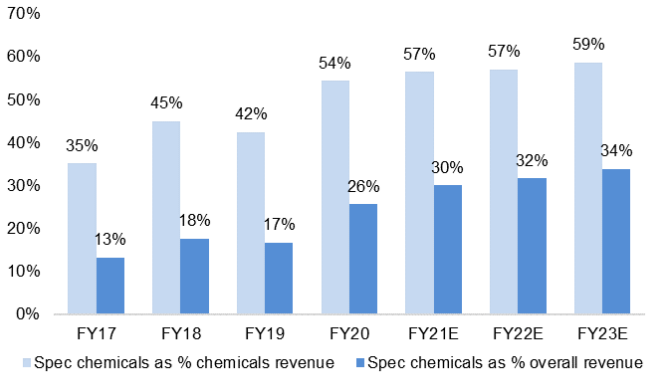
SRF's Specialty Chemicals business mainly focuses on developing new-age molecules to be used as intermediates by leading innovators. It also involves scaling up the capacity of existing products with focus on lowering overall production costs. The strength of R&D and process engineering has substantially been augmented, building the capability to design and execute multiple projects simultaneously in challenging timelines. Constant engagements with reputed domestic as well as global innovators for developing new products are key determinants of future growth potential.

Out of Agrochemicals and Pharma, SRF has strong foothold in Agrochemicals with all the global agrochemicals majors being its clients. Though the share of Pharma in SRF's total revenue is relatively low, for the last few years, the company has been making inroads in that space considering the huge growth opportunity.

Exhibit 16: Specialty chemicals revenue growth- we are building in ~25% CAGR over FY20-23E

Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 17: Specialty chemicals segments to gain revenue share meaningfully over FY20-23E



Source: Company, Nirmal Bang Institutional Equities Research

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Fluorine – an element of magic

Since Moissan isolated elemental fluorine in 1886. Fluorine has always been an element of surprise. Fluorine is the most reactive chemical element and the lightest member of the halogen elements. Indeed, despite being absent from natural products and biological processes, fluorine plays an increasingly important role in numerous areas of our daily life. Decades of chemical research have shown that fluorine atom and fluorine containing reaction profoundly impact the structure, reactivity and function of organic and inorganic molecules. Its small size, high electron negativity and high C-F disassociation energy make fluorinated compounds fit for multiple applications like Pharmaceuticals, Agrochemicals, Automobiles, Electronics, Semiconductors etc. Over the last 15 years, fluorine chemistry has undergone a notable transformation from merely a subfield of organic chemistry into a major area of multi-disciplinary research, modernizing health, food and energy related industries. Remarkable electronic, physical, biological properties and reactivity of fluoro-organic compounds, compared with to non-fluorinated counterparts, are being commonly used for technological innovations. Presently, Pharmaceuticals and Agrochemicals are the key end users of fluorine chemistry, which is the result of persistent R&D efforts over the past few decades. As per industry reports, global fluorochemicals market was valued at US$21bn in 2018 and is expected to reach US$30bn by 2026.

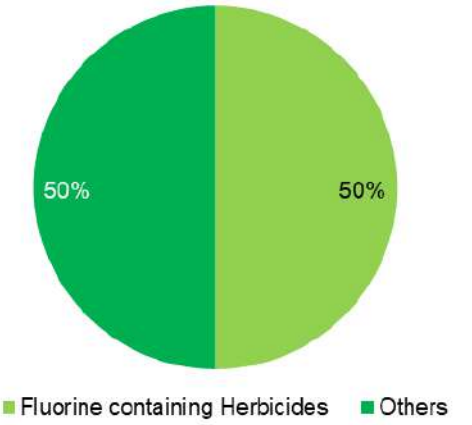
Agrochemicals

- Global agrochemicals industry is expected to grow at ~3% till 2027 whereas the Indian crop protection industry is expected to grow at ~8% CAGR over 2019-25.
- As per industry reports, fungicides and herbicides contain in most cases fluorine atoms, whereas nematicides and insecticides contain in most cases 'mixed' halogen atoms (example: chlorine and fluorine). It is well recognized that the ratio of fluorine-containing pesticides is increasing along with the progress of fluorine chemistry. In many cases, they have remarkable pesticidal activity as well as physicochemical properties by introduction of fluorine atom(s).

  Some key facts

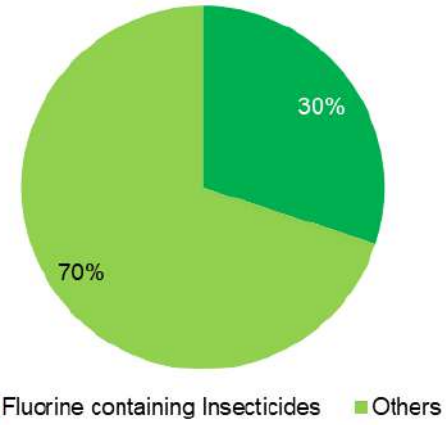
  - ✓ As per industry reports, ~50% of the herbicides and fungicides contain at least one fluorine atom. Herbicides account for ~45% of total global agrochemicals market whereas the share of fungicides is ~26%.
  - ✓ Also, ~30% of the total insecticides contain fluorine and its presence is rising YoY. Insecticides account for ~25% of total global agrochemicals market.
  - ✓ Succinate dehydrogenase inhibitor (SDHI) fungicides are broad-spectrum fungicides. Some of the most commonly used SDHI active ingredients are penthiopyrad, bixafen, isopyrazam, fluxapyroxad or boscalid, all of which contain fluorine. Europe dominates the market. Overall, adoption rate of SDHI fungicides in the cereals segment is rising significantly with fluxapyroxad as an active ingredient from the major sub-segments of SDHI fungicide. The global SDHI fungicide market is a consolidated market with major players having a prominent share. Major players in the market include Syngenta, Bayer Crop Science, Corteva, BASF SE, UPL etc. Syngenta AG, Bayer Crop Science and BASF SE hold the major share in the market. As per industry reports, global SDHI fungicides market has grown significantly over the last 10 years, reaching ~US$2bn. It is expected to grow at ~8% CAGR over the next 5 years.

Exhibit 18: ~50% of the herbicides (largest sub-segment of agrochemicals globally) contain at least one atom of fluorine



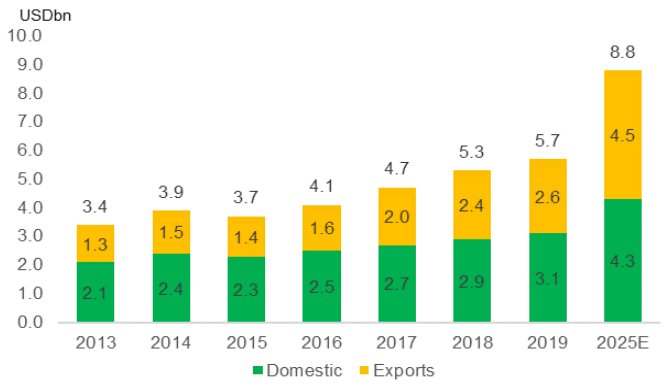
Source: Press reports, Nirmal Bang Institutional Equities Research

Exhibit 19: Proportion of fluorine containing insecticides is rising



Source: Press reports, Nirmal Bang Institutional Equities Research

Exhibit 20: India crop protection market expected to grow at ~8% CAGR over 2019-25 (exports CAGR ~10%)

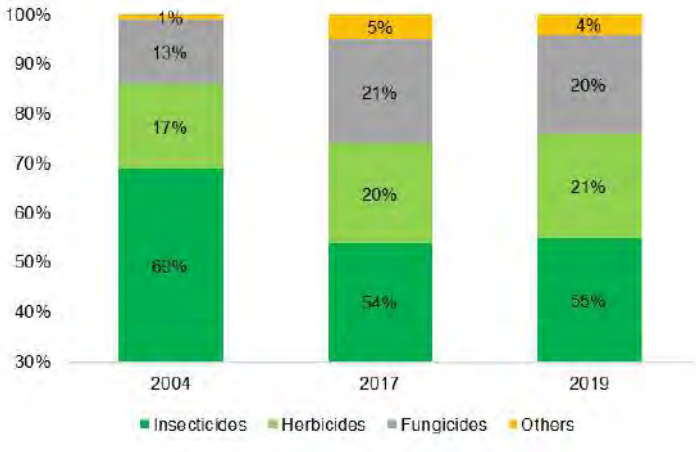


Source: UPL, Nirmal Bang Institutional Equities Research

Exhibit 21: Global agrochemicals industry is expected to grow at ~3% CAGR over 2019-27

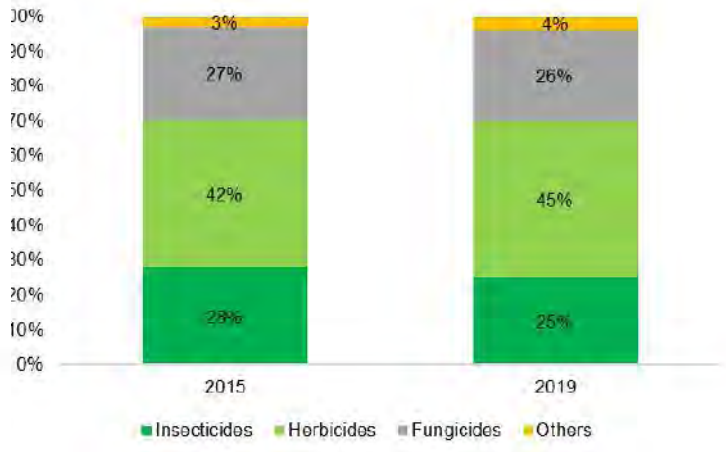
Source: UPL, Nirmal Bang Institutional Equities Research

Exhibit 22: Insecticides form ~55% of India crop protection market



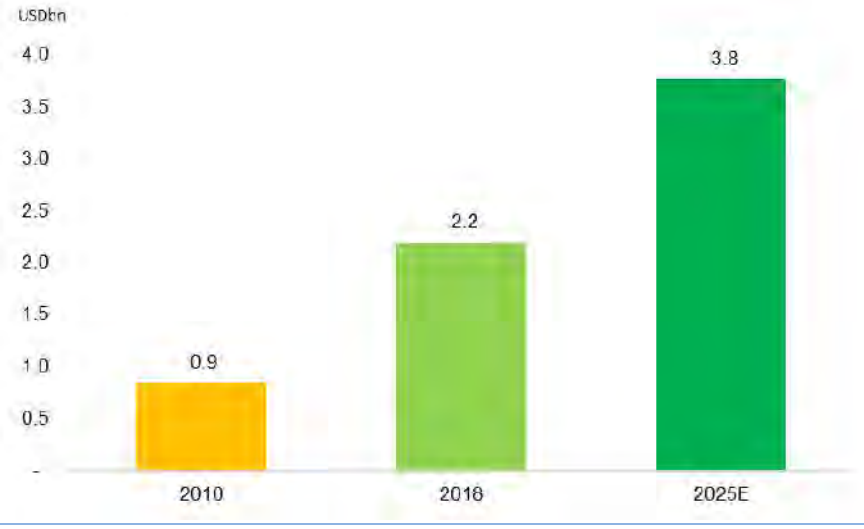
Source: UPL, Nirmal Bang Institutional Equities Research

Exhibit 23: Globally, herbicides have a higher share (~45%) in the overall agrochemicals pie and has gained share



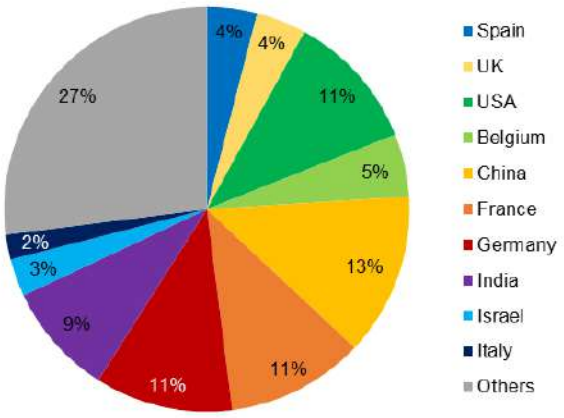
Source: UPL, Nirmal Bang Institutional Equities Research

Exhibit 24: Global SDHI market is growing rapidly; majority of the common intermediates or APIs contain fluorine



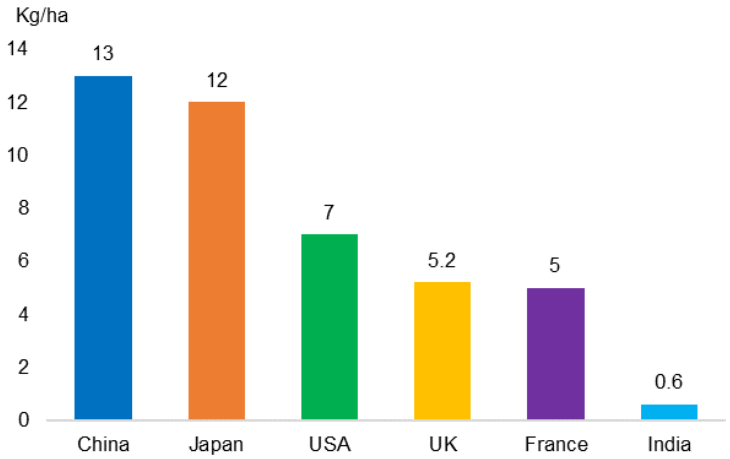
Source: Industry reports, Nirmal Bang Institutional Equities Research

Exhibit 25: World agrochemicals exports (2019)



Source: UN Comtrade, Nirmal Bang Institutional Equities Research

Exhibit 26: Agrochemicals consumption (2016)



Source: UN Comtrade, Nirmal Bang Institutional Equities Research

Pharmaceuticals

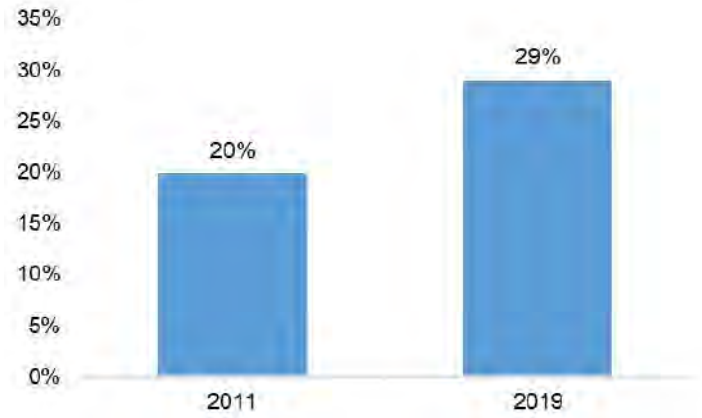
- Worldwide prescription drug sales are expected to grow at ~7% CAGR over 2019-24. In the field of Pharmaceuticals, introducing a fluorine atom or fluorinated group into drugs is often accompanied with higher binding affinity, enhanced metabolic stability, improved bioavailability etc.
- Over the last 2 decades, fluorine substitution has become one of the essential structural traits in modern pharmaceuticals. Fluorine containing drugs are used for the treatment of various diseases, including cancer, HIV, malaria and smallpox infections. Fluorine has been playing a multi-faceted role in pharmaceuticals. Although fluorine was regarded as an element of magic and used based on intuition, nowadays it is used with greater confidence after more details emerged about fluorination's effect on small molecules and its interaction with the biological system. This is the field of ongoing research and we expect the same to drive the demand for fluorine chemistry in the pharmaceuticals space.

Some key facts

- ✓ In 2019, 29% of the novel drugs approved by FDA contained fluorine. This ratio was ~20% in 2011. 50% of the blockbuster drugs (most successful drugs) have at least one fluorine item.
- ✓ Fluorine's application in oncology is very positive as ~50% of the overall pharmaceuticals R&D is skewed towards oncology. As a result, a large part of the products in the pipeline belong to the oncology segment.
- ✓ ~40% of the fluorine containing drugs approved by FDA over last 2 years were related to oncology.

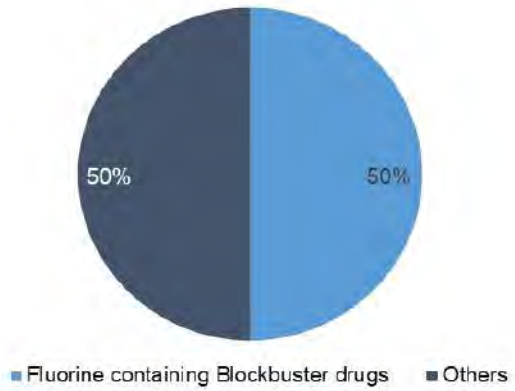
- ✓ Top 3 Global R&D projects with 2024 expected revenue potential of ~US$9bn has at least one fluorine molecule. Also, 1 out of top 10 selling drugs (estimate) has fluorine and the same is expected to grow at ~32% CAGR over 2018-24.

Exhibit 27: Fluorine containing drugs as % of total novel drugs approved by FDA



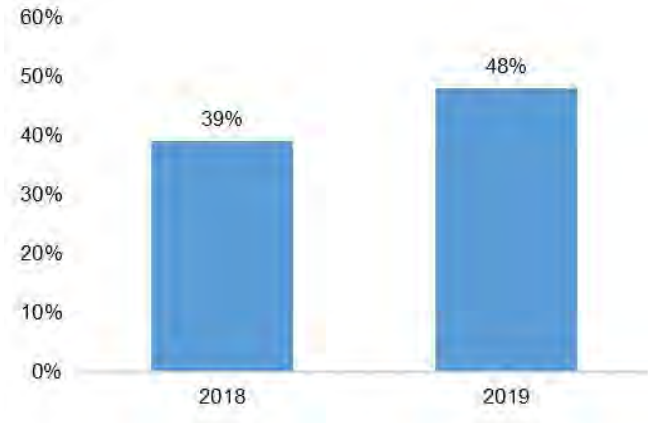
Source: Press reports, Nirmal Bang Institutional Equities Research

Exhibit 28: ~50% of blockbuster drugs contain at least one atom of fluorine



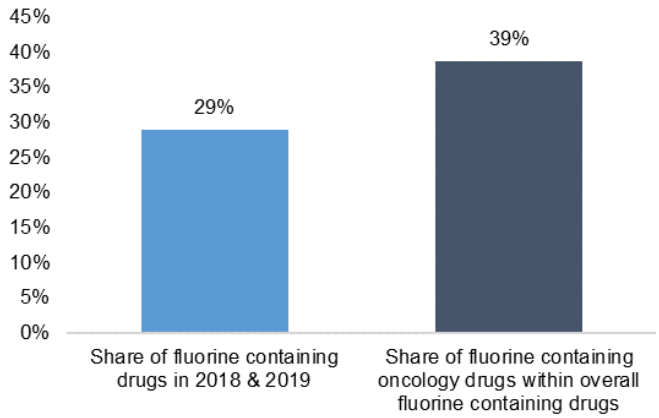
Source: Press reports, Nirmal Bang Institutional Equities Research

Exhibit 29: Share of oncology drugs in overall FDA approvals



Source: Industry reports, Nirmal Bang Institutioal Equities Research

Exhibit 30: Higher share of fluorine containing oncology drugs



Source: Indsutry reports, Nirmal Bang Institutional Equities Research

Exhibit 31: Top 10 valuable R&D projects (Ranked by NAV)- Top 3 contain fluorine with 2024 revenue potential of USD 8bn

Rank	Product	Company	Phase (current)	Mechanism of Action	WW Product Sales ($m) 2024		Today's NPV ($m)
1.	VX-659/VX-445 + Tezacaftor + Ivacaftor	Vertex Pharmaceuticals	Phase III	Cystic fibrosis transmembrane regulator (CFTR) corrector; Cystic fibrosis transmembrane regulator (CFTR) potentiator	4,274		19,984
2.	Upadacitinib	AbbVie	Filed	Janus kinase 1 (JAK1) inhibitor	2,509		10,246
3.	DS-8201	Daiichi Sankyo	Phase III	Epidermal growth factor receptor ErbB-2 (HER2) antibody	1,790	New Entry	9,111
4.	Liso-cel	Celgene	Phase III	B-lymphocyte antigen CD19 CAR-T cell therapy	1,378		8,986
5.	Zolgensma	Novartis	Filed*	Survival of motor neuron 1 (SMN1) gene therapy	1,635	New Entry	8,011
6.	LY3298176	Eli Lilly	Phase III	Gastric inhibitory polypeptide (GIP) agonist; Glucagon-like peptide 1 (GLP-1) receptor agonist	1,012	New Entry	7,460
7.	Sacituzumab Govitecan	Immunomedics	Filed	Tumour-associated calcium signal transducer 2 (TROP2) antibody	1,589	New Entry	6,092
8.	Ozanimod	Celgene	Filed	Sphingosine 1-phosphate (S1P) receptor 1 regulator; Sphingosine 1-phosphate (S1P) receptor 5 regulator	1,516	New Entry	5,957
9.	Brolucizumab	Novartis	Filed	Vascular endothelial growth factor (VEGF) antibody fragment (Fab)	1,322		5,907
10.	Voxelotor	Global Blood Therapeutics	Phase III	Sickle haemoglobin (HbS) polymerisation inhibitor	1,711	New Entry	5,871
	Top 10				18,737		87,625
	Other				175,045		503,317
	Total				193,782		590,943
					NPV of R&D Pipeline MAY 2018:		576,990

Source: Evaluate Pharma Report, Nirmal Bang Institutional Equities Research

Exhibit 32: Global pharma R&D- pharma majors focusing on core activities would translate into strong growth opportunity for specialty chemical players like SRF

Rank	Company	Pharma R&D ($bn) 2018	2024	CAGR 2018-24	R&D As a % of Prescription Sales 2018	2024	Chg. (+/-)
1.	Johnson & Johnson	8.4	9.9	+2.6%	21.8%	21.6%	-0.2pp
2.	Roche	9.8	9.9	+0.1%	22.0%	21.1%	-0.9pp
3.	Merck & Co	7.9	9.2	+2.5%	21.2%	21.6%	+0.4pp
4.	Novartis	8.2	9.2	+2.0%	18.8%	18.4%	-0.4pp
5.	Pfizer	8.0	8.9	+1.9%	17.6%	17.4%	-0.2pp
6.	GlaxoSmithKline	5.0	6.8	+5.3%	16.3%	17.6%	+1.3pp
7.	Bristol-Myers Squibb	5.1	6.7	+4.5%	23.8%	22.5%	-1.3pp
8.	Sanofi	6.2	6.7	+1.2%	17.7%	16.4%	-1.3pp
9.	Eli Lilly	5.0	6.1	+3.4%	25.5%	23.6%	-1.9pp
10.	AstraZeneca	5.3	5.9	+1.8%	25.5%	18.2%	-7.3pp
	Total Top 10	68.9	**79.1**	+2.3%	20.4%	19.6%	-0.8pp
	Other	110.0	**133.9**	+3.3%			
	Total	178.9	**213.0**	+3.0%	21.6%	18.0%	-3.6pp

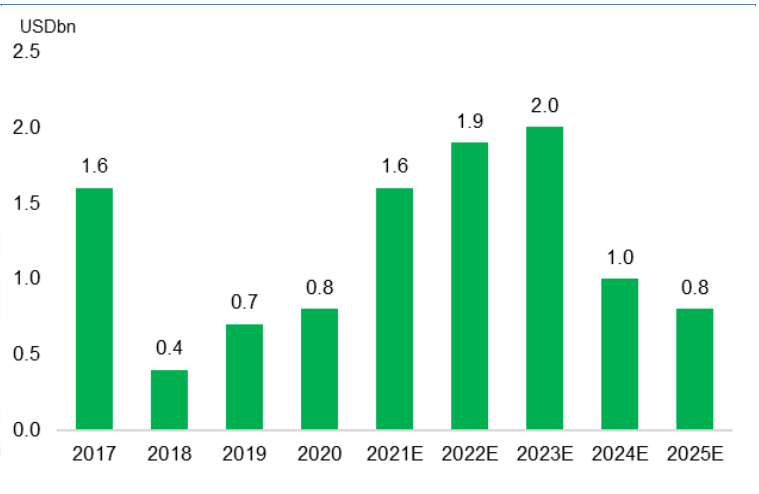
Source: Evaluate Pharma Report, Nirmal Bang Institutional Equities Research

The importance of R&D, innovation and time to market continues to increase for big pharma and agrochemicals companies. Since the share of patented drugs and agrochemicals is falling, there is increasing pressure on innovators to launch new products which enjoy the highest price premiums and profits in the industry. Based on research by Evaluate Pharma, annual sales of drugs about to lose their patent protection have averaged USD 40bn since 2011, and the potential loss due to competition from generics is ~50%. Similarly, agrochemicals worth USD 8bn are expected to expire over the next 5 years. We believe that chemical companies would significantly benefit from this development wherein innovators would depend more on these players in order to deliver efficient and faster new products.

Exhibit 33: Revenue at risk from patent expiration

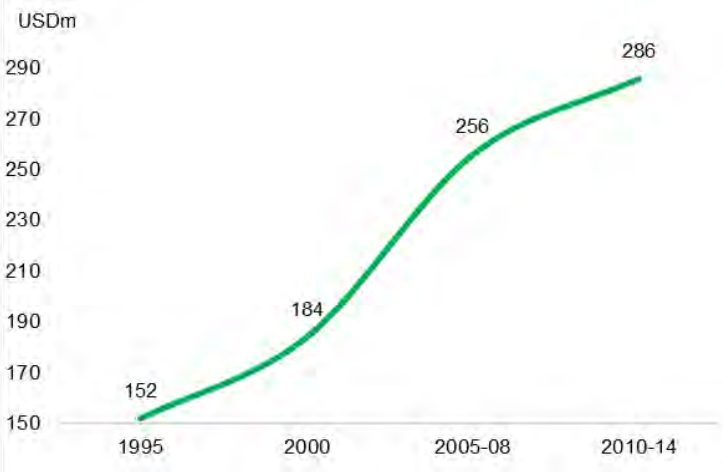
Source: Evaluate Pharma, Nirmal Bang Institutional Equities Research

Exhibit 34: Agrochemicals going off-patent



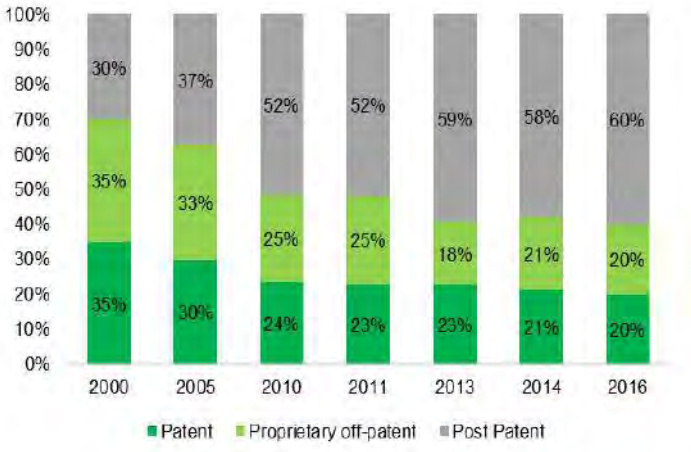
Source: FICCI, Nirmal Bang Institutional Equities Research

Exhibit 35: Rising development costs of agrochemicals



Source: FICCI, Nirmal Bang Institutional Equities Research

Exhibit 36: Rising share of generic drugs will open up the market

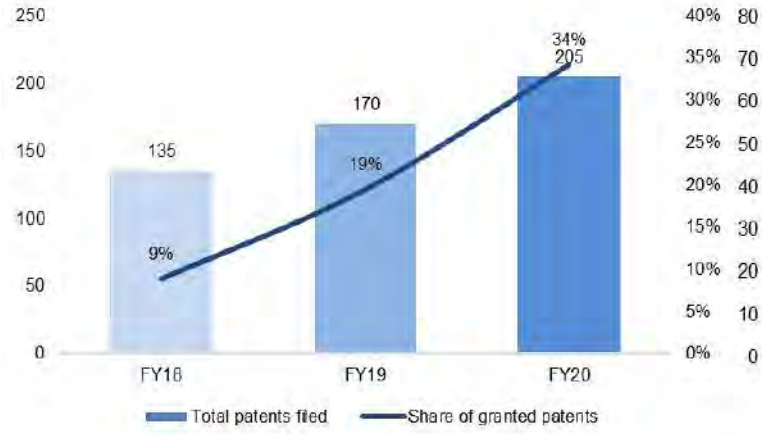


Source: FICCI, Nirmal Bang Institutional Equities Research

Chemicals Technology Group (CTG) – pillar of strength

With a clear vision and practicing innovation, quality and productivity as the key drivers of success, CTG remains the key pillar of growth for SRF. Utilizing synergetic efforts of scientists (400+); two dedicated R&D facilities; state-of-the-art engineering lab and pilot plant facilities; CTG is persistently working towards improving SRF's capabilities in process development, scale-up and commercialization of new chemistries. The business commissioned its first state-of-the-art cGMP plant in FY19 and also leveraged the technology to move up the value chain by introducing Active Ingredient P32 (AI) in its product offering. Overall, SRF has filed 205 patents as on FY20. Also, over the last 2 years, the share of granted patents has risen from ~9% (FY18) to ~34%, which is a testimony of SRF's R&D expertise. In FY20, SRF's R&D team worked on 69 molecules and 38 products were successfully taken up for process development. Similar to granted patents ratio, the share of molecules taken up for process development has risen from ~40% in FY18 to ~55% in FY20. We believe that R&D as % chemicals revenue is the key indicator for SRF considering its multi business entity structure. R&D spends consistently in excess of ~4% of chemicals revenue is a key positive.

Exhibit 37: Total patents filed- significant increase in share of granted patents over last 2 years

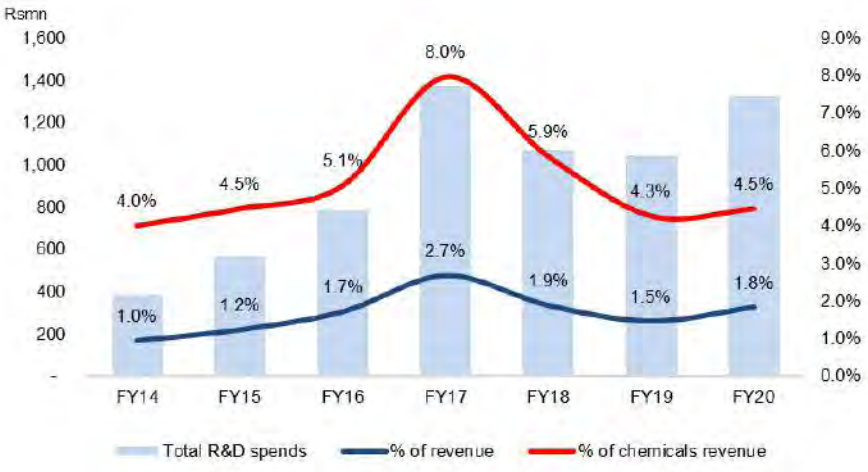


Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 38: Share of molecules taken up for process development has gone up significantly

Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 39: R&D as % chemicals revenue has been consistently in excess of ~4%

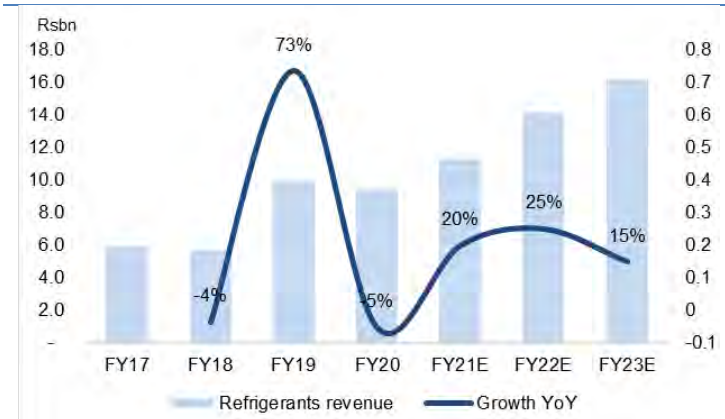


Source: Company, Nirmal Bang Institutional Equities Research

Ref Gases - strong medium-term prospects led by capacity expansion

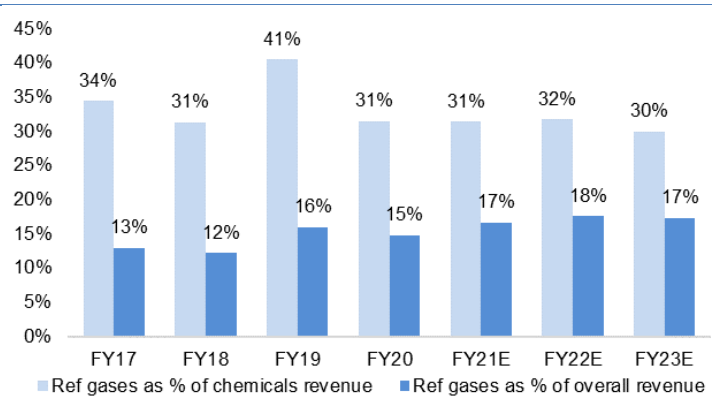
Refrigerants are primarily used as a cooling medium in the air-conditioning and refrigeration industry. SRF is one of the very few fully backward integrated global players in Refrigerant Gases. It is the domestic market leader with about 60% share. We believe that SRF is stronger than NFIL and GFL in Refrigerant Gases on account of the strong product portfolio of HFCs. Refrigerant Gases segment forms ~15% of the overall revenue and ~30% of the Chemicals revenue as on FY20. Given the COVID-19 impact on various industries (mainly HVACR), we expect the demand for refrigerants from OEMs to remain low in the near term. But, SRF has recently expanded its HFC capacity by ~2x and hence we expect robust growth from FY22 onwards once the situation normalises. We are building in ~20% revenue CAGR over FY20-23E, mainly led by capacity expansion of HFC and recovery in the air-conditioning and refrigeration industry. Recent announcement of prohibition on import of AC loaded with refrigerant gases is positive for SRF as India imports ~30% of its refrigerant gas requirements and filly backward integrated status of SRF would help the company to fulfil the incremental demand after import ban.

Exhibit 40: Refrigerant gases revenue- we are building in ~20% CAGR over FY20-23E



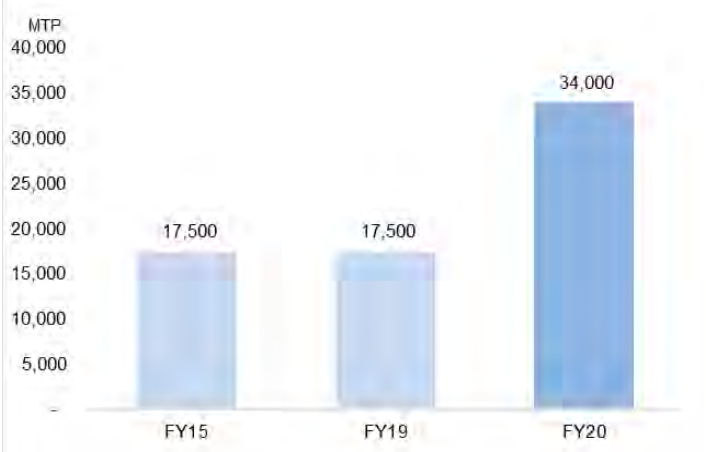
Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 41: Refrigerant gases form ~15% of the overall revenue in FY20



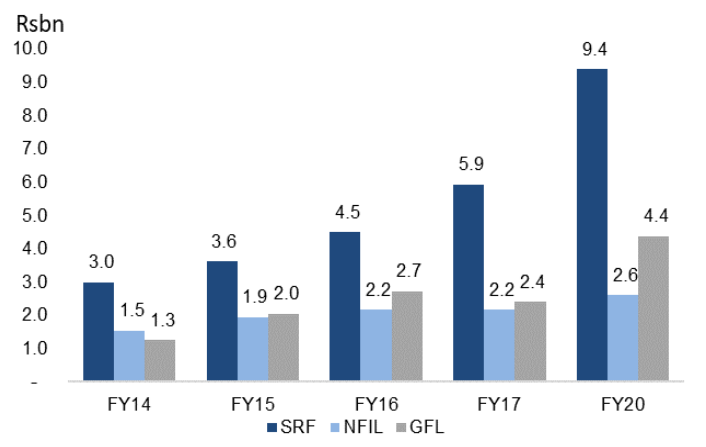
Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 42: SRF has nearly doubled its HFC capacity



Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 43: Refrigerant gases revenue- SRF is significantly ahead of NFIL and GFL



Source: Company, Nirmal Bang Institutional Equities Research

The refrigerant product range marketed under the company's FLORON® brand includes F-22, F-134a, F-32 and HFC Blends such as F-404a, F-407C, F-410a ,F 600a and F 152a. SRF's market share in the refrigerants space has increased with the launch of F600a. SRF is the only Indian manufacturer of HFC 134a, HFC 125 and HFC 32 refrigerants, which have been developed using indigenous technology. SRF acquired the Dymel® HFA 134a/P medical propellant brand from DuPont™ in FY15 along with the technology to convert its technical grade of F 134a to the propellant grade. In the process, it became one of the few manufacturers of Pharma grade HFA 134a/P in the world, which is used in Metered Dose Inhalers as a propellant. Realisations for Pharma grade 134-a are superior than the normal version. SRF has recently doubled its HFC capacity from 17,500mtpa to 34,000mtpa in FY20, which will further strengthen its competitive advantage in all three major HFCs, namely HFC 134a, 32 and 125. R-467A, a drop-in substitute for R-22 that in-house R&D team developed, received certification from the American Society of Heating, Refrigeration and Air-Conditioning Engineers (ASHRAE). It is the first ever refrigerant gas from India to receive this certification. An approval by ASHRAE is a testimony to the fact that SRF is at the forefront of major fluorine-based gas transitions set by international regulations to reduce global emissions of greenhouse gases. SRF is planning to enter another segment called Fluoropolymer through its ongoing addition to R22 capacity and the new Poly-tetrafluoroethylene capacity project at Dahej. However, the project rollout has been postponed due to near term challenges like Covid-19.

Exhibit 44: List of total HFCs and SRF's presence

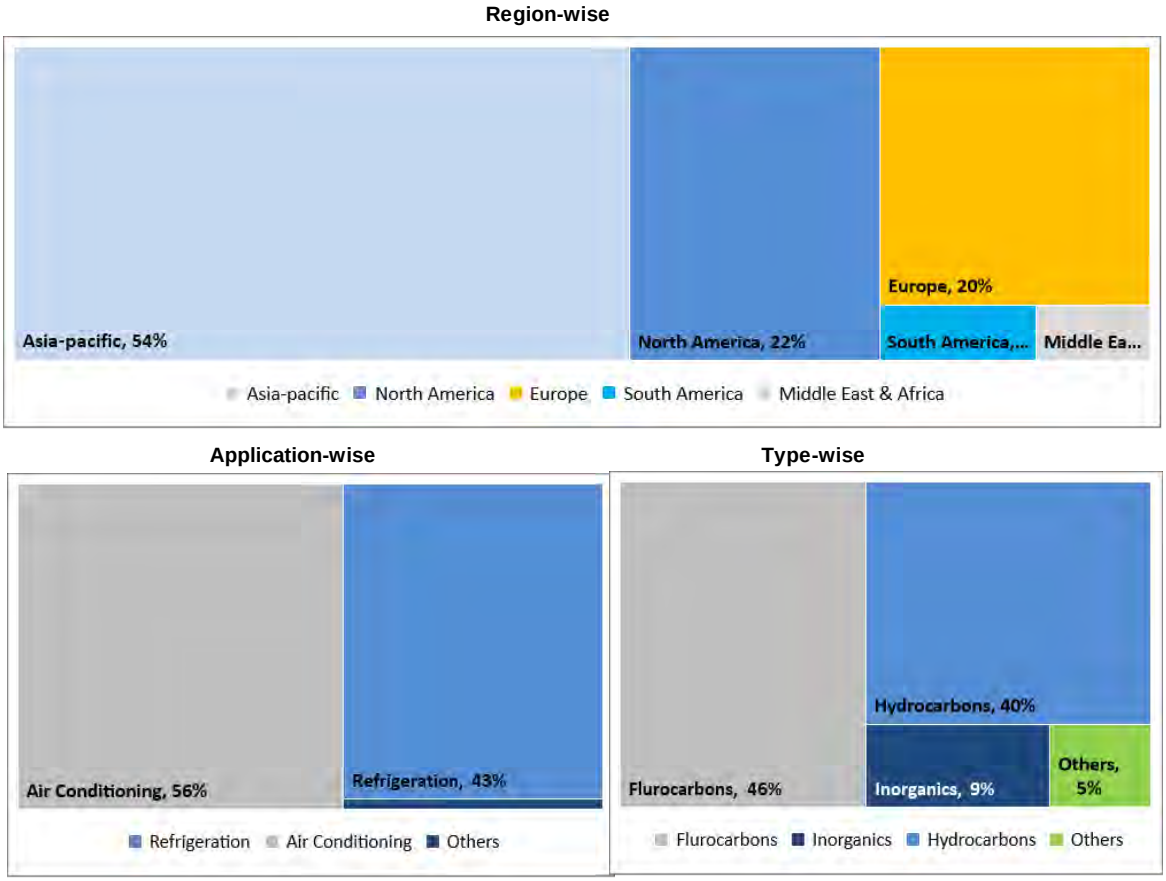
Substance	100-year Global Warming Potential (GWP)	Comments
HFC-23 (R23)	14,800	
HFC-236fa	9,810	
HFC-143a	4,470	
R507A	3,980	
R404A	3,920	
HFC-125	3,500	Only Indian manufacturer (developed using indigenous technology)
HFC-227ea	3,220	
R422A	3,140	
R417A	2,350	
R408A	2,300	
R438A	2,260	
R427A	2,140	
R452A	2,140	
R410A	2,090	
R413A	2,050	
R407F	1,820	
R407C	1,770	
HFC-43-10mee	1,640	
HFC-134a (R134a)	1,430	Only Indian manufacturer (developed using indigenous technology)
R449A	1,397	
R448A	1,387	
HFC-236ea	1,370	
HFC-236cb	1,340	
HFC-467A	1,330	First Indian Manufacturer to get ASHRAE approval
HFC-134	1,100	
HFC-245fa	1,030	
R365mfc/R227ea mix	960	
R416A	840	
HFC-365mfc	794	
HFC-245ca	693	
HFC-32	675	Only Indian manufacturer (developed using indigenous technology)
HFC-143	353	
HFC-152a	124	
HFC-41	92	
HFC-152	53	
HFC 600a	3	Replacement for R134a

Source: Press reports, company, Nirmal Bang Institutional Equities Research

HVACR industry is the key end-user of refrigerant gases

The primary applications of refrigerant gas are in refrigeration and air-conditioners (RAC), while it is also used as feedstock in Agrochemicals and Pharmaceuticals. The refrigeration industry plays a major and increasing role in today's global economy, with significant contributions made in food, health, energy and environmental domains, which policy makers need to better take into account. Region-wise, Asia Pacific forms ~54% of the overall refrigerants consumption followed by North America and the EU. Air conditioning and refrigeration together form ~99% of the overall refrigerants market.

Exhibit 45: Refrigerants industry break-up

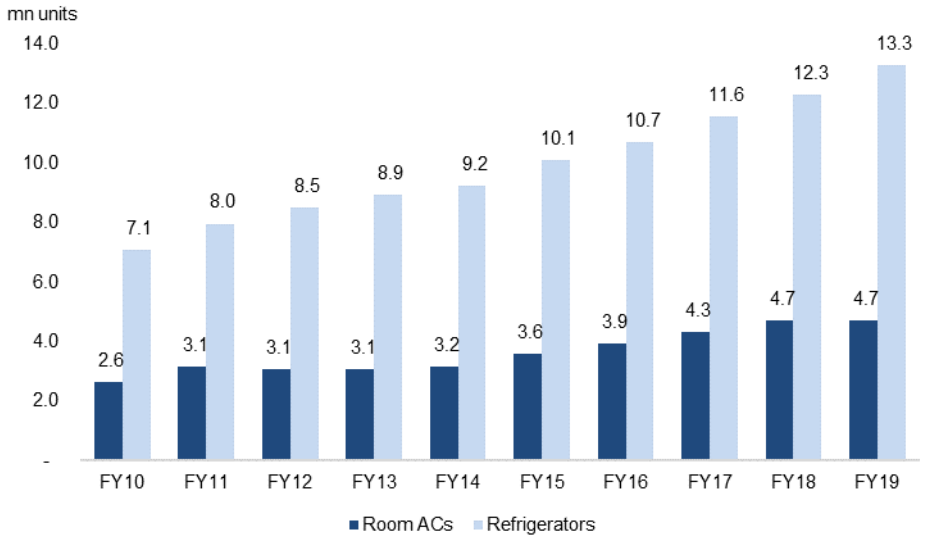


Source: Industry reports, Nirmal Bang Institutional Equities Research.

Domestic HVACR industry

Market size of ACs and Refrigerators in India is approximately ~5mn and ~13mn units per annum, respectively. AC penetration in India is very low at ~5% whereas the same is in excess of ~20% for refrigerators. Due to phase out of R22, we have been seeing increasing use of other gases like R-410a, R-32 and R-290. For automobile AC, R-134a is a preferred gas.

Exhibit 46: Domestic volume growth trend of Room ACs and Refrigerators



Source: CRISIL, Nirmal Bang Institutional Equities Research

Exhibit 47: Usage of ref gases key brands of AC and Refrigerators

Brand	AC	Refrigerator
Voltas	R-410a	-
Samsung	R-410a	R-600a
Daikin	R-32, R-410a	-
LG	R-410a	R-600a, R-134a
Blue Star	R-32, R-410a	-
Hitachi	R-410a	-
O General	R-410a	-
Godrej	R-410a, R-290	R-600a
Panasonic	R-410a	-
Videocon	R-410a	-

Source: Nirmal Bang Institutional Equities Research

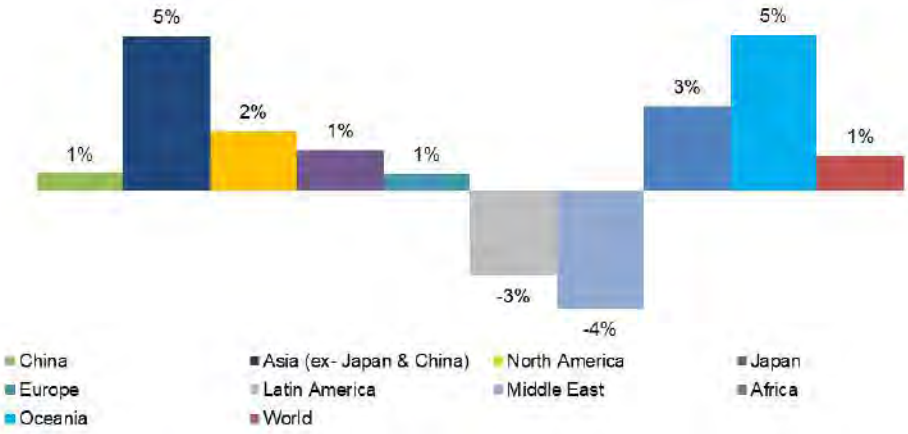
Global HVACR industry is expected to grow at ~7% CAGR over 2018-25

Global HVACR industry (US$181bn as on 2018) is expected to grow at a CAGR of 6.8% over the period 2018-23. Key growth drivers include increase in consumer spending, expanding construction space and rising preference for efficient and smart technology. Emerging economies will play a big role in overall growth of this market. Regulations have been in place in order to use energy efficient systems but consumers prefer these efficient systems on account of cost efficiency. A Nielsen study indicated that 66.0% of global consumers are willing to pay extra for more socially responsible products and 9 in 10 Millennials said they would switch brands to support such progressive causes. As per global industry surveys, energy cost is the third largest cost among the corporate expenses and forms ~6.5% of the overall expenses. Hence, businesses are cognizant of saving opportunity there.

Exhibit 48: HVACR industry is expected to grow at ~7% CAGR over 2018-25

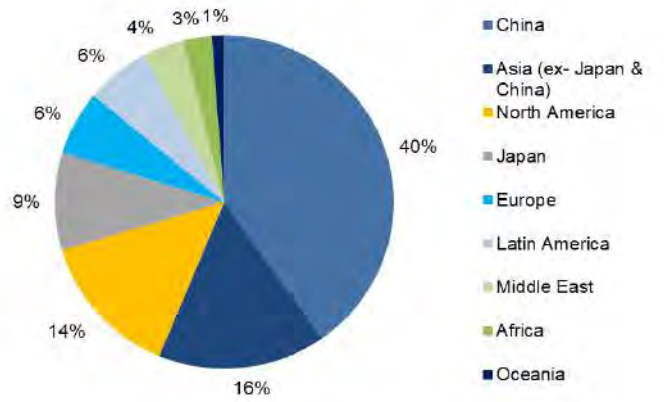
Source: Industry reports, Nirmal Bang Institutional Equities Research

Exhibit 49: Global AC CAGR region/country wise over 2013-18 (volume)



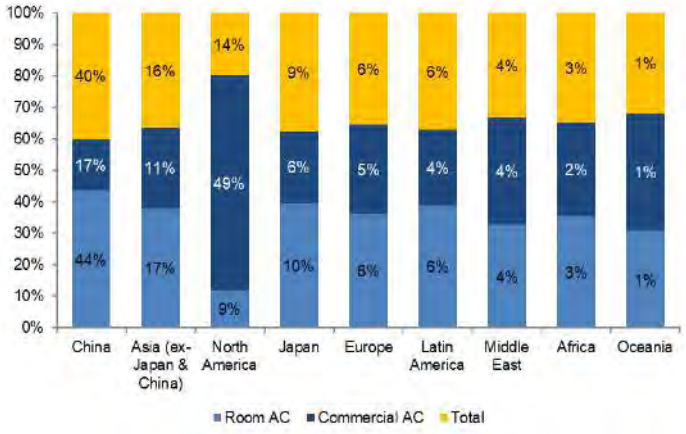
Source: Industry reports, Nirmal Bang Institutional Equities Research

Exhibit 50: Break-up of global AC demand (Volume)



Source: Industry Reports, Nirmal Bang Institutional Equities Research

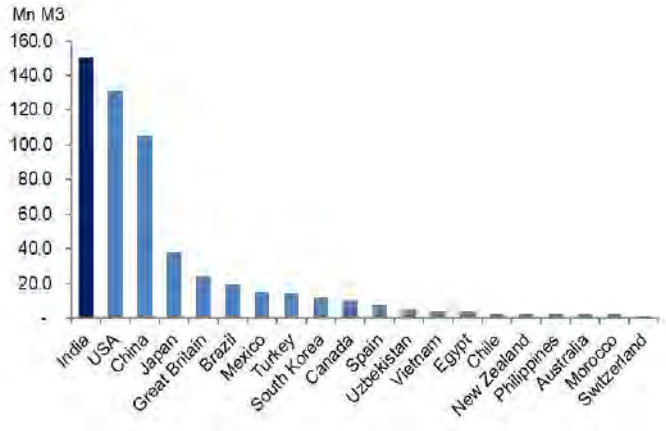
Exhibit 51: Break-up of global AC demand by type



Source: Industry Reports, Nirmal Bang Institutional Equities Research

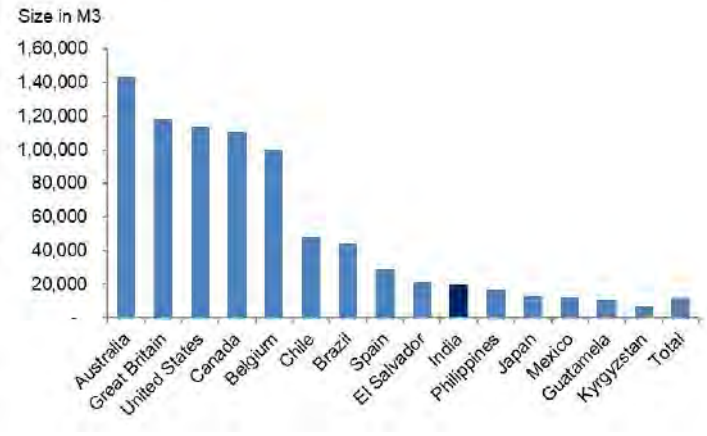
We highlight that importance of the refrigeration sector is expected to grow further in the coming years because of increase cooling needs in various industries and global warming. According to the IIR, the lack of cold chain causes significant global food losses - up to almost 20% of the global food supply. In the developed countries, food losses from the absence of refrigeration account for nearly 9% of the total food production; this figure is at 23% on average in the developing countries.

Exhibit 52: Capacity of refrigerated warehouses



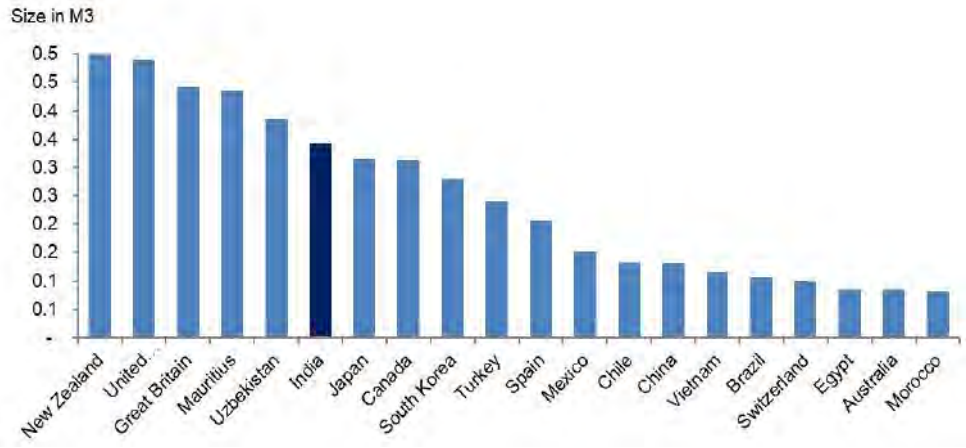
Source: Industry reports,Nirmal Bang Institutional Equities Research

Exhibit 53: Average size of refrigerated warehouses



Source: Industry reports, Nirmal Bang Institutional Equities Research

Exhibit 54: Capacity of refrigerated warehouse per urban resident



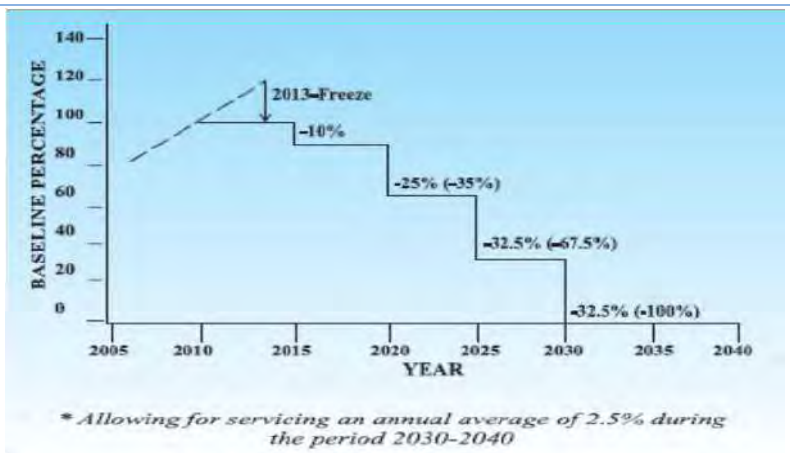
Source: Industry reports, Nirmal Bang Institutional Equities Research

SRF would gain market share on account of R-22 phaseout

R-22 and its by product R-23 have high ozone depleting effects and are also potent greenhouse gases. Phasing-out of R-22 was therefore agreed in the Montreal Protocol, thus significantly restricting future use and availability of R-22. As per the Montreal Protocol, India would need to phase out R-22 (HCFC-22) and a few other HCFCs by 2030. The first phase of reduction kicked-in from 1st January 2015 when HCFC consumption and production quota was cut by 10% from the baseline (baseline benchmarked to 2009 and 2010 consumption). The next reduction in HCFC production quota for emissive use happened w.e.f. 1st January 2020, which would be a steep 25% cut (aggregate 35% from baseline). However, this restriction is only with respect to emissive uses and companies like NFIL and SRF can utilise R-22 capacities for non-emissive uses continuously. Both NFIL and SRF use ~10-15% of their total R-22 capacity for non-emissive uses like feedstock for Pharmaceuticals, Agrochemicals, Polymer etc. Majority of the R-22 exports from India are to the Gulf region. Due to reduction in consumption quota, competitive intensity has gone up significantly in the past, particularly from the Chinese manufacturers. SRF is planning enter another segment i.e. Fluoropolymer business through its ongoing additional R22 capacity and the new Poly-tetrafluoroethylene capacity project at Dahej.

SRF developed R-134a production capability indigenously in 2006 and has capacity to produce ~16,000 TPA (after debottlenecking of Dahej capacity but before considering doubling of HFC capacity in FY20), catering to both domestic and export markets. SRF has ~60% market share in R-134a in India while the remaining demand is met by imports. SRF is the sole manufacturer of R-134a, which is mainly used in automobile ACs. Hence, demand for the same is dependent on the growth of the auto industry. As SRF enjoys exclusivity, once the auto demand comes back on track, it would be a key beneficiary. India has extended an anti-dumping duty of US$1.22/kg on R134a refrigerant from China for five years till July 2021. India had first imposed anti-dumping duty in July 2011. An investigation by the Directorate General of Anti-dumping and Allied Duties found that imports from China were undercutting the prices of the domestic industry significantly and depressing the domestic prices. Apart from domestic demand, there is large scope for exports demand as USA also imposed anti-dumping duty on exports of R-134a from China. In February 2017, the US Department of Commerce prescribed anti-dumping duties ranging from 148.79% to 167.02%. Meanwhile, the deal to supply pre-filled R-134a cans to Walmart establishes SRF' credibility in the US market.

Exhibit 55: HCFC phaseout schedule



Source: Industry reports, Nirmal Bang Institutional Equities Research

The Kigali Amendment is a key step in the evolution of refrigerants to ensure that their use is considered along with their impact on the environment. This landmark agreement mandates a global reduction in the production and consumption of HFCs in CO2 equivalent. HFC reduction in CO2 equivalent began in 2019 for developed countries, which must reduce 85% of HFCs in CO2 equivalent by 2036, and 2024/2028 for developing countries, which have to achieve 80% of HFCs in CO2 equivalent reduction by 2045 or 85% by 2047.

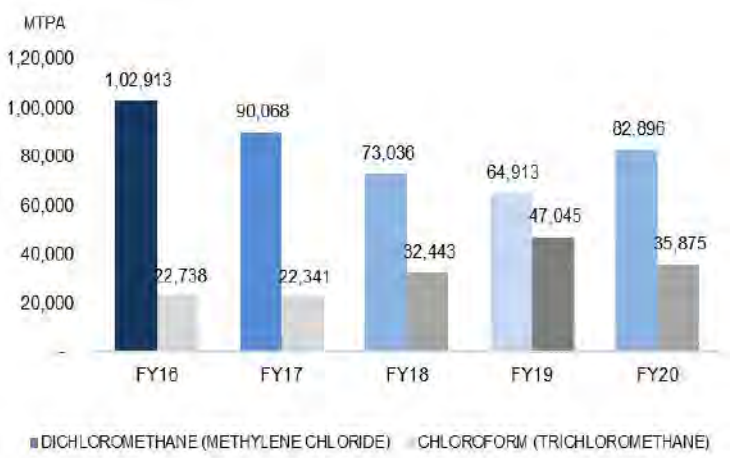
Chloromethanes is import substitution play

SRF's main products in the chloromethanes business are methylene chloride and chloroform. While chloroform is internally consumed for manufacturing HCFC-22, methylene chloride is sold primarily in the domestic market. Apart from methylene chloride and chloroform, SRF also manufactures trichloroethylene and perchloroethylene at the Dahej site. Trichloroethylene is backward integrated to the HFC-134a production facility and is used primarily as a feedstock. Perchloroethylene is used as a solvent in the laundry, metal degreasing and vapour degreasing industries. It is also a feedstock for HFC-125 and HFC-134a for some producers. SRF has received an approval for setting up an additional facility to produce 95,000 mtpa of chloromethane at Dahej at a projected cost of Rs3.2bn. This would take SRF's total capacity to 1,90,000 mtpa. India is an importer of both methylene chloride and chloroform. There is a huge import substation opportunity while the exports market could grow eventually based on the availability of surplus capacity. We like SRF's approach of significant capacity expansion over the last 5 years and now further doubling the capacity to capture the demand. Over the last 3 years, revenue from chlorinated solvents has more than doubled and we expect ~15% CAGR over the next 3 years. Also, with the new capacity coming on board in FY22/23, there is strong headroom for growth for SRF.

Exhibit 56: Chloromethanes revenue growth- we are building in ~15% CAGR over FY20-23E

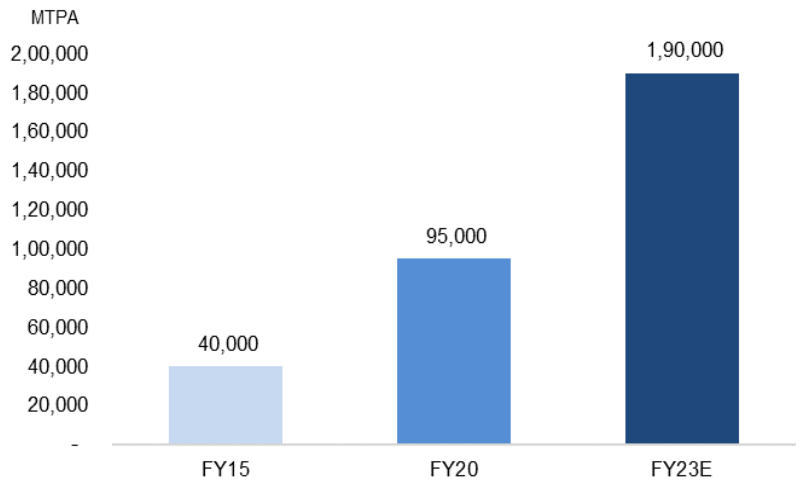
Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 57: Chloromethanes is an import substitution play; addition of capacity by SRF would drive growth



Source: Import Export Bank of India, Nirmal Bang Institutional Equities Research

Exhibit 58: SRF chloromethane capacity



Source: Company, Nirmal Bang Institutional Equities Research

Packaging Films - capacity addition and strong domestic demand are key drivers

Packaging Films have been one of SRF's key focus areas. Although the business is cyclical in nature and fate of this segment is dependent on crude oil prices, SRF has managed to do well, especially in the last 5 years, led by strategic expansion plans, higher focus on value-added products and cost efficiency measures. It has presence in both BOPET as well as BOPP segments and has manufacturing facilities both in India as well as abroad. Over the last 5 years, SRF has almost tripled its BOPET capacity. ~70% of the company's revenue from Packaging Films comes from value-added products. We are structurally positive on this business and expect SRF to deliver better-than-industry growth. Similar to other divisions, there are upcoming capacity expansion plans in Packaging Films, which ensure future growth from this segment. Operating margin of SRF has been consistently ahead of peers and this has more to do with efficiently running operations and ongoing focus on product mix improvement. Packaging Films business formed ~36% of the consolidated revenue for FY20. We are building in ~14% revenue CAGR from the Packaging Films business over FY20-23E.

Exhibit 59: Packaging films revenue- we are building in ~14% CAGR over FY20-23E

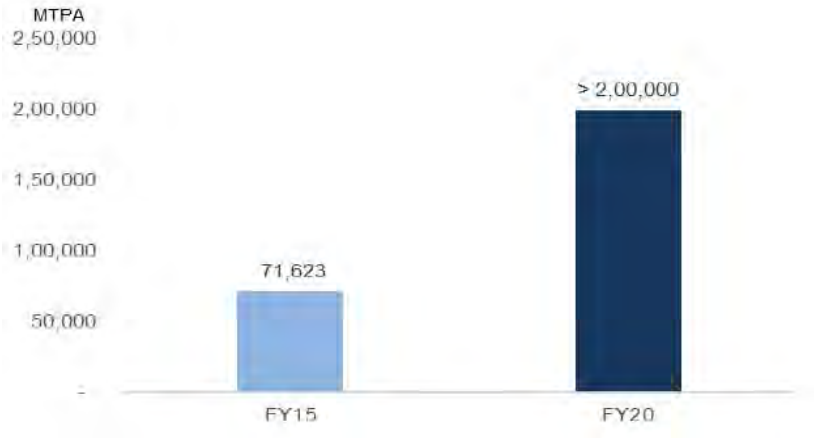
Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 60: Packaging films EBITDA- we believe improved margins are sustainable

Source: Company, Nirmal Bang Institutional Equities Research

SRF has almost tripled its BOPET capacity over the last 5 years. All-India BOPET industry capacity is ~7,00,000 tonnes whereas globally thin PET market is as big as ~4mn tonnes. Domestic consumption of BOPET is ~600,000 tonnes. BOPP market in India is estimated at ~600,000 tonnes and domestic consumption would be ~450,000 as per industry estimates.

Exhibit 61: SRF has almost tripled its BOPET capacity



Source: Industry reports, Nirmal Bang Institutional Equities Research

Exhibit 62: Packaging films business capacity details

Source:Company, Nirmal Bang Institutional Equities Research

Exhibit 63: Packaging films business capacity details

India	
Facility	**Capacity(TPA)**
PET Resin	87,500
BOPET Film	93,500
BOPP Film	34,000
Plasma Metallization	34,000
Holography	1,200
AlOx Coating	4,500
Specialty Coating	2,500
Thailand	
Facility	**Capacity(TPA)**
Polyester Film	30,000
Metallized PET Film	16,000
South Africa	
Facility	**Capacity(TPA)**
BOPP Film	30,000
Metallized BOPP Film	9,000
Hungary	
Facility	**Capacity(TPA)**
Polyester Film	40,000
Metallized PET Film	8,000

Source:Company, Nirmal Bang Institutional Equities Research

Exhibit 64: Packaging films peer comparison

Revenue (Rsbn)	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
SRF	0.9	0.7	0.6	0.9	1.2	1.3	1.4	1.8	2.7	2.6
Polyplex	2.4	2.4	2.5	3.2	3.2	3.2	3.2	3.6	4.6	4.5
Cosmo Films	1.1	1.1	1.3	1.5	1.6	1.6	1.6	1.8	2.2	2.2
Jindal Poly	2.9	2.4	2.2	5.1	7.6	7.2	7.0	6.4	3.7	3.5
Uflex	3.5	4.5	5.2	5.9	6.2	6.0	6.2	6.7	8.0	7.4
Ester	0.7	0.7	0.9	0.9	0.9	0.8	0.8	0.8	1.0	1.0

EBITDA margin (%)	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
SRF	43%	9%	6%	6%	9%	19%	18%	17%	19%	25%
Polyplex	37%	19%	10%	4%	13%	12%	18%	15%	20%	19%
Cosmo Films	9%	9%	8%	8%	7%	12%	11%	9%	8%	13%
Jindal Poly	34%	16%	8%	9%	9%	13%	11%	11%	14%	19%
Uflex	33%	15%	13%	12%	12%	14%	15%	13%	13%	15%
Ester	33%	6%	5%	9%	8%	10%	6%	8%	11%	18%

EBIT margin (%)	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
SRF	34%	90%	56%	22%	24%	30%	23%	17%	14%	20%
Polyplex	60%	9%	4%	-2%	4%	4%	13%	10%	15%	15%
Cosmo Films	6%	6%	4%	3%	5%	10%	8%	6%	6%	10%
Jindal Poly	31%	9%	3%	5%	4%	10%	7%	6%	-5%	15%
Uflex	29%	11%	8%	8%	8%	9%	9%	8%	8%	9%
Ester	31%	2%	2%	5%	5%	6%	1%	4%	7%	15%

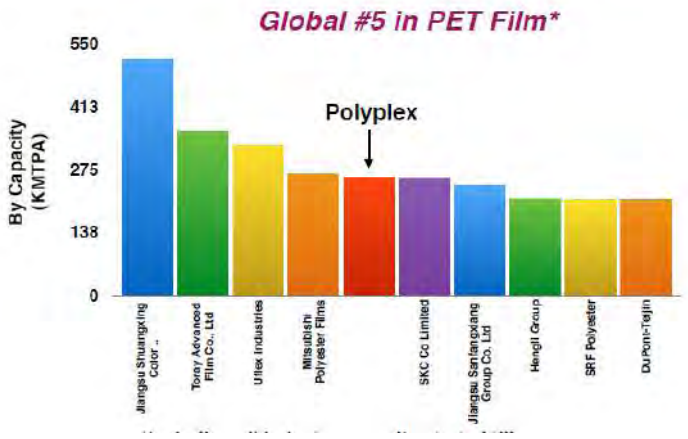
ROCE (%)	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
SRF	72%	6%	1%	0%	5%	15%	12%	11%	20%	19%
Polyplex	63%	8%	3%	-1%	4%	3%	14%	10%	19%	17%
Cosmo Films	9%	9%	6%	4%	9%	18%	11%	8%	9%	14%
Jindal Poly	42%	9%	3%	7%	9%	18%	11%	12%	-6%	18%
Uflex	31%	12%	9%	8%	9%	10%	10%	9%	10%	8%
Ester	42%	3%	3%	9%	7%	8%	2%	6%	14%	29%

Source: Company, Nirmal Bang Institutional Equities Research

Domestic flexible packaging industry (BOPET) expected to grow at ~12-13% CAGR

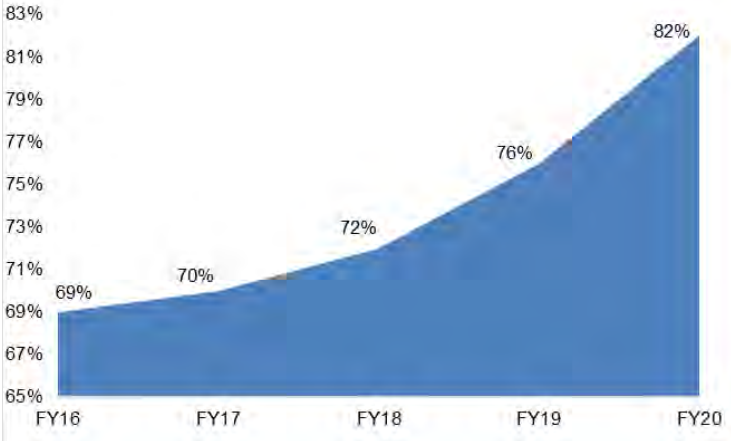
Overall global flexible packaging industry is expected to grow at ~6-7% CAGR over the next 5 years whereas domestic growth would be ~12-13%, led by high demand from packaged foods and other industries. Capacity utilisation of global BOPET capacity has been increasing, which suggests the narrowing of supply-demand gap. On the other hand, BOPP is facing oversupply situation on account of huge capacity additions in China over the years. Flexible packaging solutions have been experiencing positive demand across the end-user industries such as food, retail, consumer goods, pharmaceuticals etc. Demand has been catalyzed by the continued rise in the level of urbanization, a large expatriate population and changing dietary habits of the resident citizens. Increasing penetration of organized retail formats such as hypermarkets, supermarkets and e-commerce, apart from processed and packaged food market is currently exhibiting strong growth. BOPET packaging films are oriented films that are used predominantly in the packaging of products in multiple consumer industries, like food & beverage, pharmaceuticals, cosmetic and personal care products. These films remain stable through printing and laminating processes, making them ideal for high-quality graphic packaging applications. Long-term prospects for BOPET films remain strong, as it has superior technical properties and is being used in flexible packaging, which is growing at a steady rate across the world. BOPP films offer excellent moisture barrier and the metallized variant provides better oxygen barrier.

Exhibit 65: Global thin PET capacity



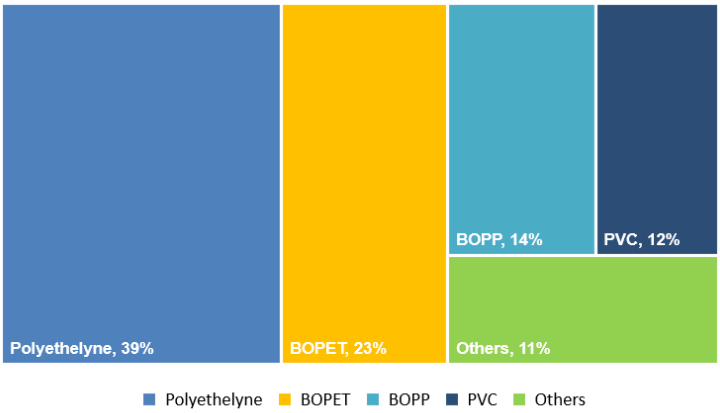
Source: Polyplex PPT, Nirmal Bang Institutional Equities Research

Exhibit 66: Global Thin PET capacity utilisation increasing



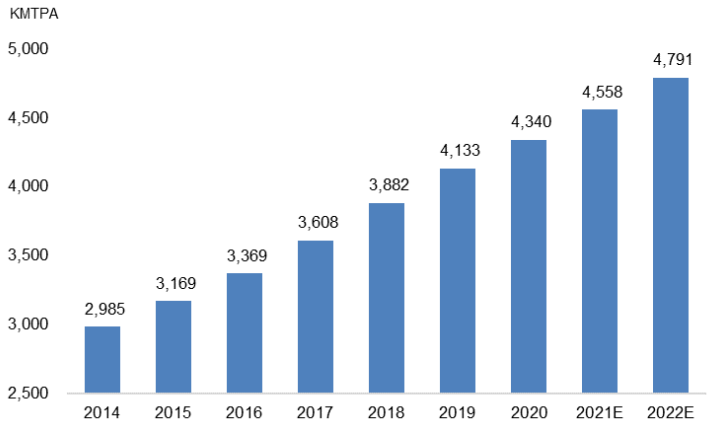
Source: Polyplex PPT Nirmal Bang Institutional Equities Research

Exhibit 67: Global Packaging films market break-up



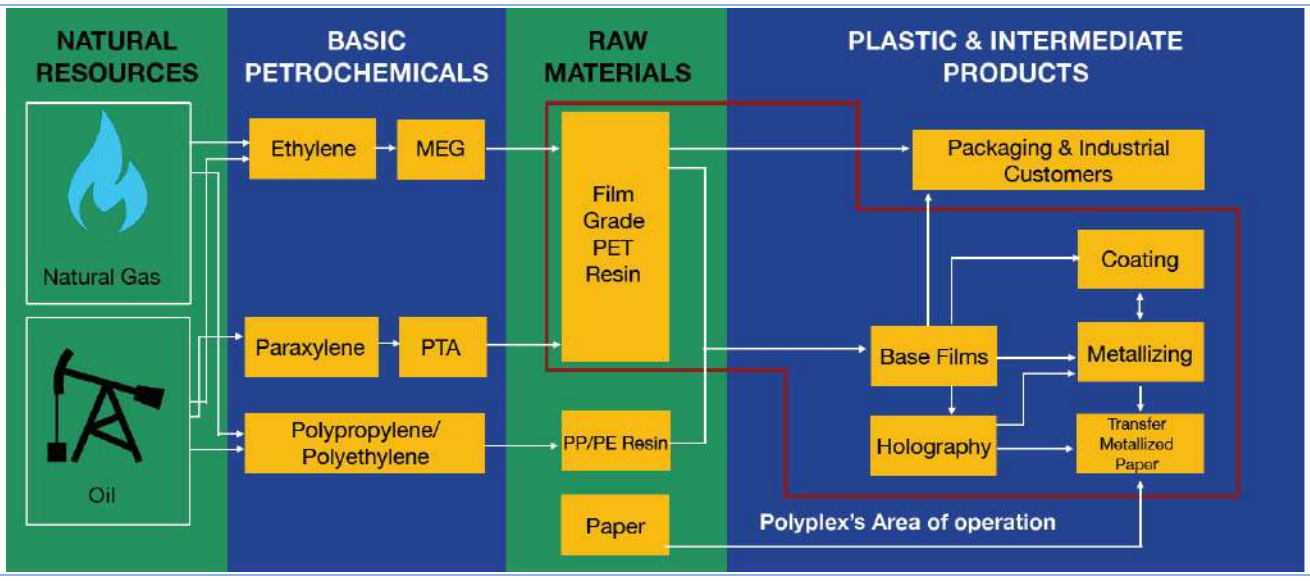
Source: Industry Reports, Nirmal Bang Institutional Equities Research

Exhibit 68: Global thin PET demand is expected to grow at ~6% CAGR



Source: Polyplex PPT, Nirmal Bang Institutional Equities Research

Exhibit 69: Packaging value chain



Source:Polyplex PPT, Nirmal Bang Institutional Equities Research

Technical Textiles - we expect overall decline in FY20 base

SRF is the largest manufacturers of Technical Textiles in India and also enjoys global leadership (2nd for tyre cord and belting fabrics) for most of the products. It offers a wide range of high-performance reinforcements covering both nylon and polyester yarns and fabrics for diverse non-consumer and lifestyle applications. SRF has successfully transformed itself from a Technical Textiles player to a Chemical company as the growth prospects and margin of former depends to a large extent on growth of key end-user industries like Auto, Steel, Construction etc. Margin in the Technical Textiles business is the lowest of all the segments despite SRF being a market leader. This is mainly on account of stiff competition and lack of pricing power due to oversupply. We do not expect SRF to incur any capex in this business in the coming years and core focus would be on cost optimization and improving product mix in order to beat the overall industry performance. Revenue share of Technical Textiles in FY20 stood at ~19% and we expect the same to fall to ~10% by FY23E. On the profitability side, Technical Textiles formed ~10% of EBITDA pool in FY20, which we expect to fall to ~5% over the next 3 years.

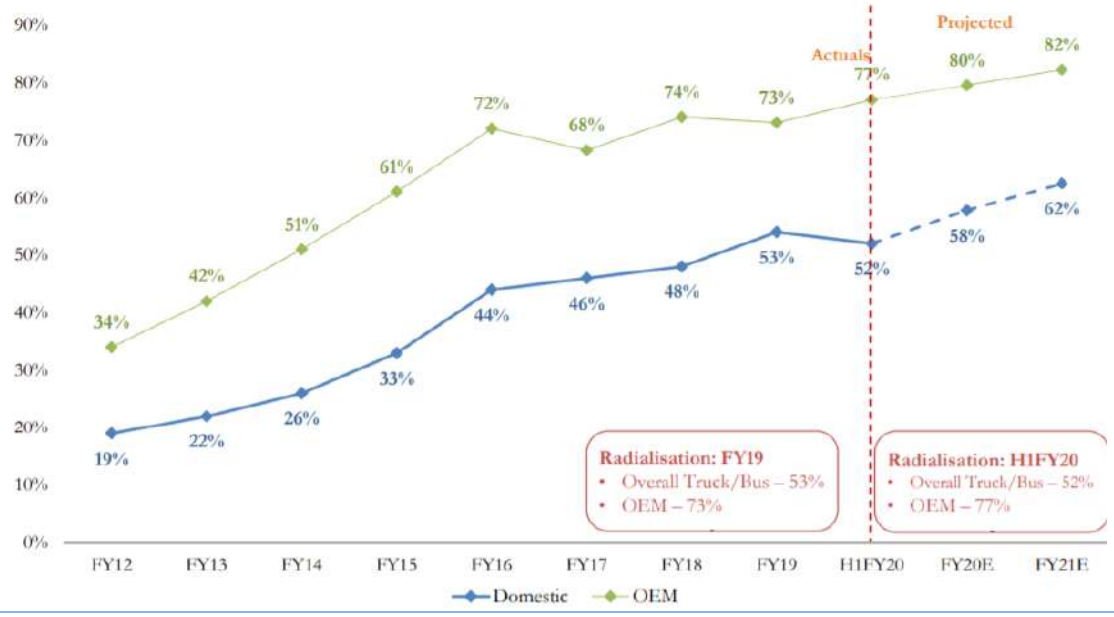
Exhibit 70: Technical textiles revenue- we are building in ~7% CAGR decline over FY20-23E on account of steep decline in FY21

Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 71: Technical textiles EBITDA margin- we do not expect improvement in EBITDA margin on account of rising competition

Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 72: Radialisation of trucks/bus tyres to further reduce salience of nylon tyre cord fabric

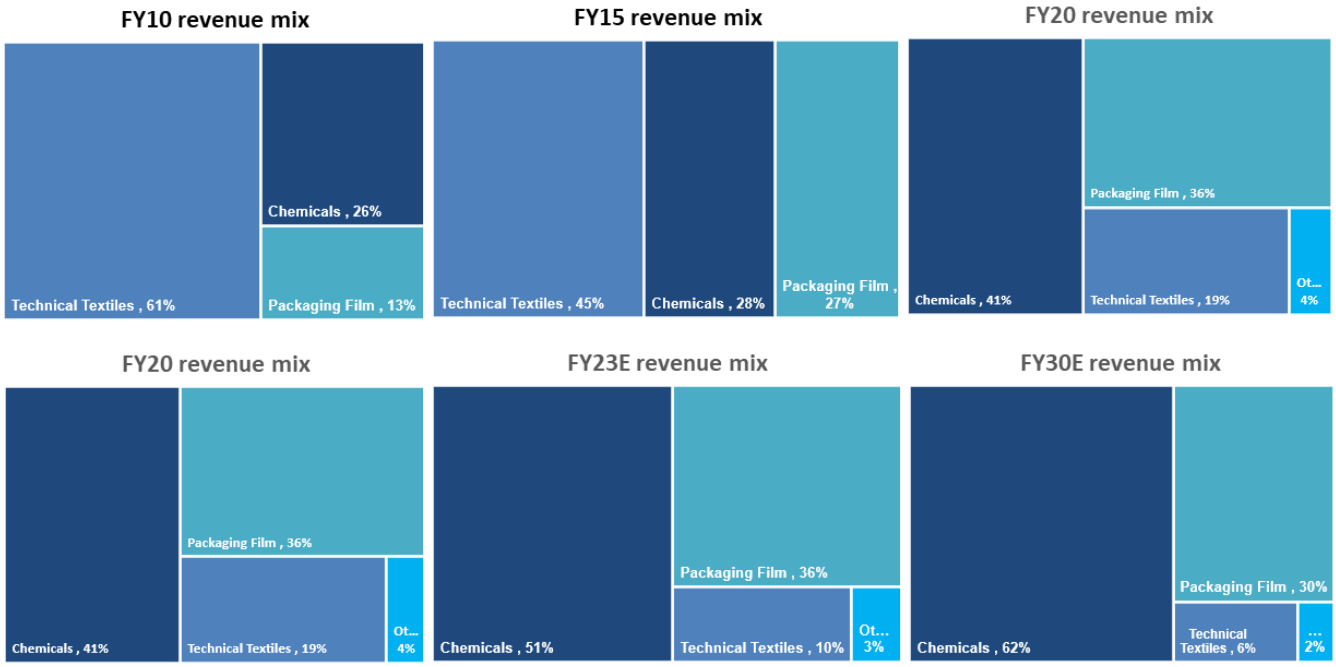


Source: JK Tyres PPT, Nirmal Bang Institutional Equities Research

Financial performance - we are building in ~25% earnings CAGR over FY20-23E

We like SRF management's disproportionate focus on the Chemicals segment, especially Specialty Chemicals, which is expected to outpace the growth of other segments. This would result in a significant shift in the product mix in our view (Chemicals share in total revenue to rise from ~41% in FY20 to ~50% by FY23 as per our estimates) and hence will be reflected in strong earnings growth over the next 3 years despite factoring in near term weakness due to Covid-19 in select end-user industries. Therefore, we are building in ~25% earnings CAGR over FY20-23E.

Exhibit 73: Revenue mix- we expect mix tilting towards chemicals segment in the coming years



Source: Company, Nirmal Bang Institutional Equities Research

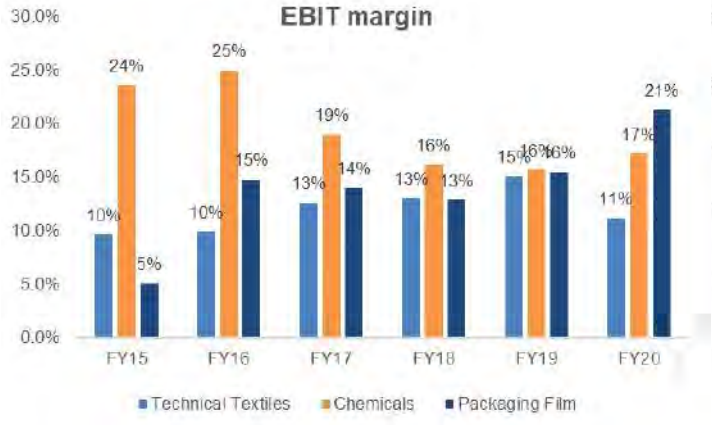
Exhibit 74: Revenue growth- last 10-yr CAGR ~11%

Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 75: Estimated revenue CAGR ~14% for next 5 years

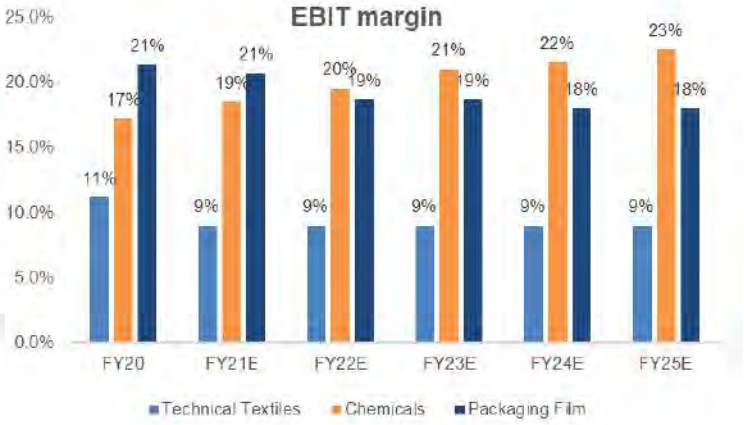
Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 76: Segmental margin



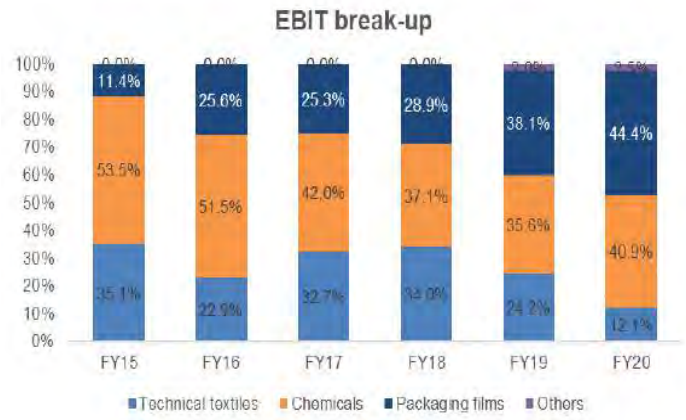
Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 77: Segmental margin estimates



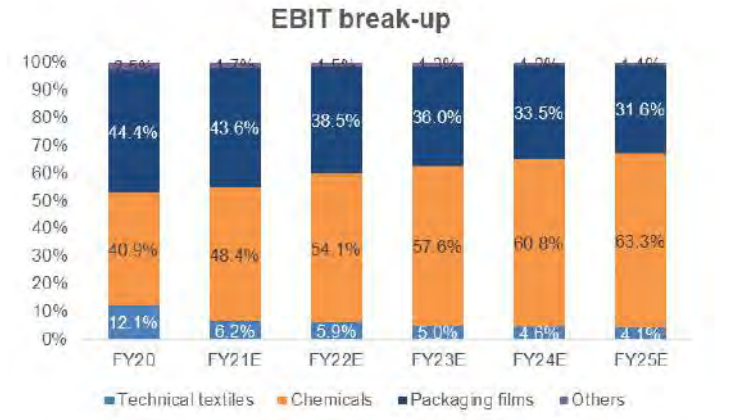
Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 78: EBIT break-up



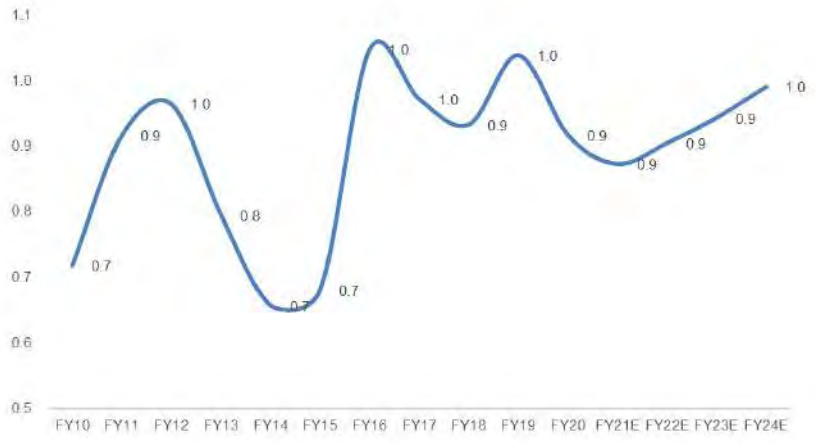
Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 79: EBIT break-up estimates



Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 80: Asset turnover

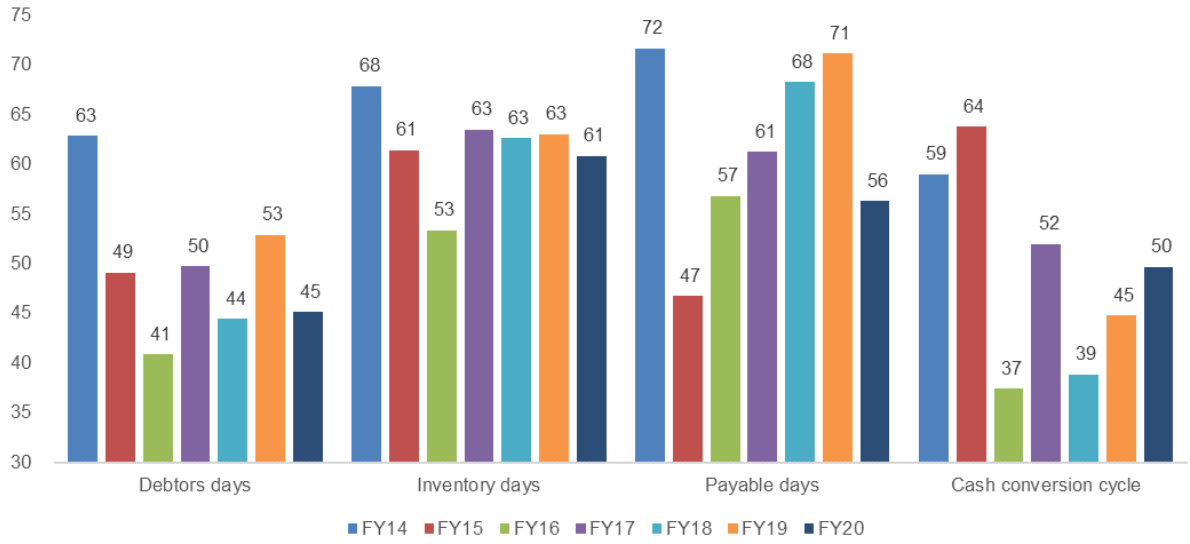


Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 81: Return ratios- SRF in capex mode and hence underlying return ratios will reflect in medium term

Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 82: Working capital days at 50 days is stable

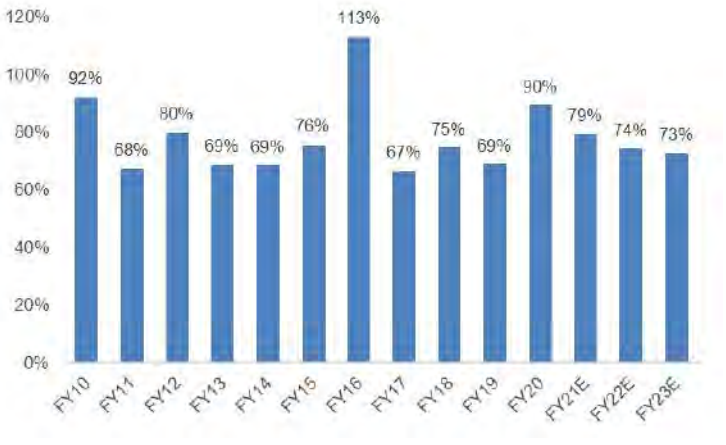


Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 83: Strong cash flow generation- FCF will improve meaningfully after commissioning of WIP projects

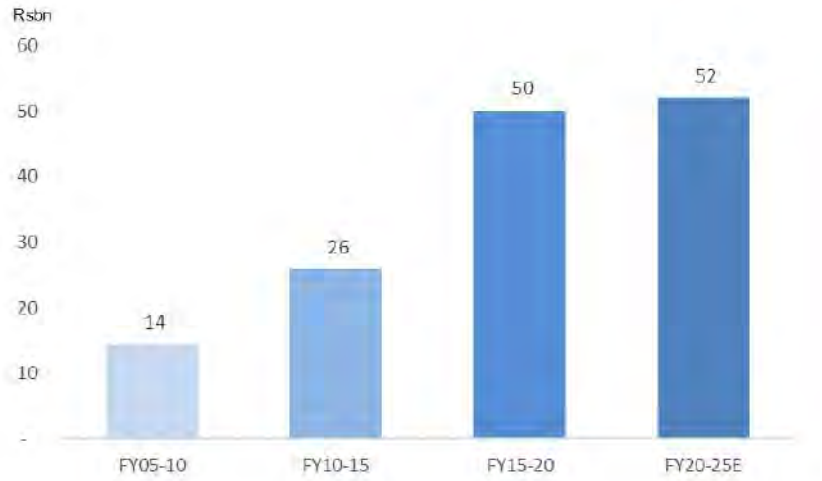
Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 84: OCF/EBITDA ratio remains strong



Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 85: Increased capex intensity clearly visible; higher concentration towards chemicals business is key positive



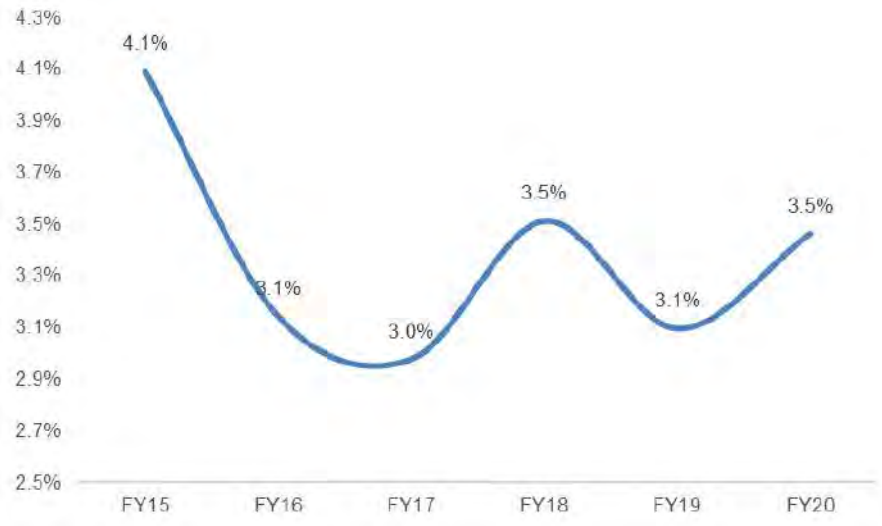
Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 86: Key recent capex announcements

Segment	Announcement	Details	Capex (Rsmn)	COD/ECOD
Chemicals	Aug-17	P33 for agrochemicals	850	2QFY21
	Nov-17	HFC doubling of capacity	4,770	3QFY20
	Feb-19	Agrochemicals intermediates plant	1,660	3QFY20
	Aug-19	Entry in fluoropolymers (5000 MTPA)	4,240	NA
	Jul-20	Doubling of Chloromethane	3,150	4QFY22
	Jul-20	Agrochemicals intermediates plant	2,380	4QFY21
Packaging	Feb-18	BOPET Hungary	3,800	3QFY21
	Jul-18	BOPET Thailand	4,100	1QFY21
	Nov-19	BOPP Line in Thailand (45,000 MTPA)	3,500	2QFY22
Technical textiles	Nov-19	Modernisation of tyre cord fabric	1,250	4QFY23

Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 87: Management remuneration as % PAT

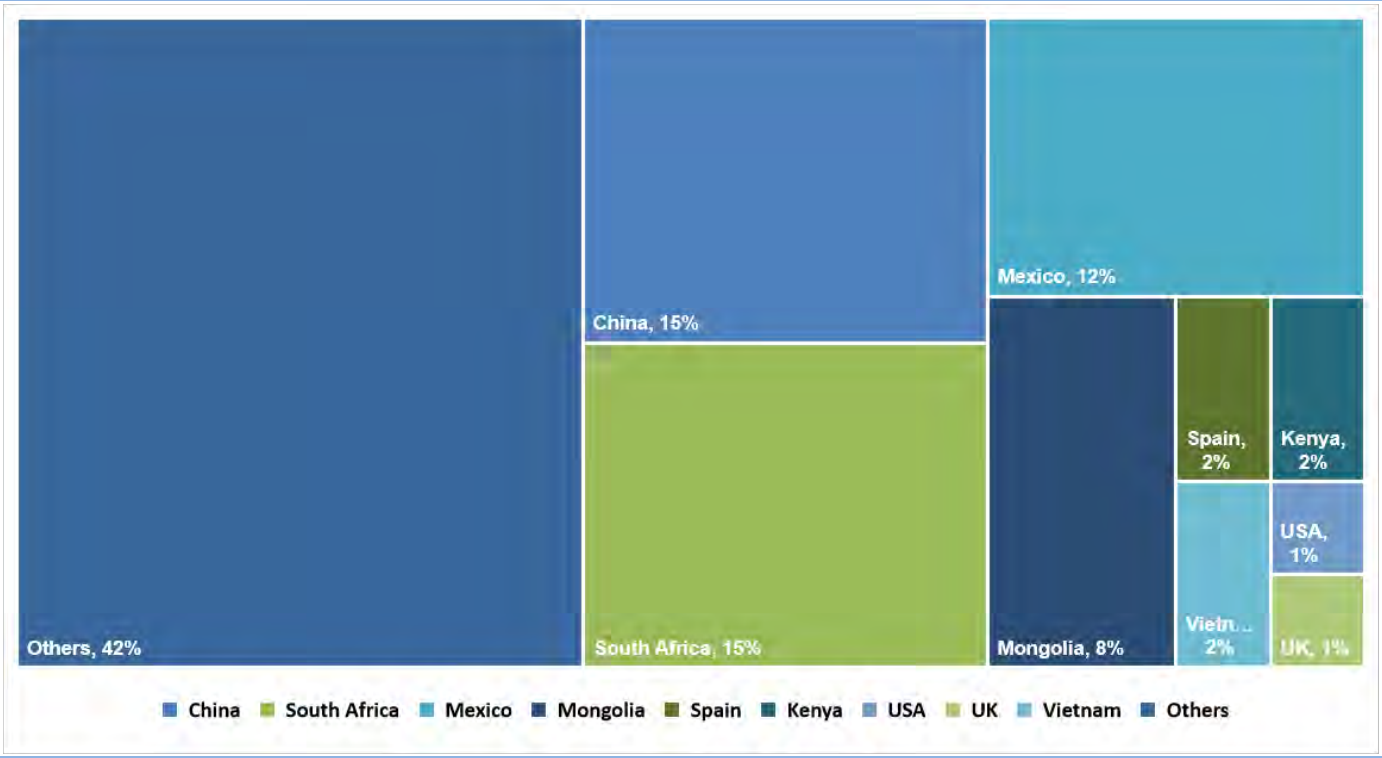


Source: Company, Nirmal Bang Institutional Equities Research

Raw materials - low/nil dependency on China

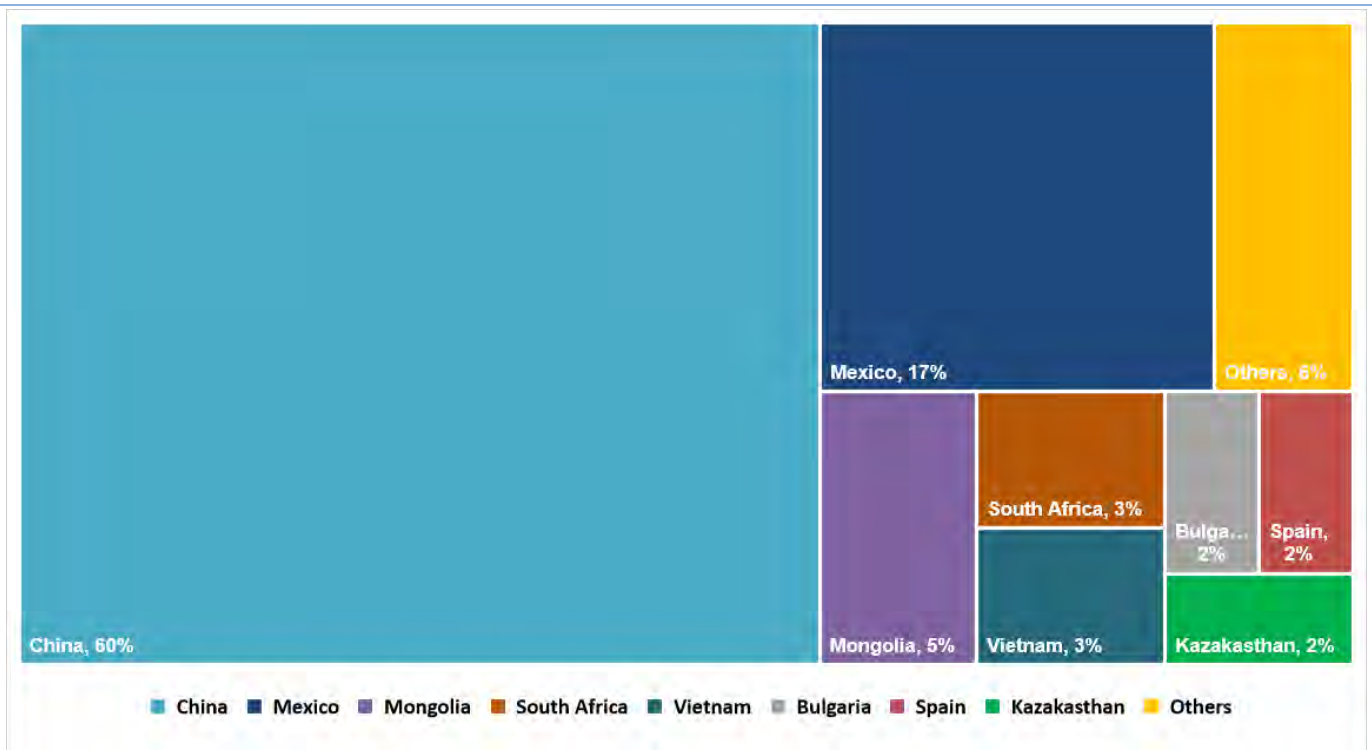
For SRF, fluorspar is the key raw material. Although China has a higher share of fluorspar reserves, SRF has strategically reduced its dependence on China over the years. Therefore, although pricing can undergo disruption due to Chinese dominance, availability of fluorspar from other countries should not be a challenge.

Exhibit 88: Global fluorspar reserves (2018)



Source: Ministry of Mines, Nirmal Bang Institutional Equities Research

Exhibit 89: World production of fluorspar (2015)



Source: Minitstry of Mines, Nirmal Bang Institutional Equities Research

Financial summary

Y/E March (Rsmn)	FY19	FY20	FY21E	FY22E	FY23E
Net Sales	70,996	72,094	77,388	91,047	1,06,257
Growth YoY%	*27.0%*	*1.5%*	*7.3%*	*17.7%*	*16.7%*
Gross margin %	*44.1%*	*48.9%*	*49.4%*	*49.5%*	*49.4%*
EBITDA	12,970	14,549	18,487	21,727	26,434
EBITDA margin %	*18.3%*	*20.2%*	*23.9%*	*23.9%*	*24.9%*
Adj PAT	5,916	6,892	9,348	12,062	13,769
Growth YoY%	*28.1%*	*16.5%*	*35.6%*	*29.0%*	*14.2%*
RoCE	*13.7%*	*13.7%*	*15.5%*	*16.1%*	*18.1%*
RoE	*15.4%*	*15.2%*	*16.4%*	*17.3%*	*17.1%*
P/E	23.3	23.2	26.7	20.7	18.1
EV/EBITDA	13.0	13.0	15.1	12.8	10.6
P/BV	3.3	3.2	3.8	3.3	2.9

Source: Company, Nirmal Bang Institutional Equities Research

Variance with consensus

Particulars	NBIE estimates			Consensus estimates			Variance (%)		
	FY21E	FY22E	FY23E	FY21E	FY22E	FY23E	FY21E	FY22E	FY23E
Revenue	77,388	91,047	1,06,257	76,090	92,460	1,09,174	1.7%	-1.5%	-2.7%
EBITDA	18,487	21,727	26,434	16,612	20,405	24,062	11.3%	6.5%	9.9%
EBITDA margin	23.9%	23.9%	24.9%	21.8%	22.1%	22.0%	206bps	179bps	284bps
APAT	9,348	12,062	13,769	8,404	10,972	13,492	11.2%	9.9%	2.1%

Initiate with Buy and potential upside of ~25%

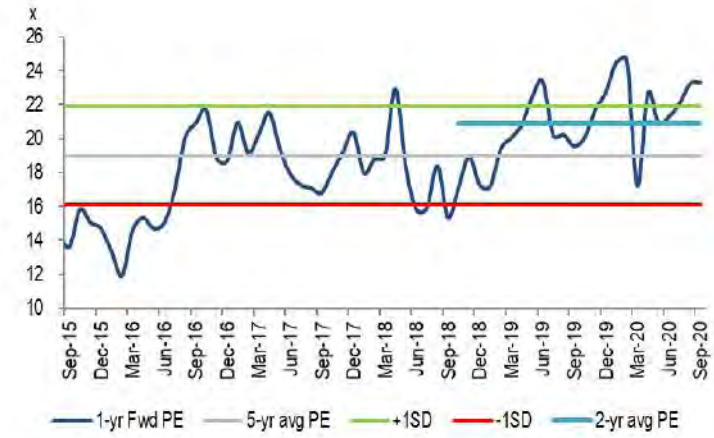
SRF's 5-year and 2-year average PE are ~19x and ~22x, respectively. Currently, the stock is trading above 1 SD based on 5-year average PE. However, we believe that the stock has re-rated over the last one year on account of high capex focus and growth prospects of the Specialty Chemicals business. We expect the company's product mix to change significantly over the next 5 years. Accordingly, the stock deserves a premium valuation. Average revenue share of the Chemicals business over FY15-20 was ~35% and we expect the same to rise to ~51% over FY20-25. This will improve the overall profitability of the business and return ratios. We are building in ~25% earnings CAGR over FY20-23E. Currently, the stock is trading at ~13x 1-year forward EV/EBITDA. We initiate coverage on SRF with TP of Rs5,400 based on SOTP methodology, indicating an upside of ~25% from CMP.

Exhibit 90: 1-yr Forward EV/EBITDA

Particulars	Sept'22 EBITDA	EV/EBITDA multiple	EV
Technical Textiles	1,385	2	2,770
Chemicals	14,244	19	2,70,629
Packaging Film	8,152	8	65,216
Others	300	1	300
Total			**3,38,915**
Less: Net debt			29,431
Equity value			3,09,484
Total number of shares			57
Target price per share			**5,400**
CMP			4,115
Upside			**31%**

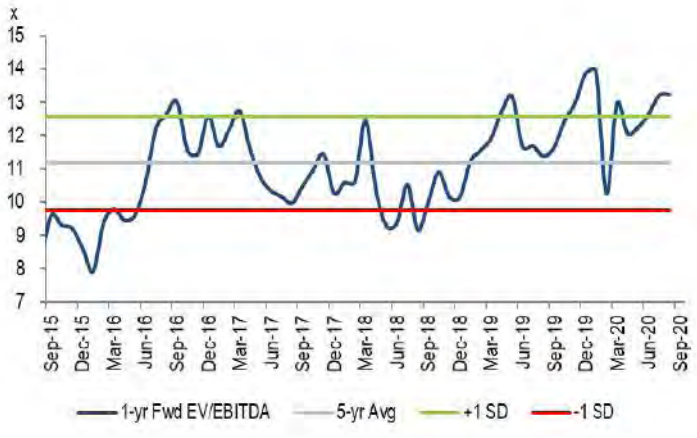
Source: Nirmal Bang Institutional Equities Research

Exhibit 91: 1-yr Forward PE



Source: Bloomberg, Nirmal Bang Institutional Equities Research

Exhibit 92: 1-yr Forward EV/EBITDA



Source: Bloomberg, Nirmal Bang Institutional Equities Research

Exhibit 93: Peer valuation

Company Name	FY20-23E CAGR (%)			EBITDA margin (%)			ROE (%)				P/E (x)			P/B (x)			EV/EBITDA (x)		
	Revenue	EBITDA	PAT	FY20	FY23E	Change	FY20	FY21E	FY22E	FY23E	FY21E	FY22E	FY23E	FY21E	FY22E	FY23E	FY21E	FY22E	FY23E
Indian companies																			
UPL Ltd	9.2	11.9	24.9	20.8	22.4	158bps	15.0	15.4	16.5	17.8	13.4	11.1	9.5	1.9	1.6	1.5	7.6	6.4	5.3
Coromandel International Ltd	7.7	11.4	15.6	12.3	13.6	132bps	25.1	26.4	24.1	22.7	16.4	15.0	13.9	4.0	3.4	2.9	11.0	10.0	9.1
PI Industries Ltd	22.6	25.3	28.2	21.2	22.7	145bps	19.5	19.7	20.5	20.0	44.8	34.5	29.1	6.7	5.8	4.9	32.9	26.1	21.4
Rallis India Ltd	11.6	17.3	17.3	12.8	14.9	207bps	14.6	15.3	16.3	17.1	22.9	19.0	15.8	3.3	2.9	2.5	14.9	12.4	10.5
Bayer CropScience Ltd/India	13.7	21.3	21.8	18.3	22.3	395bps	21.7	24.0	23.6	22.7	37.7	32.8	29.1	8.7	7.2	6.1	27.8	23.9	20.6
BASF India Ltd	11.9	18.8	-284.6	3.0	3.6	59bps	-1.8	5.1	10.1	11.5	38.9	25.0	21.1	4.2	3.7	3.3	19.7	16.0	Na
Navin Fluorine International L	**26.1**	**30.3**	**31.4**	**24.8**	**27.4**	**257bps**	**14.6**	**16.0**	**17.9**	**21.3**	**41.3**	**32.9**	**24.0**	**6.3**	**5.6**	**4.7**	**31.5**	**25.7**	**16.4**
SRF Ltd	**13.8**	**22.0**	**25.9**	**20.2**	**24.9**	**470bps**	**15.2**	**16.4**	**17.3**	**17.1**	**26.9**	**20.9**	**18.3**	**3.9**	**3.4**	**2.9**	**14.8**	**12.6**	**10.3**
Aarti Industries Ltd	**17.0**	**19.1**	**24.2**	**23.3**	**24.6**	**128bps**	**19.1**	**17.1**	**19.7**	**24.2**	**31.5**	**23.8**	**16.6**	**5.1**	**4.4**	**3.7**	**19.2**	**15.3**	**11.4**
Vinati Organics Ltd	**18.8**	**15.6**	**12.2**	**40.3**	**37.2**	**-312bps**	**28.6**	**22.1**	**22.9**	**24.2**	**42.7**	**35.1**	**27.7**	**8.8**	**7.4**	**6.1**	**29.9**	**24.8**	**19.3**
Atul Ltd	5.3	7.6	7.3	22.1	23.6	149bps	20.9	16.9	17.3	17.5	30.6	25.3	22.0	4.9	4.3	3.6	21.0	17.2	15.3
Sudarshan Chemical Industries	11.5	16.2	12.4	15.1	17.2	201bps	22.2	17.5	20.5	22.3	28.5	21.6	17.5	4.7	4.0	3.5	14.3	11.7	9.6
Global companies																			
DuPont de Nemours Inc	0.6	0.0	0.3	26.1	25.7	-42bps	6.4	5.8	6.8	7.5	19.5	17.1	15.0	1.1	1.1	1.0	12.0	10.8	9.9
BASF SE	0.6	2.7	0.5	13.5	14.4	87bps	11.2	3.1	7.1	8.8	21.8	14.9	12.4	1.3	1.3	1.2	9.1	7.7	7.0
Chemours Co/The	-0.4	3.5	5.0	18.3	20.5	220bps	44.8	37.6	44.2	44.5	14.6	10.2	8.1	5.4	4.6	3.9	8.3	6.9	5.8
Solvay SA	-1.4	-2.3	-3.8	22.4	21.8	-62bps	7.6	2.8	7.4	9.3	13.6	12.2	10.1	1.0	1.0	1.0	5.5	5.4	4.8
FMC Corp	4.9	7.6	9.7	26.4	28.5	207bps	27.3	30.4	30.4	30.2	16.8	14.9	13.3	4.7	4.4	4.0	13.1	11.9	11.1
China Petroleum & Chemical Cor	-1.8	-3.0	-4.1	6.8	6.6	-25bps	7.7	2.5	5.0	6.3	31.6	12.9	9.7	0.6	0.6	0.6	4.0	3.0	2.5
Exxon Mobil Corp	-4.9	1.2	3.4	13.9	16.7	285bps	5.3	-1.0	3.0	7.0	-123.7	24.9	12.3	0.8	0.9	0.9	10.8	7.2	5.5

Source: Bloomberg, Nirmal Bang Institutional Equities Research (For companies under coverage, our estimates have been used)

Exhibit 94: India chemical companies has consistently outperformed

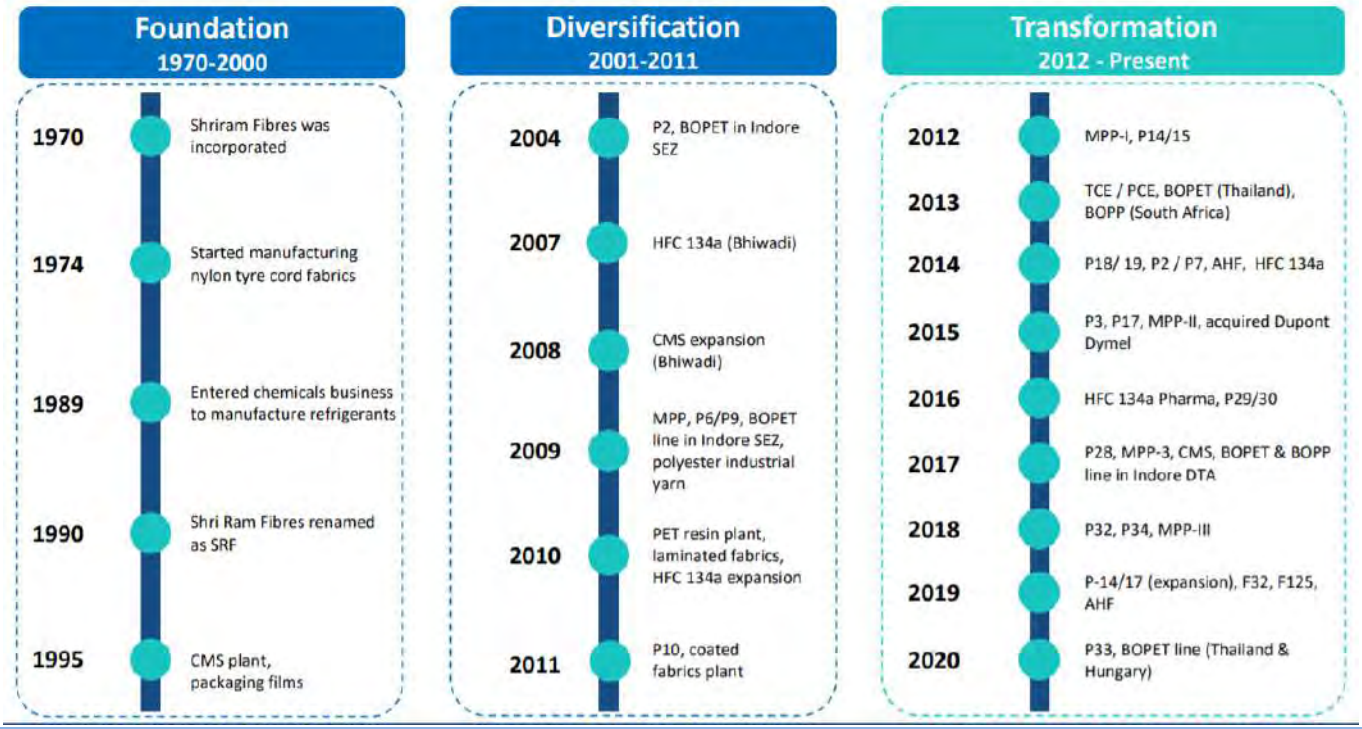
Company Name	0.5yr absolute	1yr absolute	1.5yr CAGR	2yr CAGR	3yr CAGR	4yr CAGR	5yr CAGR	10yr CAGR	15yr CAGR
Nifty 50	33	4	1	6	5	9	8	7	11
Sensex 30	33	5	3	8	8	10	8	7	11
Average of Indian chemical companies	36	57	34	32	21	20	25	27	26
MSCI World Chemical Index	35	12	7	8	3	8	8	6	7
Indian chemical companies									
UPL	48	-11	-11	10	-1	3	10	15	15
Coromandel	36	77	38	37	14	28	30	8	25
PI Industries	44	54	57	61	39	26	24	45	47
Rallis India	31	59	42	20	5	4	5	7	19
Bayer Cropscience India	49	70	21	14	15	6	8	18	23
BASF India	28	55	3	-8	-5	4	7	8	13
Navin Fluorine	**45**	**178**	**102**	**80**	**41**	**44**	**51**	**42**	**25**
SRF	**32**	**68**	**47**	**58**	**37**	**24**	**28**	**28**	**19**
Aarti Industries	**8**	**30**	**15**	**25**	**30**	**29**	**31**	**40**	**25**
Vinati Organics	**51**	**22**	**34**	**42**	**39**	**44**	**43**	**42**	**51**
Atul	42	50	43	35	36	26	30	43	30
Sudarshan Chemicals	17	30	20	14	7	6	33	22	23
Global chemical companies									
Du Pont Nemours Inc	65	-10	-20	-16	-17	-6	-3	3	-0
BASF SE	21	-18	-18	-12	-16	-9	-6	0	4
Chemours	139	56	-31	-21	-26	11	27	na	na
Solvay SA	12	-23	-22	-15	-16	-8	-4	-0	-1
Sinopec	-13	-22	-23	-22	-12	-6	-5	-6	2
Exxonmobil Chemical	-16	-51	-44	-35	-25	-21	-16	-6	-4

Source: Bloomberg, Nirmal Bang Institutional Equities Research

Company background

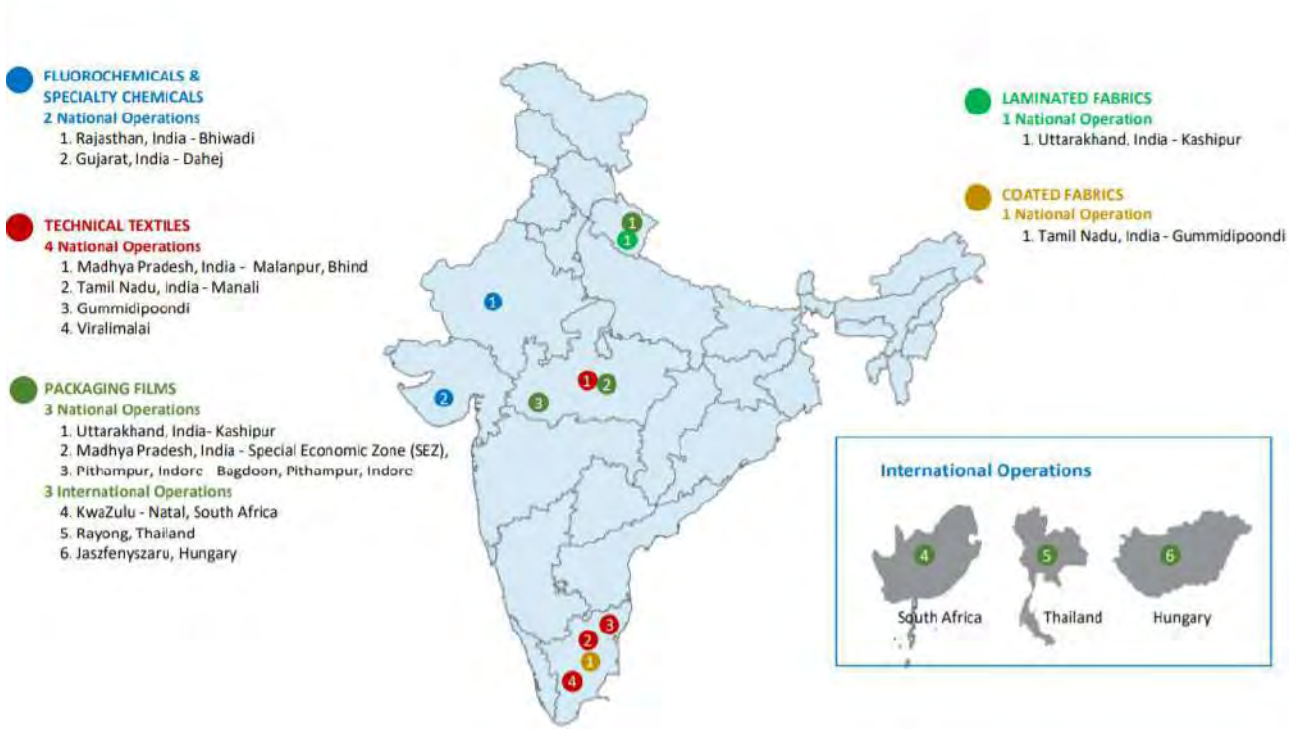
SRF is a multi-business entity with presence in Chemicals, Packaging and Technical Textiles. SRF has successfully transformed itself from a Technical Textiles player into a leading chemical company in India. Within the Chemicals segment, the company is involved in the manufacture of Specialty Chemicals, catering to global Agrochemicals and Pharmaceuticals companies. It primarily manufactures fluorine-based intermediates for such companies. It is also present in Refrigerant Gas and Chloromethane, catering to a variety of sectors. In the Packaging Films segment, the company manufactures BOPET and BOPP films and has manufacturing operations in India, Thailand, South Africa and Hungary. From growth perspective, SRF has disproportionately allocated its capital budget towards Chemicals followed by the Packaging Films business. In the Technical Textiles segment, it primarily manufactures nylon tyre cord fabric and belting fabric. Apart from this, the company manufactures laminated and coated fabrics, which are classified in the other segment. Formation of the Chemicals Technology Group (CTG) suggests its thrust on R&D. Specialty Chemicals is R&D driven and growing at a rapid pace while in other segments the company is in leadership position. The company has filed 205 patents so far and has witnessed an increase in the share of granted patents in the last couple of years.

Exhibit 95: Journey till date



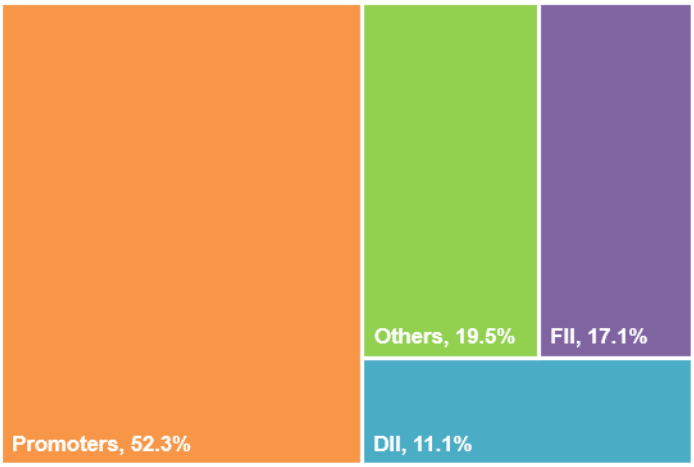
Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 96: Manufacturing facilities



Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 97: Shareholding pattern as on Sep-20



Source: BSE, Nirmal Bang Institutional Equities Research

Exhibit 98: Top 5 public shareholders

Particulars	% holding
Kotak MF	6.37
Nippon India MF	1.12
Mirae Asset Equity	1.07
Amansa Holdings	6.39
Stichting Depository APG	1.1

Source: BSE, Nirmal Bang Institutional Equities Research

Exhibit 99: Key board members profile

Name	Designation	Description
Arun Bharat Ram	Chairman	Arun Bharat Ram, Chairman of SRF Limited is an alumnus of the University of Michigan, USA. He set up SRF in 1970 as a manufacturer of nylon tyre cord, which over the years has also acquired global leadership. He started his career in 1967 with Delhi Cloth & General Mills Co. Ltd. (now DCM Ltd.), the flagship company of Shri Ram Group of Companies
Ashish Bharat Ram	Managing Director	Ashish Bharat Ram took over as Managing Director of SRF Ltd in January 2007. He has assumed various responsibilities across different verticals since he joined SRF in 1994. Under his leadership SRF has grown into a multi locational global entity with operations across 3 countries. Prior to this, Ashish briefly worked as a management trainee at Toyota Motor Corporation, Tokyo, and American Express Bank, New Delhi. He also had a very satisfying stint at DCM Toyota, SRF Finance Limited and SRF Overseas Limited.
Kartik Bharat Ram	Dy Managing Director	Kartik Bharat Ram took over as Deputy Managing Director of SRF Limited in February 2007. He assumed various responsibilities across different verticals in SRF ever since he joined the company in 1993. As Vice President in SRF, Kartik Bharat Ram was instrumental in integrating HR, IT and total quality management (TQM) functions across the organization. Earlier, Kartik worked as an SRF member of the team at McKinsey & Co in 1993, which involved developing and implementing a cost-reduction programme and rationalization of manpower. He has also been associated with designing business processes with Coopers & Lybrand for setting up a new factory under SRF's business in UAE.

Source: Company, Nirmal Bang Institutional Equities Research

Financials (Consolidated)

Exhibit 100: Income statement

Y/E March (Rsm)	FY19	FY20	FY21E	FY22E	FY23E
Net Sales	**70,996**	**72,094**	**77,388**	**91,047**	**106,257**
Growth YoY%	*27.0*	*1.5*	*7.3*	*17.7*	*16.7*
COGS	39,671	36,870	39,182	46,020	53,759
Gross margin %	***44.1***	***48.9***	***49.4***	***49.5***	***49.4***
Staff costs	4,608	5,419	6,064	7,120	8,124
Other expenses	13,747	15,256	13,654	16,180	17,939
EBITDA	**12,970**	**14,549**	**18,487**	**21,727**	**26,434**
Growth YoY%	*43.1*	*12.2*	*27.1*	*17.5*	*21.7*
EBITDA margin %	***18.3***	***20.2***	***23.9***	***23.9***	***24.9***
Depreciation	3,582	3,886	4,767	5,709	6,754
EBIT	9,388	10,663	13,721	16,018	19,681
Interest	1,984	2,007	1,634	1,509	1,473
Other income	280	491	358	1,604	175
PBT (bei)	7,684	9,147	12,444	16,113	18,383
PBT	7,684	9,147	12,444	16,113	18,383
ETR	23.0	2.9	24.9	25.1	25.1
PAT	5,916	9,159	9,348	12,062	13,769
Adj PAT	**5,916**	**6,892**	**9,348**	**12,062**	**13,769**
Growth YoY%	***28.1***	***16.5***	***35.6***	***29.0***	***14.2***

Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 101: Cash flow

Y/E March (Rsm)	FY19	FY20	FY21E	FY22E	FY23E
PBT	**8,269**	**10,706**	**12,444**	**16,113**	**18,383**
Depreciation	3,669	3,929	4,767	5,709	6,754
Interest	2,016	2,016	1,634	1,509	1,473
Other adjustments	-330	-1,940	-358	-1,604	-175
Change in Working capital	-3,165	-239	-720	-3,328	-2,689
Tax paid	-1,502	-1,427	-3,096	-4,051	-4,614
Operating cash flow	**8,956**	**13,044**	**14,671**	**14,348**	**19,131**
Capex	-10,564	-13,892	-10,000	-12,000	-12,000
Free cash flow	**-1,607**	**-847**	**4,671**	**2,348**	**7,131**
Other investing activities	422	2,088	-2,059	-1,287	-2,137
Investing cash flow	**-10,142**	**-11,803**	**-12,059**	**-13,287**	**-14,137**
Issuance of share capital	1	-	7,500	-	-
Movement of Debt	5,534	1,019	-2,312	-2,080	-936
Dividend paid (incl DDT)	-694	-803	-1,378	-1,870	-2,412
Other financing activities	-2,383	-2,205	-1,796	-1,509	-1,565
Financing cash flow	**2,458**	**-1,990**	**2,014**	**-5,459**	**-4,914**
Net change in cash flow	**1,272**	**-748**	**4,625**	**-4,398**	**80**
Opening C&CE	870	1,896	1,255	5,880	1,482
Closing C&CE	1,896	1,255	5,880	1,482	1,562

Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 102: Balance sheet

Y/E March (Rsm)	FY19	FY20	FY21E	FY22E	FY23E
Share capital	591	585	603	603	603
Reserves	40,702	48,748	64,200	74,392	85,749
Net worth	**41,293**	**49,333**	**64,803**	**74,995**	**86,352**
Long term debt	21,613	23,116	20,805	18,724	17,788
Short term debt	11,274	9,554	9,554	9,554	9,554
Total debt	**32,887**	**32,671**	**30,359**	**28,279**	**27,342**
Other non-current	3,986	3,239	3,077	3,077	2,985
Total Equity &	**78,166**	**85,243**	**98,239**	**106,351**	**116,679**
Gross block	68,371	78,668	88,668	100,668	112,668
Accumulated	12,277	16,163	20,930	26,639	33,392
Net Block	**56,094**	**62,505**	**67,738**	**74,030**	**79,276**
CWIP	7,536	13,933	13,933	13,933	13,933
Intangible and others	-	1,171	1,171	1,171	1,171
Other non-current assets	3,525	2,055	3,083	4,624	6,936
Investments	1	42	42	42	42
Trade receivables	10,288	8,911	9,565	11,253	13,133
Inventories	12,247	12,012	12,894	15,170	17,705
Cash & Cash equivalents	11,292	10,896	12,939	15,978	17,857
Other current assets	6,194	4,899	4,899	6,369	6,369
Total current assets	**31,723**	**29,062**	**36,613**	**38,999**	**43,494**
Trade payables	13,824	11,117	11,933	14,039	16,385
Other current liabilities	6,889	12,408	12,408	12,408	11,788
Total current liabilities	**20,713**	**23,525**	**24,341**	**26,447**	**28,172**
Total Assets	**78,166**	**85,243**	**98,239**	**106,351**	**116,679**

Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 103: Key ratios

Y/E March (Rsm)	FY19	FY20	FY21E	FY22E	FY23E
Per share (Rs)					
Adj EPS	102.9	119.9	162.6	209.8	239.5
Book value	718.4	858.3	1,127.4	1,304.7	1,502.3
Valuation (x)					
EV/EBITDA	13.0	13.0	15.1	12.8	10.6
P/E	23.3	23.2	26.7	20.7	18.1
P/BV	3.3	3.2	3.8	3.3	2.9
Return ratios (%)					
RoCE	13.7	13.7	15.5	16.1	18.1
RoE	15.4	15.2	16.4	17.3	17.1
Profitability ratios (%)					
Gross margin	44.1	48.9	49.4	49.5	49.4
EBITDA margin	18.3	20.2	23.9	23.9	24.9
PAT margin	8.3	9.5	12.0	13.0	12.9
Liquidity ratios (%)					
Current ratio	1.0	0.9	1.1	1.1	1.2
Quick ratio	0.6	0.5	0.7	0.7	0.7
Solvency ratio (%)					
Debt to Equity ratio	0.8	0.7	0.5	0.4	0.3
Turnover ratios					
Fixed asset turnover ratio (x)	1.0	0.9	0.9	0.9	0.9
Debtor days	53	45	45	45	45
Inventory days	63	61	61	61	61
Creditor days	71	56	56	56	56
Net Working capital days	45	50	50	50	50

Source: Company, Nirmal Bang Institutional Equities Research

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Navin Fluorine International

16 October 2020

Reuters: NAFL.BO; Bloomberg: NFL IN

Initiating Coverage

'F'lourishing chemistry

Navin Fluorine International (NFIL) is one of the leading manufacturers of specialty fluorochemicals in India. NFIL operates in 4 business segments, namely Refrigerant Gases, Inorganic Fluorides, Specialty Fluorides and CRAMS. In total, NFIL has more than 5 decades of experience in fluorination and has strategically moved up the value chain by building presence across Refrigerant Gases, Inorganic Fluorides (1967), Specialty Chemicals (2000) and CRAMS (2011). Fluorine is considered as a magic element in the chemistry space on account of its applications in various industries, mainly Pharmaceuticals and Agrochemicals. Increased application of fluorine in oncology is positive considering the growth and disproportionate R&D focus. NFIL has excellent relationships with global majors and has established an impressive track record of handling complex chemistries. High value businesses, namely Specialty Chemicals, CRAMS and HPP will drive future growth for NFIL besides improving its overall product mix and profitability in our view. We believe that the company's capex intensity has gone up significantly and expect NFIL to spend ~Rs9bn in capex over FY20-25E, which is higher than cumulative capex done over the last 15 years. We are building in ~40% revenue CAGR from NFIL's high-value business over FY20-23E. For the legacy businesses (Refrigerant Gases and Inorganic Fluorides), we expect modest growth as these segments are not key focus areas for the company considering their low margin profile. NFIL's debt-free balance sheet along with ~22% of total assets in the form of cash & cash equivalents will enable it to go for aggressive expansion. Also, strong cash flow generation will support expansion through internal accruals. Absence of dependency on China for raw materials will also make NFIL a strong candidate for incremental orders from global majors as part of their 'Plus One' theme. Overall, we are building in ~25% revenue CAGR and ~31% earnings CAGR over FY20-23E.

Initiate coverage with ~10% upside: We initiate coverage on NFIL with a TP of Rs2,200 and Accumulate rating based on Sept'22 earnings and target PE multiple of 30x. NFIL's 5-year and 2-year average PE are ~20x and ~24x, respectively. However, we believe that the stock has re-rated significantly over the last one year on account of order wins and strong visibility on high-value businesses. Average revenue share of the high-value businesses in total revenue was 53% over FY15-20 and we expect the same to rise to ~72% over FY20-25. This will improve the company's overall profitability and return ratios. Therefore, we believe that the stock deserves a premium over 5-year average PE multiple. While we are structurally positive on this business, current price largely factors in next 2-3 years' growth in our view.

Y/E March (Rsmn)	FY19	FY20	FY21E	FY22E	FY23E
Net Sales	9,959	10,616	11,850	14,246	21,279
Growth YoY%	*9.1%*	*6.6%*	*11.6%*	*20.2%*	*49.4%*
Gross margin %	*52.1%*	*54.4%*	*54.7%*	*54.9%*	*56.1%*
EBITDA	2,184	2,635	2,999	3,721	5,829
EBITDA margin %	21.9%	24.8%	25.3%	26.1%	27.4%
Adj PAT	1,491	1,819	2,395	3,010	4,129
Growth YoY%	*-17%*	*22%*	*32%*	*26%*	*37%*
RoCE (%)	*18.4%*	*18.2%*	*17.2%*	*18.9%*	*24.1%*
RoE (%)	*14.5%*	*14.6%*	*16.0%*	*17.9%*	*21.3%*
P/E (x)	*23.5*	*33.2*	*41.3*	*32.9*	*24.0*
EV/EBITDA (x)	*15.0*	*21.6*	*31.5*	*25.7*	*16.4*
P/BV (x)	*3.3*	*4.3*	*6.3*	*5.5*	*4.7*

Source: Company, Nirmal Bang Institutional Equities Research

ACCUMULATE

Sector: Chemicals

CMP: Rs1,999

Target Price: Rs2,200

Upside: 10%

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Research Analyst
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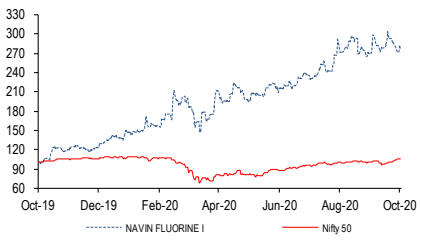
+91-22-6273-8013

Key Data

Current Shares O/S (mn)	49.4
Mkt Cap (Rsbn/US$bn)	101.1/1.4
52 Wk H / L (Rs)	2,250/700
Daily Vol. (3M NSE Avg.)	139,543

Share holding (%)	1QFY20	2QFY20	3QFY20
Promoters	30.5	30.5	31.0
Public	69.5	69.5	69.0
Non-Institutions	-	-	-

One Year Indexed Stock Performance



Price Performance (%)

	1 M	6 M	1 Yr
Navin Fluorine	(1.2)	40.4	186.0
Nifty Index	1.4	30.9	2.2

Source: Bloomberg

Initiate with potential upside of 10%

NFIL's 5-year and 2-year average PE are ~20x and ~24x, respectively. Currently, the stock is trading well above 1 SD based on 5-year average. However, we believe that the stock has re-rated significantly over the last one year on account of order wins and strong visibility on high-value businesses. We expect NFIL's product mix to change significantly over the next 5 years and hence the stock deserves a premium valuation. Average revenue share of the high-value businesses was 53% over FY15-20 and we expect the same to rise to ~72% over FY20-25. This will improve the company's overall profitability and return ratios. Currently, the stock is trading at ~41x 1-year forward earnings. We assign 30x PE multiple based on Sept'22E earnings (in-line with last 1 year's average PE) to arrive at a TP of Rs2,200, indicating an upside of ~10% from CMP.

Exhibit 1: TP calculation

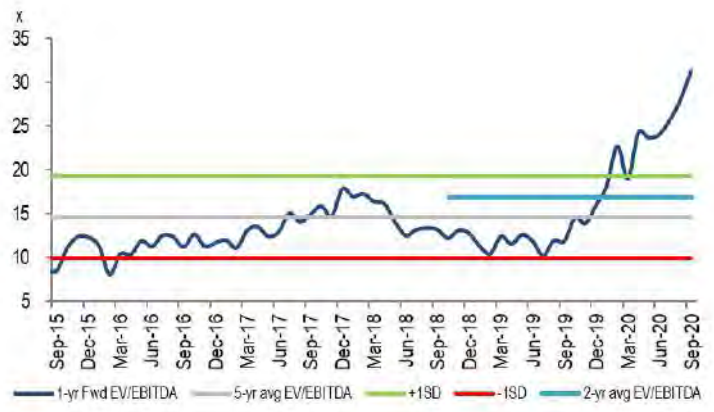
Particulars	
Sept'22 Consolidated EPS (Rs)	72
Target PE multiple (x)	30
Target Price (Rs)	**2,200**

Source: Nirmal Bang Institutional Equities Research

Exhibit 2: 1-year forward PE trend

Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 3: 1-year forward EV/EBITDA trend



Source: Company, Nirmal Bang Institutional Equities Research

We expect exponential growth in high-value segments

Navin Fluorine International Ltd (NFIL) is one of the largest manufacturers of specialty fluorochemicals in India. NFIL operates in 4 business segments, namely Refrigerant Gases, Inorganic Fluorides, Specialty Fluorides and CRAMS. In total, NFIL has more than 5 decades of experience in fluorination and has strategically moved up the value chain by building presence across Refrigerant Gases, Inorganic Fluorides (1967), Specialty Chemicals (2000) and CRAMS (2011).

Refrigerant Gases and Inorganic Fluorides are classified as legacy businesses with limited growth potential whereas Specialty Chemicals and CRAMS are considered as high-value businesses wherein the management is allocating disproportionate capital considering the huge growth potential. We are building in ~46% (including new segment) and ~29% revenue CAGR in Specialty Chemicals and CRAMS businesses, respectively over FY20-23E. Since growth in high-value businesses would be well ahead of the legacy businesses, we expect legacy businesses' revenue share in total revenue to decline from ~44% in FY20 to ~23% in FY23, which would in turn improve the overall profitability. NFIL's segments are fairly diversified in our view, except CRAMS, which caters to only export markets. Also, NFIL is continuously looking for new segments by leveraging its fluorination expertise. High Performance Products (HPP) is one such segment, which is expected to be commissioned from 4QFY22 as part of a long-term contract with annual revenue potential of ~Rs4bn. In the product grid below, we have clubbed this revenue with Specialty Chemicals as its margin profile would be somewhat similar to Specialty Chemicals in our view.

The competitive positioning of NFIL is very strong in our view, particularly in Specialty Chemicals and CRAMS verticals as it has carved a niche for itself in fluorine chemistry. Also, it has an edge in Pharma compared to SRF. In Refrigerant Gases, we do not see incremental focus from NFIL while SRF has expanded its portfolio significantly in order to sustain growth even after factoring in phase out regulation. Therefore, SRF, which is already a domestic market leader in Refrigerant Gases, is expected to gain further share in this segment in our view.

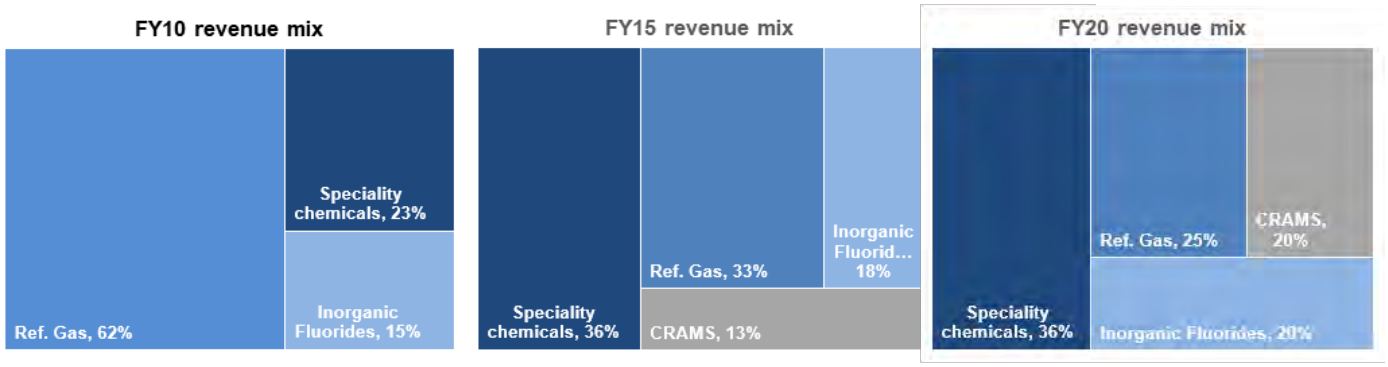
Exhibit 4: NFIL product grid

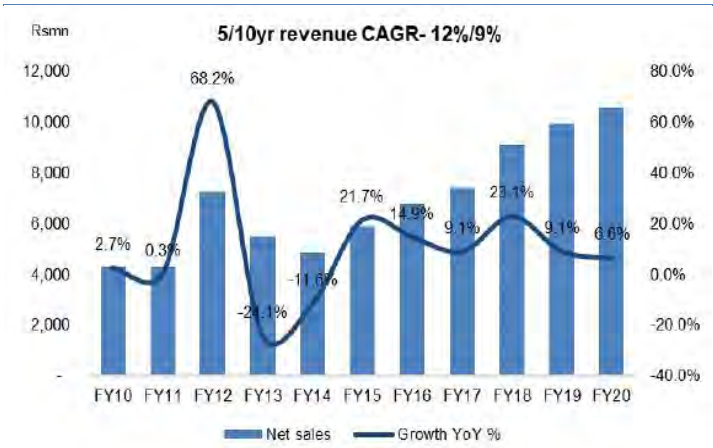
Particulars	Ref. Gases	Inorganic Fluorides	Speciality Chemicals	CRAMS
Revenue share (FY11)	55%	18%	27%	0%
Revenue share (FY20)	25%	20%	36%	20%
Revenue share (FY23E)	11%	12%	55%	21%
Revenue share (FY30E)	7%	10%	50%	34%
Revenue CAGR FY10-20	1%	13%	15%	NA
Revenue CAGR FY20-23E	9%	-4%	46%	29%
Revenue CAGR FY20-30E	3%	9%	21%	24%
Domestic revenue share	*54%*	*88%*	*68%*	*0%*
Exports revenue share	*46%*	*12%*	*32%*	*100%*
EBITDA margin	Moderate	Low	High	High
Future capex intensity	Moderate	Low	HIgh	HIgh
Competitive positioning	Moderate	Moderate	Strong (in fluorine segment)	Strong (in fluorine segment)
Applications	HVAC segment	Mainly Steel, Gas industries and other industries like autombiles, Pharma etc	Pharma (40%), Agrochemicals (40%) and others(20%)	Global pharma and agrochemical majors
Key clients	Blue Star, Carrier, LG, Voltas, Samsung	NA	BASF, Clariant, Bayer, Chemours, Syngene etc	Novartis, Roche etc
Peers	SRF, GFL	Solvay	SRF, Solvay, Chemours	SRF, PI, Divis etc

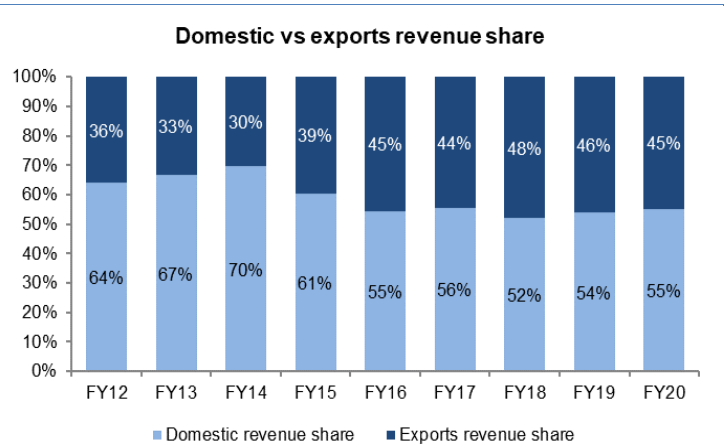
Source: Nirmal Bang Institutional Equities Research

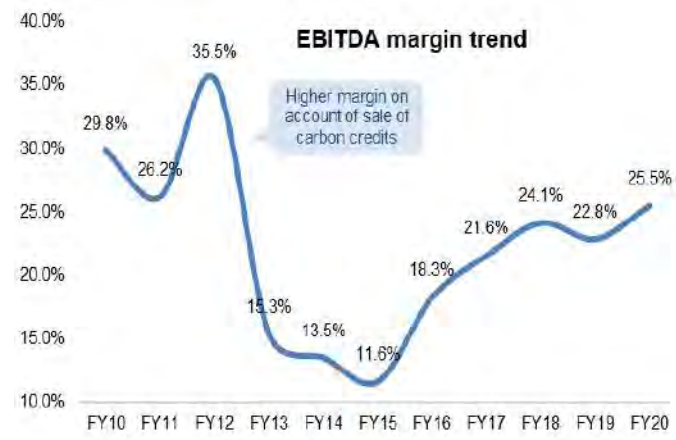
Note- In the above grid, performance of HPP has been clubbeed in specialty chemicals segments as details are not available with regard to the product and the project is expected to start from FY23.

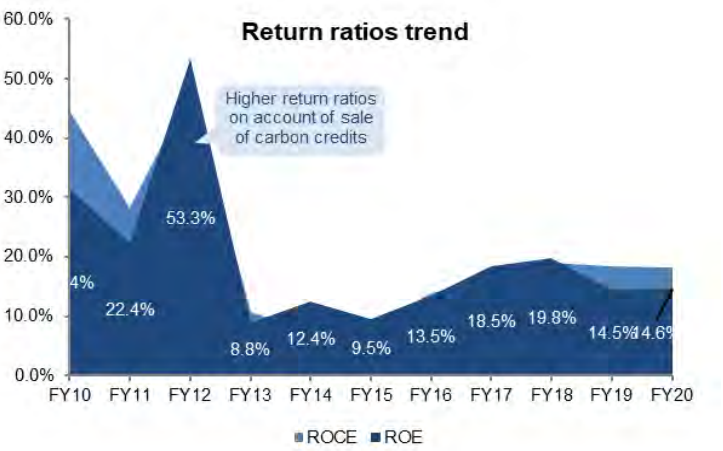
Exhibit 5: FY10-20 dashboard - journey over the last decade

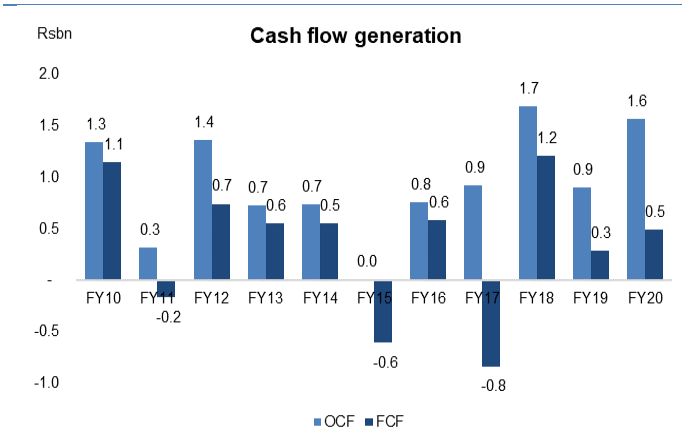


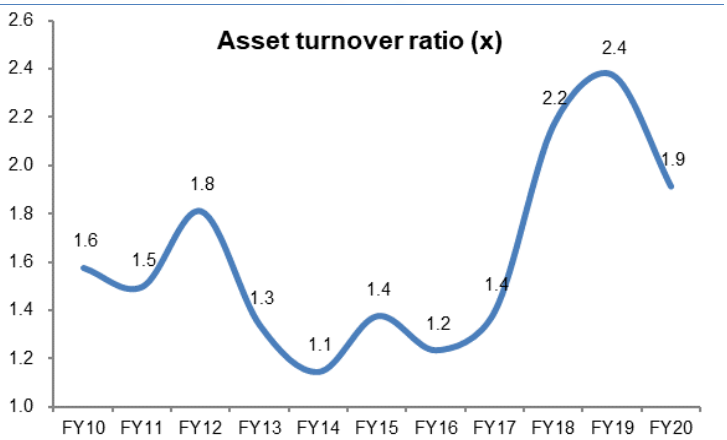






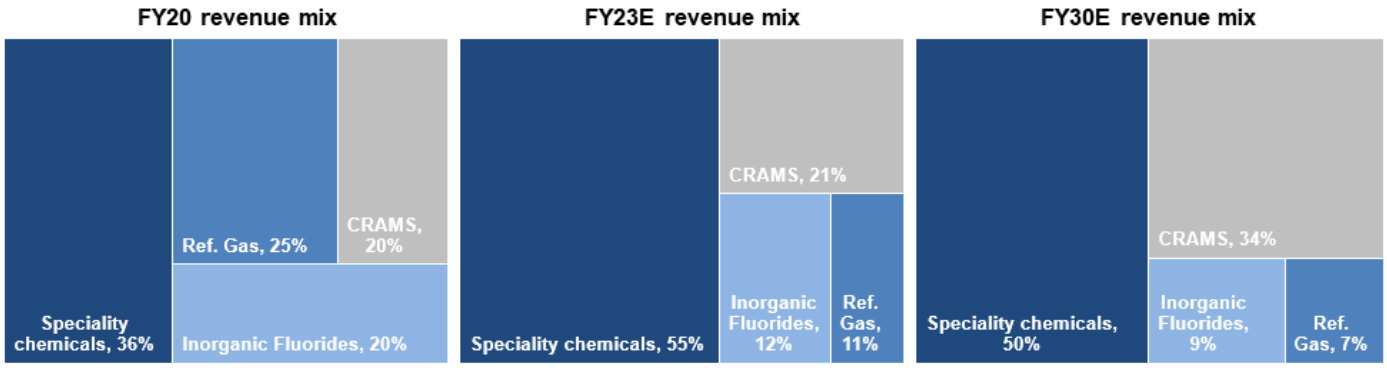


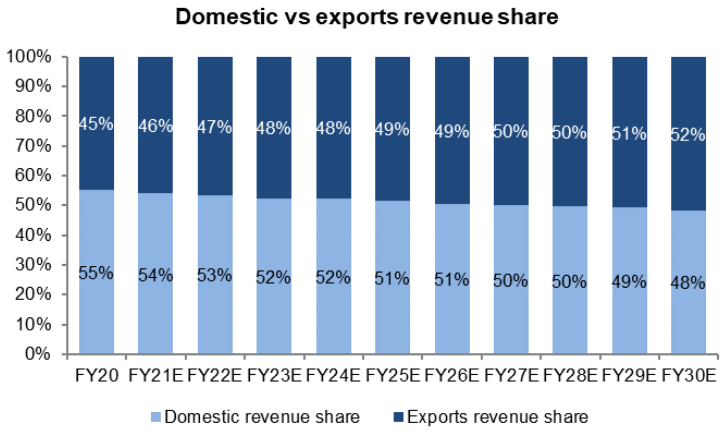


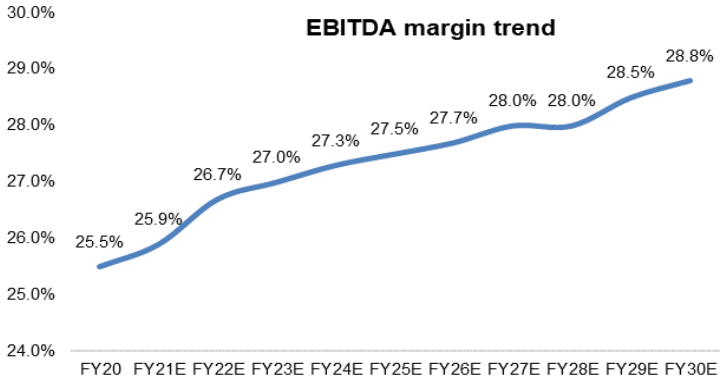


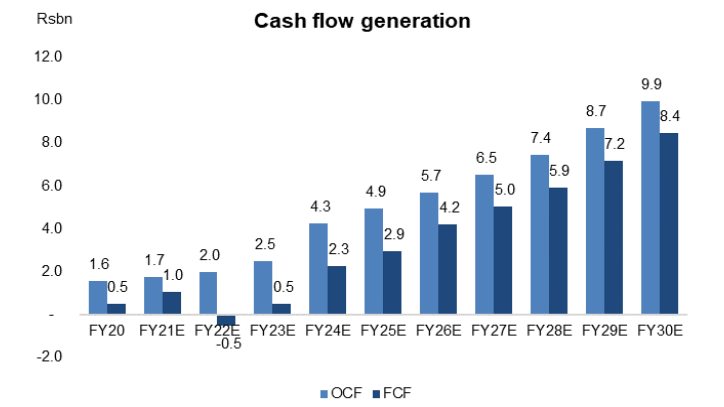
Source: Company, Nirmal Bang Institutional Equities Research

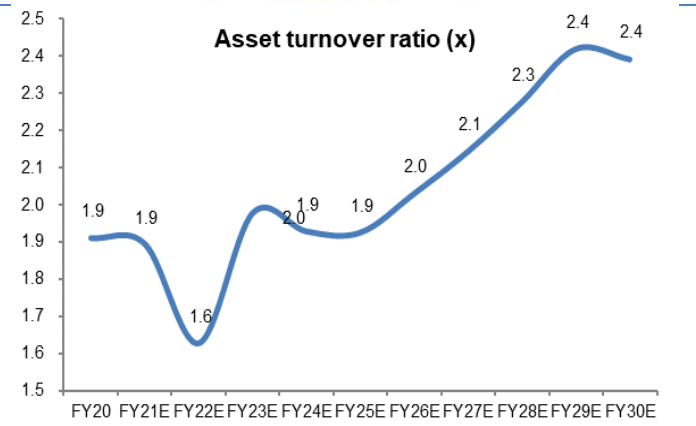
Exhibit 6: FY20-30E dashboard - where is NFIL headed?











Source: Company, Nirmal Bang Institutional Equities Research

Note- In the above grid, performance of HPP has been clubbeed in specialty chemicals segments as details are not available with regard to the product and the project is expected to start from FY23.

Fluorine – an element of magic

Since Moissan isolated elemental fluorine in 1886, fluorine has always been an element of surprise. Fluorine is the most reactive chemical element and the lightest member of the halogen elements. Indeed, despite being absent from natural products and biological processes, fluorine plays an increasingly important role in numerous areas of our daily life. Decades of chemical research has shown that fluorine atom and fluorine containing reaction profoundly impact the structure, reactivity and function of organic and inorganic molecules. Its small size, high electron negativity and high C-F disassociation energy make fluorinated compounds fit for multiple applications like Pharmaceuticals, Agrochemicals, Automobiles, Electronics, Semiconductors etc. Over the last 15 years, fluorine chemistry has undergone a notable transformation from merely a subfield of organic chemistry into a major area of multidisciplinary research, modernizing health, food and energy related industries. Remarkable electronic, physical, biological properties and reactivity of fluoro-organic compounds, compared with those of non-fluorinated counterparts, are being commonly used for technological innovations. Presently, Pharmaceuticals and Agrochemicals are the key end users of fluorine chemistry, which is the result of persistent R&D efforts over the decades. As per industry reports, global fluorochemicals market was valued at US$21bn in 2018 and is expected to reach US$30bn by 2026.

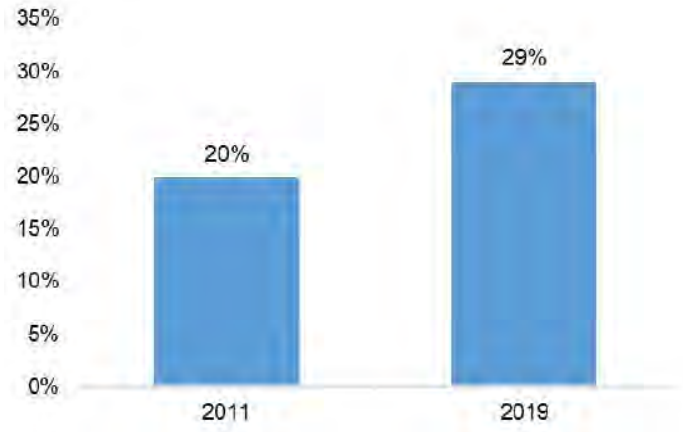
Pharmaceuticals

Worldwide prescription drug sales are expected to grow at ~7% CAGR over 2019-24. In the field of Pharmaceuticals, introducing a fluorine atom or fluorinated group into drugs is often accompanied with higher binding affinity, enhanced metabolic stability, improved bioavailability etc. Over the last 2 decades, fluorine substitution has become one of the essential structural traits in modern pharmaceuticals. Fluorine containing drugs are used for the treatment of various diseases, including cancer, HIV, malaria and smallpox infections. Fluorine has been playing a multi-faceted role in Pharmaceuticals. Although fluorine was regarded as an element of magic and used based on intuition, nowadays it is used with greater confidence as more details have emerged about fluorination's effect on small molecule and interaction with biological system. This is the field of ongoing research and we expect the same to drive demand for fluorine chemistry in the Pharmaceuticals space.

Some key facts

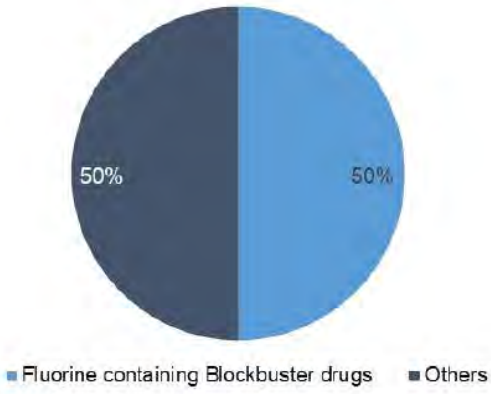
- ✓ In 2019, 29% of the novel drugs approved by the USFDA contained fluorine. This ratio was ~20% in 2011. 50% of the blockbuster drugs (most successful drugs) have at least one fluorine item.
- ✓ Fluorine's application in oncology is very positive as ~50% of the overall pharmaceuticals R&D is skewed towards oncology. As a result, a large part of the products under pipeline belong to the oncology segment. ~40% of the fluorine containing drugs approved by the USFDA over the last 2 years were related to oncology.
- ✓ Top 3 Global R&D projects with expected revenue potential of ~US$9bn by 2024 have at least one fluorine molecule. Also, 1 out of top 10 selling drugs (estimate) has fluorine and the same is expected to grow at ~32% CAGR over 2018-24.

Exhibit 7: Fluorine containing drugs as % of total novel drugs approved by USFDA



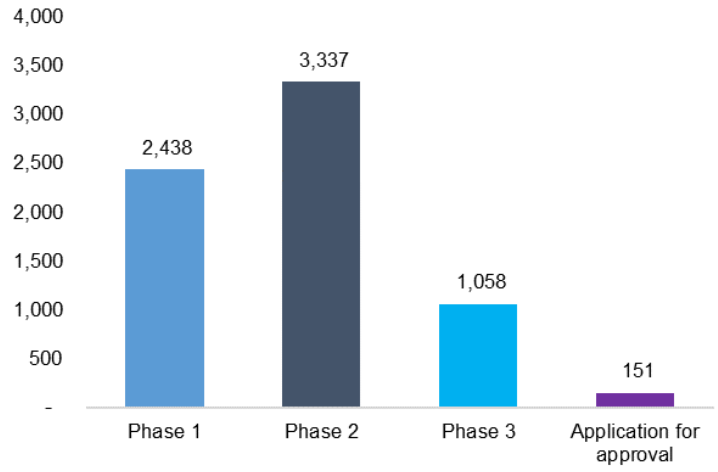
Source: Press reports, Nirmal Bang Institutional Equities Research

Exhibit 8: ~50% of blockbuster drugs contain at least one atom of fluorine



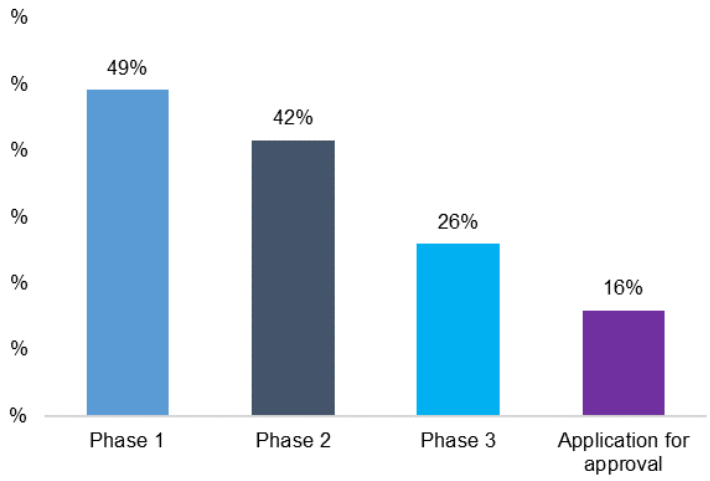
Source: Press reports, Nirmal Bang Institutional Equities Research

Exhibit 9: Drugs under pipeline at various stages



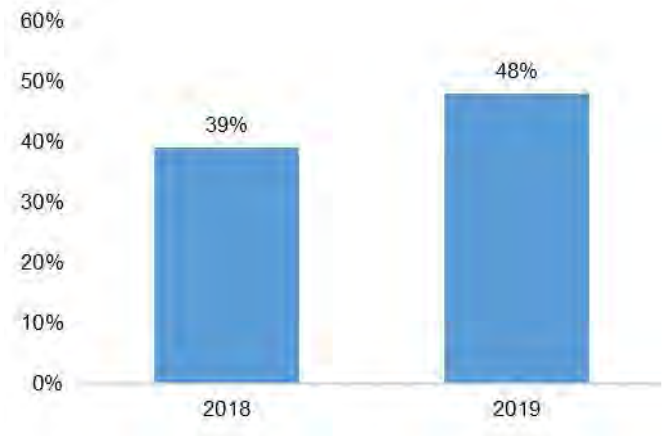
Source: Industry reports, Nirmal Bang Institutional Equities Research

Exhibit 10: Share of oncology in product pipeline is very high



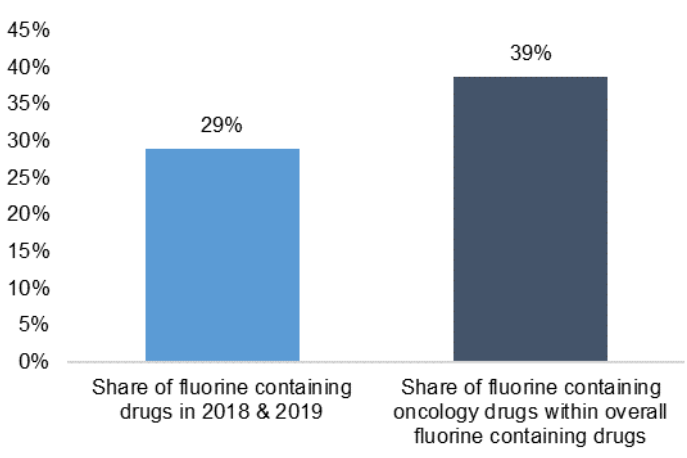
Source: Industry reports, Nirmal Bang Institutional Equities Research

Exhibit 11: Share of oncology drugs in overall USFDA approvals



Source: Industry reports, Nirmal Bang Institutioal Equities Research

Exhibit 12: Higher share of fluorine containing oncology drugs



Source: Indsutry reports, Nirmal Bang Institutional Equities Research

Exhibit 13: Top 10 valuable R&D projects (ranked by NAV) - Top 3 contain fluorine with 2024 revenue potential of US$8bn

Rank	Product	Company	Phase (current)	Mechanism of Action	WW Product Sales ($m) 2024		Today's NPV ($m)
1.	**VX-659/VX-445 + Tezacaftor + Ivacaftor**	Vertex Pharmaceuticals	Phase III	Cystic fibrosis transmembrane regulator (CFTR) corrector; Cystic fibrosis transmembrane regulator (CFTR) potentiator	4,274		**19,984**
2.	**Upadacitinib**	AbbVie	Filed	Janus kinase 1 (JAK1) inhibitor	2,509		**10,246**
3.	**DS-8201**	Daiichi Sankyo	Phase III	Epidermal growth factor receptor ErbB-2 (HER2) antibody	1,790	New Entry	**9,111**
4.	**Liso-cel**	Celgene	Phase III	B-lymphocyte antigen CD19 CAR-T cell therapy	1,378		**8,986**
5.	**Zolgensma**	Novartis	Filed*	Survival of motor neuron 1 (SMN1) gene therapy	1,635	New Entry	**8,011**
6.	**LY3298176**	Eli Lilly	Phase III	Gastric inhibitory polypeptide (GIP) agonist; Glucagon-like peptide 1 (GLP-1) receptor agonist	1,012	New Entry	**7,460**
7.	**Sacituzumab Govitecan**	Immunomedics	Filed	Tumour-associated calcium signal transducer 2 (TROP2) antibody	1,589	New Entry	**6,092**
8.	**Ozanimod**	Celgene	Filed	Sphingosine 1-phosphate (S1P) receptor 1 regulator; Sphingosine 1-phosphate (S1P) receptor 5 regulator	1,516	New Entry	**5,957**
9.	**Brolucizumab**	Novartis	Filed	Vascular endothelial growth factor (VEGF) antibody fragment (Fab)	1,322		**5,907**
10.	**Voxelotor**	Global Blood Therapeutics	Phase III	Sickle haemoglobin (HbS) polymerisation inhibitor	1,711	New Entry	**5,871**
	Top 10				18,737		**87,625**
	Other				175,045		503,317
	Total				193,782		**590,943**
					NPV of R&D Pipeline MAY 2018:		**576,990**

Source: Evaluate Pharma Report, Nirmal Bang Institutional Equities Research

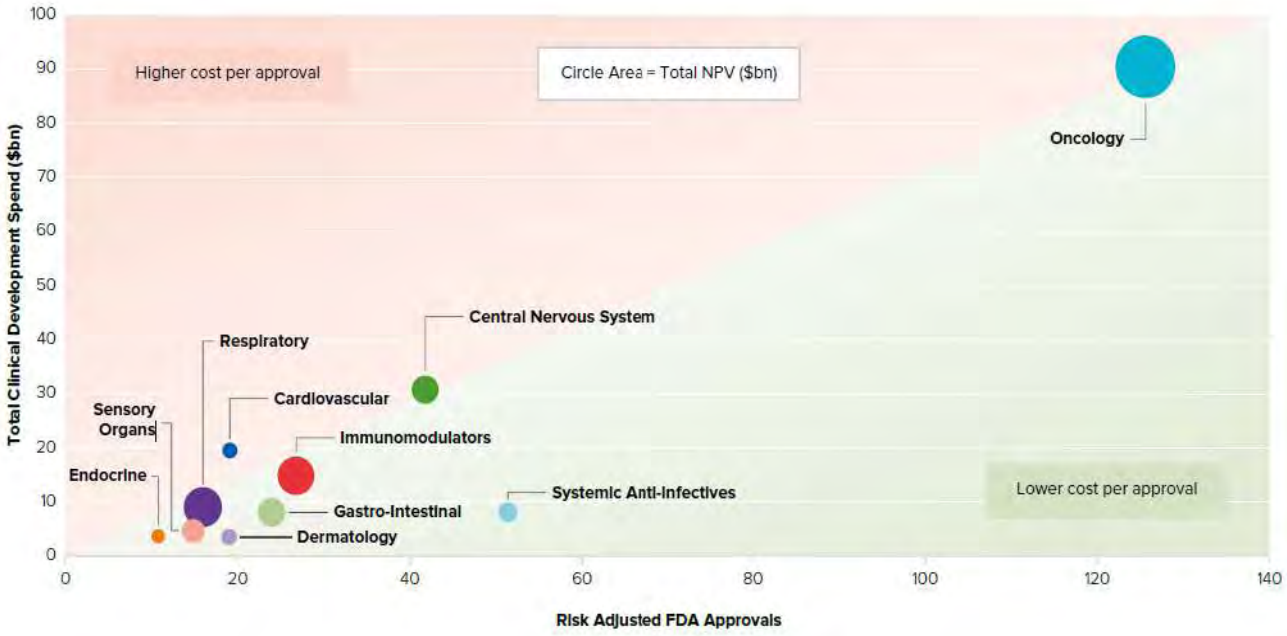
Exhibit 14: Presence of fluorine in potential top 10 selling drugs

Rank	Product	Generic Name	Company	Mechanism of Action	WW Product Sales ($m) 2018	2024	CAGR	Market Status
1.	**Keytruda**	pembrolizumab	Merck & Co + Otsuka Holdings	Programmed cell death protein 1 (PD1) antibody	7,198	17,009	+15.4%	Marketed
2.	**Humira**	adalimumab	AbbVie + Eisai	Tumour necrosis factor alpha (TNFa) antibody	20,485	12,403	-8.0%	Marketed
3.	**Eliquis**	apixaban	Bristol-Myers Squibb	Coagulation factor Xa inhibitor	6,438	12,021	+11.0%	Marketed
4.	**Opdivo**	nivolumab	Bristol-Myers Squibb + Ono Pharmaceutical	Programmed cell death protein 1 (PD1) antibody	7,574	11,323	+6.9%	Marketed
5.	**Imbruvica**	ibrutinib	AbbVie + Johnson & Johnson	Bruton's tyrosine kinase (BTK) inhibitor	4,454	9,514	+13.5%	Marketed
6.	**Ibrance**	palbociclib	Pfizer	Cyclin-dependent kinase 4 (CDK4) inhibitor; Cyclin-dependent kinase 6 (CDK6) inhibitor	4,118	9,128	+14.2%	Marketed
7.	**Revlimid**	lenalidomide	Celgene	Interleukin-6 (IL-6) antagonist; Natural killer (NK) cell stimulant; Natural killer T-cell (NKT) stimulant; Tumour necrosis factor alpha (TNFa) inhibitor; Vascular endothelial growth factor (VEGF) inhibitor	9,816	8,057	-3.2%	Marketed
8.	**Stelara**	ustekinumab	Johnson & Johnson + Mitsubishi Tanabe Pharma	Interleukin-12 (IL-12) antibody; Interleukin-23 (IL-23) receptor antibody	5,293	7,791	+6.7%	Marketed
9.	**Eylea**	aflibercept	Regeneron Pharmaceuticals + Bayer + Santen Pharmaceutical	Vascular endothelial growth factor receptor (VEGFR) antagonist	7,159	7,313	+0.4%	Marketed
10.	**Biktarvy**	bictegravir sodium; emtricitabine; tenofovir alafenamide fumarate	Gilead Sciences	HIV-1 integrase inhibitor; HIV-1 nucleoside reverse transcriptase inhibitor (NRTI)	1,184	6,977	+34.4%	Marketed
	Total				**73,719**	**101,536**	**+5.5%**	
	Total WW Individual Products Forecast in EvaluatePharma®				**676,147**	**989,099**	**+6.5%**	

Source: Evaluate Pharma Report, Nirmal Bang Institutional Equities Research

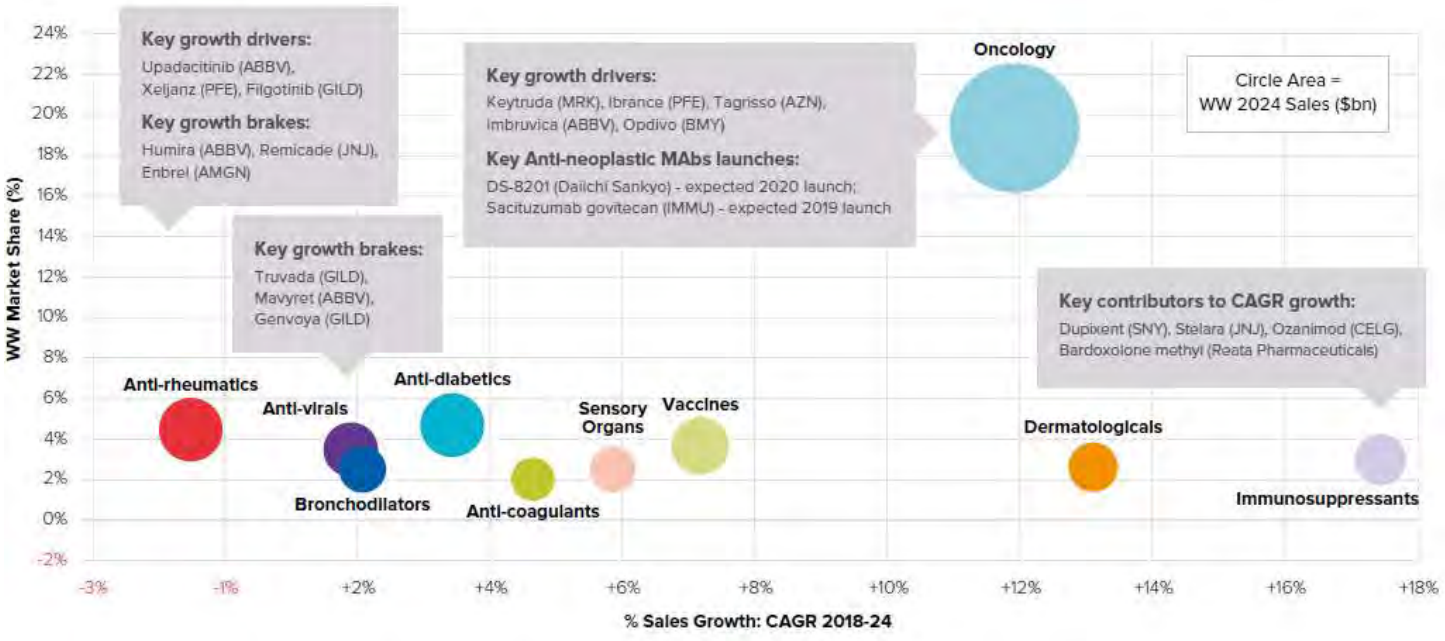
Oncology is the key focus area as far as global pharma R&D is concerned. ~50% of total R&D budget is allocated towards oncology. Oncology is expected to be the fastest growing segment despite having higher market share in the overall pie. Since fluorine applications are rising in oncology, we expect NFIL to be the key beneficiary, which can drive non-linear growth in its Specialty Chemicals and CRAMS segments.

Exhibit 15: Disproportionate focus on oncology research



Source: Evaluate Pharma Report, Nirmal Bang Institutional Equities Research

Exhibit 16: Oncology is fastest growing segment with high market share; structural positive for future of fluorine chemistry



Source: Evaluate Pharma Report, Nirmal Bang Institutional Equities Research

Exhibit 17: Global pharma R&D- pharma majors focusing on core activities would translate into strong growth opportunity

Rank	Company	Pharma R&D ($bn) 2018	2024	CAGR 2018-24	R&D As a % of Prescription Sales 2018	2024	Chg. (+/-)
1.	Johnson & Johnson	8.4	9.9	+2.6%	21.8%	21.6%	-0.2pp
2.	Roche	9.8	9.9	+0.1%	22.0%	21.1%	-0.9pp
3.	Merck & Co	7.9	9.2	+2.5%	21.2%	21.6%	+0.4pp
4.	Novartis	8.2	9.2	+2.0%	18.8%	18.4%	-0.4pp
5.	Pfizer	8.0	8.9	+1.9%	17.6%	17.4%	-0.2pp
6.	GlaxoSmithKline	5.0	6.8	+5.3%	16.3%	17.6%	+1.3pp
7.	Bristol-Myers Squibb	5.1	6.7	+4.5%	23.8%	22.5%	-1.3pp
8.	Sanofi	6.2	6.7	+1.2%	17.7%	16.4%	-1.3pp
9.	Eli Lilly	5.0	6.1	+3.4%	25.5%	23.6%	-1.9pp
10.	AstraZeneca	5.3	5.9	+1.8%	25.5%	18.2%	-7.3pp
	Total Top 10	68.9	**79.1**	+2.3%	20.4%	19.6%	-0.8pp
	Other	110.0	**133.9**	+3.3%			
	Total	178.9	**213.0**	+3.0%	21.6%	18.0%	-3.6pp

Source: Evaluate Pharma Report, Nirmal Bang Institutional Equities Research

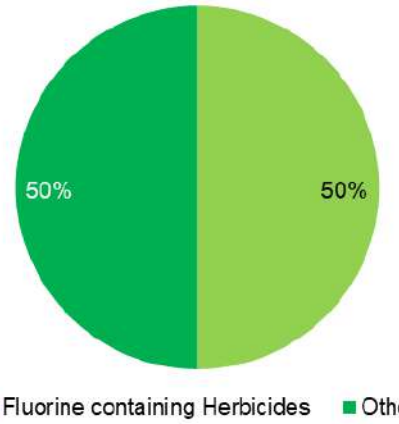
Agrochemicals

- Global agrochemicals industry is expected to grow at ~3% till 2027 while the Indian crop protection industry is expected to grow at ~8% CAGR over 2019-25.
- As per industry reports, fungicides and herbicides contain in most cases fluorine atoms, whereas nematicides and insecticides contain in most cases 'mixed' halogen atoms like chlorine and fluorine. It is well recognized that the ratio of fluorine-containing pesticides is increasing along with the progress of fluorine chemistry. In many cases, they have remarkable pesticidal activity as well as physicochemical properties by introduction of fluorine atom(s).

Some key facts

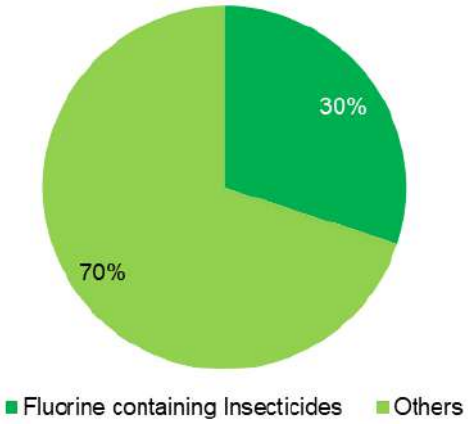
- ✓ As per industry reports, ~50% of the herbicides and fungicides contain at least one fluorine atom. Herbicides account for ~45% of total global agrochemicals market whereas the share of fungicides is ~26%.
- ✓ Also, ~30% of the total insecticides contain fluorine and its presence is rising YoY. Insecticides account for ~25% of the total global agrochemicals market.
- ✓ Succinate dehydrogenase inhibitor (SDHI) fungicides are broad-spectrum fungicides. Some of the most commonly used SDHI active ingredients are penthiopyrad, bixafen, isopyrazam, fluxapyroxad or boscalid, all of which contain fluorine. Europe dominates the market. Overall, adoption rate of SDHI fungicides in the cereals segment is rising significantly with fluxapyroxad as an active ingredient from the major sub-segment of SDHI fungicide. The global SDHI fungicide market is a consolidated market with major players holding prominent share. The major players in this market include Syngenta, Bayer Crop Science, Corteva, BASF SE, UPL etc. Syngenta AG, Bayer Crop Science and BASF SE hold major share in the market. As per industry reports, global SDHI fungicides market has grown significantly over the last 10 years in order to reach ~US$2bn. It is expected to grow at ~8% CAGR over the next 5 years.

Exhibit 18: ~50% of the herbicides (largest sub-segment of agrochemicals globally) contain at least one atom of fluorine



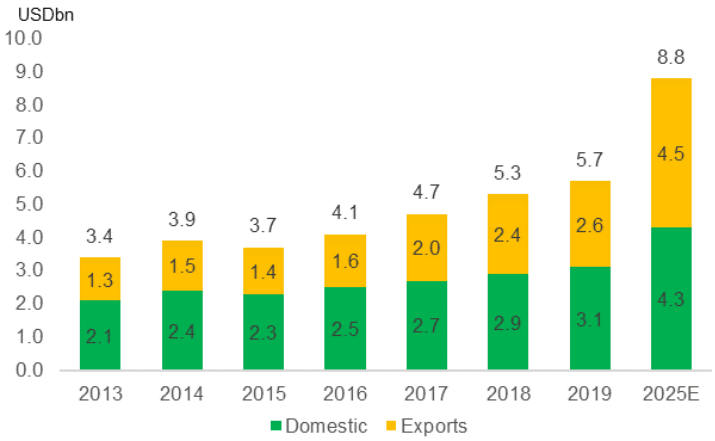
Source: Press reports, Nirmal Bang Institutional Equities Research

Exhibit 19: Proportion of fluorine containing insecticides is rising



Source: Press reports, Nirmal Bang Institutional Equities Research

Exhibit 20: India crop protection market expected to grow at ~8% CAGR over 2019-25 (exports CAGR ~10%)

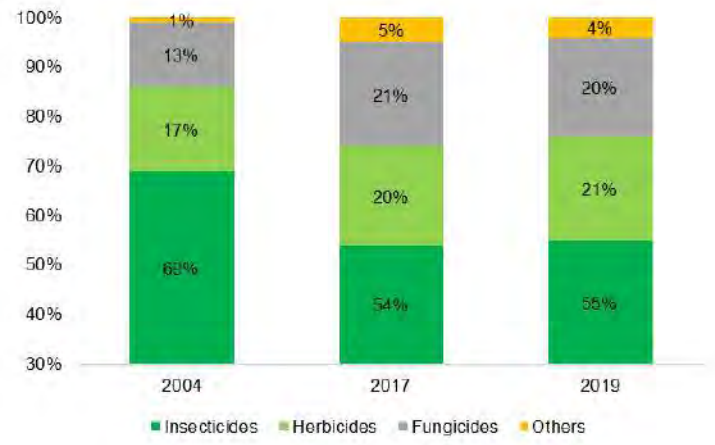


Source: UPL, Nirmal Bang Institutional Equities Research

Exhibit 21: Global agrochemicals industry is expected to grow at ~3% CAGR over 2019-27

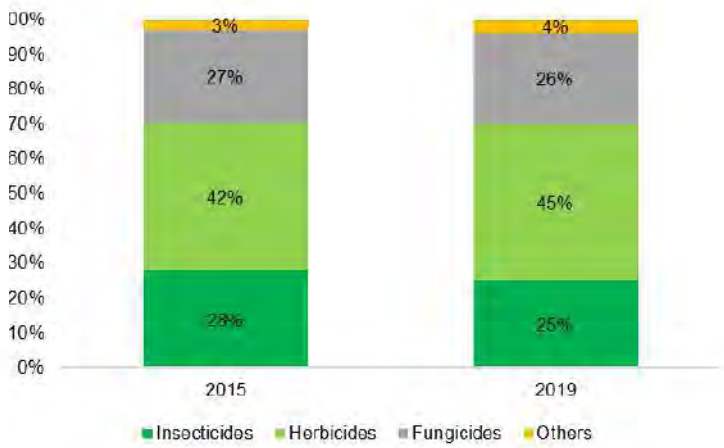
Source: UPL, Nirmal Bang Institutional Equities Research

Exhibit 22: Insecticides form ~55% of India crop protection market



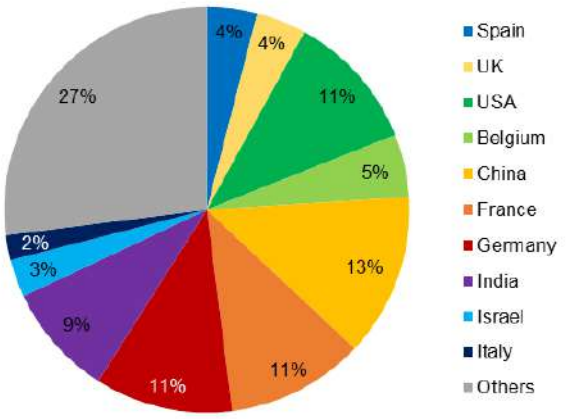
Source: UPL, Nirmal Bang Institutional Equities Research

Exhibit 23: Globally, herbicides have a higher share (~45%) in the overall agrochemicals pie and has gained share



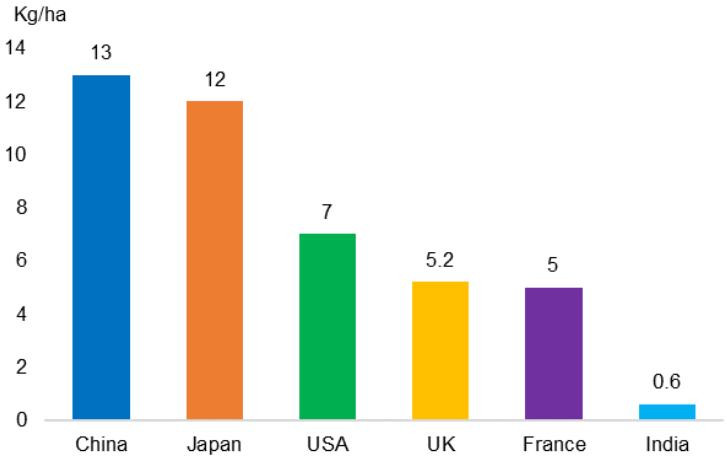
Source: UPL, Nirmal Bang Institutional Equities Research

Exhibit 24: World agrochemicals exports (2019)



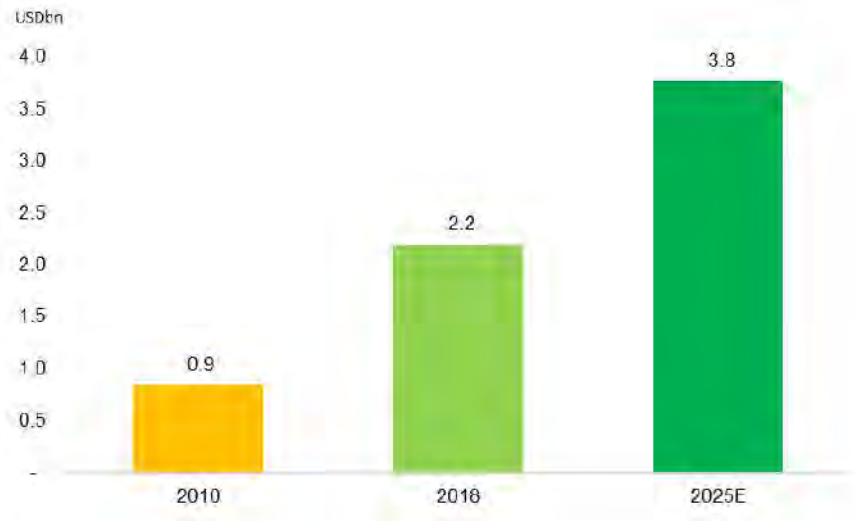
Source: UN Comtrade, Nirmal Bang Institutional Equities Research

Exhibit 25: Agrochemicals consumption (2016)



Source: UN Comtrade, Nirmal Bang Institutional Equities Research

Exhibit 26: Global SDHI market is growing rapidly; majority of the common intermediates or APIs contain fluorine



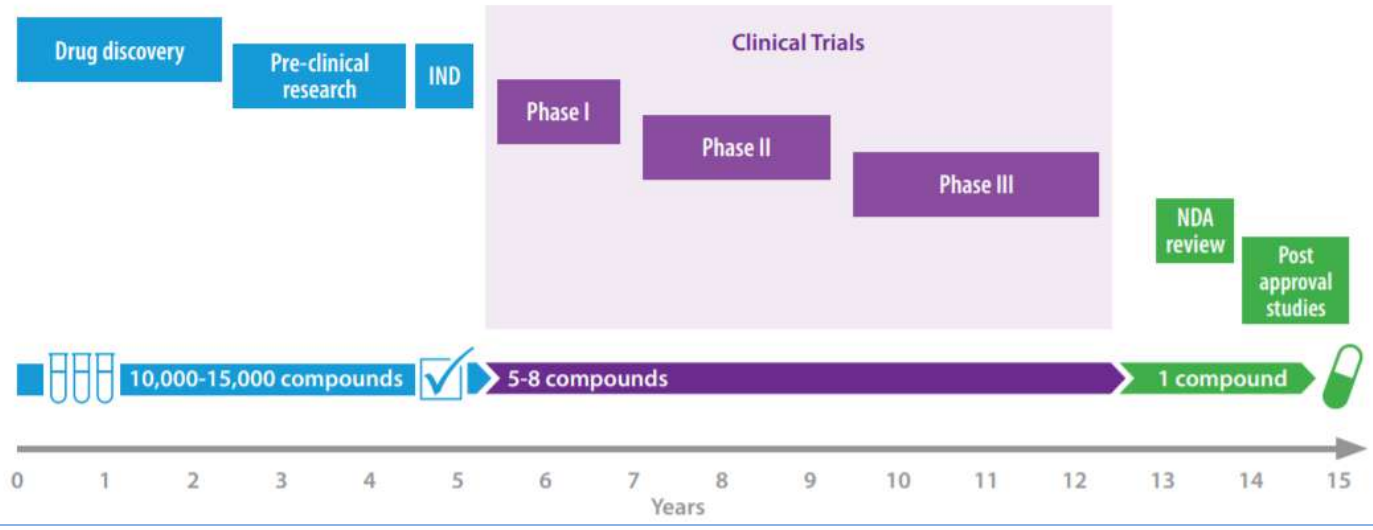
Source: Industry reports, Nirmal Bang Institutional Equities Research

CRAMS is an imperative, not a buzzword

Contract Research and Manufacturing Services (CRAMS) has got key importance in pharma industry as pharma majors are increasingly trying to outsource some of their activities in order to increase efficiency and optimize time-to-market. Barriers to entry in the CRAMS space are high and companies excelling on parameters like scale, quality, consistency and technical expertise can be rewarded disproportionately. CRAMS companies, given their ability to adopt and integrate advanced technologies and their teams of highly qualified scientists, can accelerate the development of a compound. This reduces the client companies' need to maintain its own R&D infrastructure, equipment and manpower to a large extent. We expect outsourcing to gradually evolve as a strategic function in most big pharma and agrochemicals companies as these companies increasingly leverage CROs (contract research organizations) and CDMOs (contract development and manufacturing organizations). Globally, CRAMS business is outpacing growth of pharma companies. Indian CRAMS companies offer advantages like availability of skilled resources, cheap labour, lower IP-security risk and improving infrastructure. Especially compared to China, Indian CRAMS players have become competitive considering the sharper depreciation in the INR against USD when compared to CNY.

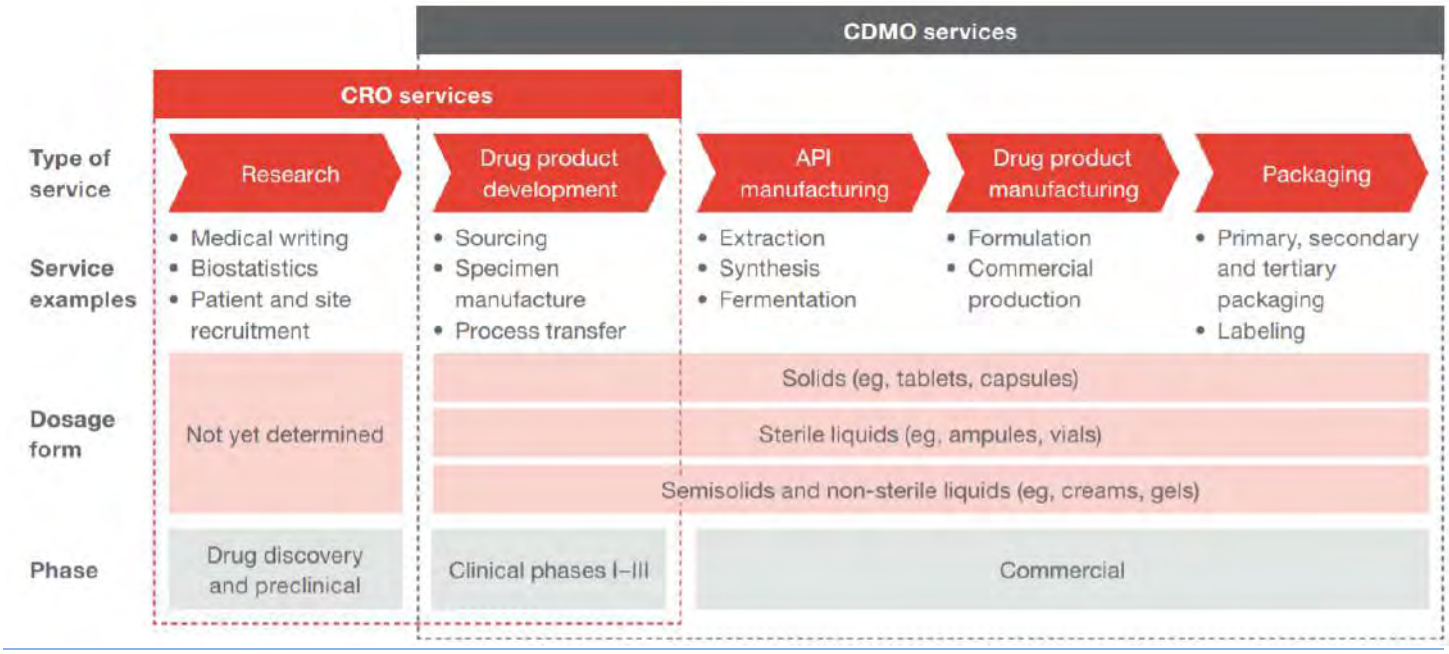
CROs have played a key role in the overall drug development process and we believe their dominance will increase even further due to issues faced by originators like growing regulatory hurdles, mounting commercialization costs and patent expiry on blockbuster drugs. Based on research by EvaluatePharma, annual sales of drugs about to lose their patent protection have averaged USD 40bn since 2011 and the potential loss due to competition from generics is ~50%. This increases pressure on the big pharma companies to develop more innovative drugs as fast as possible and use more CRO services to help them achieve that goal. Originators' key focus areas have been to reduce costs and time-to-market. Divestment of non-core functions (including CRAMS) by innovators could be a big opportunity for CRAMS players. Greater focus on core R&D, rising outsourcing penetration and requirement of more complex clinical trials are some of the key growth drivers for CRAMS players in the pharma space. The global CDMO market is highly fragmented with our estimates suggesting that over 1,000 companies are active in the sector as either pureplay CDMOs or companies with some CDMO services or capabilities. Size of the CDMO market (excluding packaging) is ~USD 94bn and is expected to grow at ~7% CAGR over the next 5 years. The CRO market is expected to grow at the same pace as per some industry reports. The average timeline from discovery, through development to launch of a new therapeutic, is between 10-15 years. However, only 5-8 compounds out of every 10,000-15,000 compounds evaluated reach clinical testing. The complexity and intensity of the different stages of the drug development process is reflected in the CRAMS market size per function wherein the share of CROs and CDMOs has been significantly higher in clinical and post approval stage.

Exhibit 27: Drug approval process



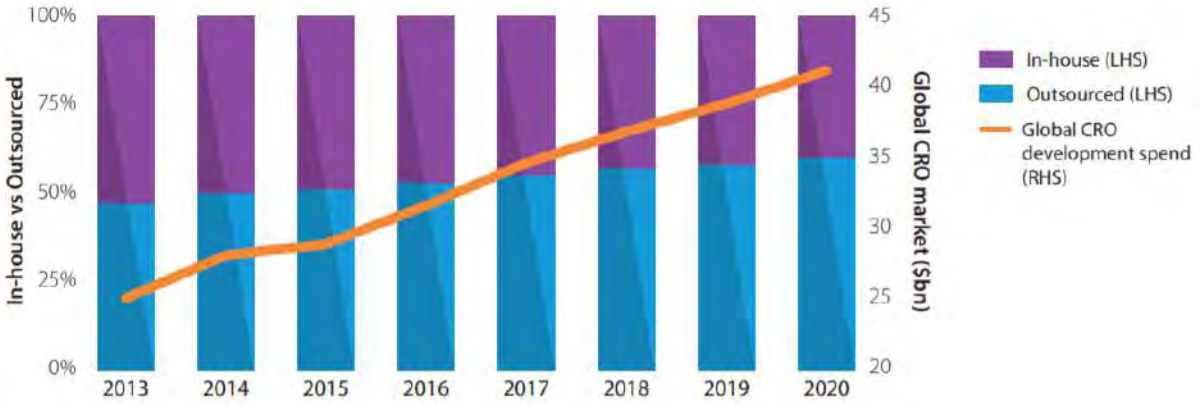
Source: Research Healthcare, Nirmal Bang Institutional Equities Research

Exhibit 28: Overview of CRO and CDMO services



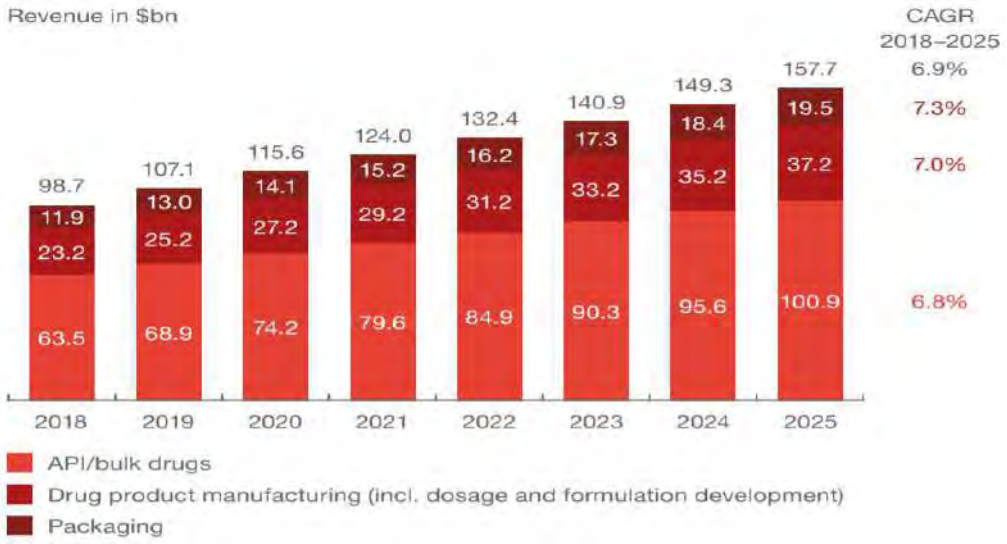
Source: PWC Report, Nirmal Bang Institutional Equities Research

Exhibit 29: Rising share of outsourcing in CRO market



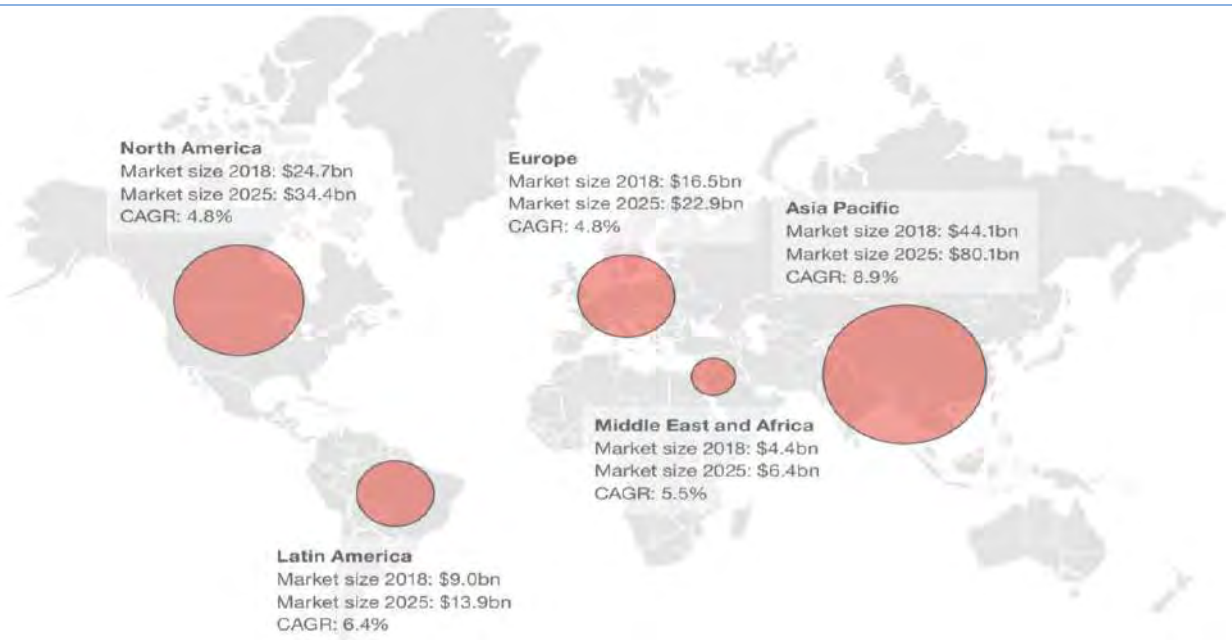
Source: Research Healthcare, Nirmal Bang Institutional Equities Research

Exhibit 30: CDMO industry is expected to grow at ~7% CAGR over 2018-25



Source: PWC Report, Nirmal Bang Institutional Equities Research

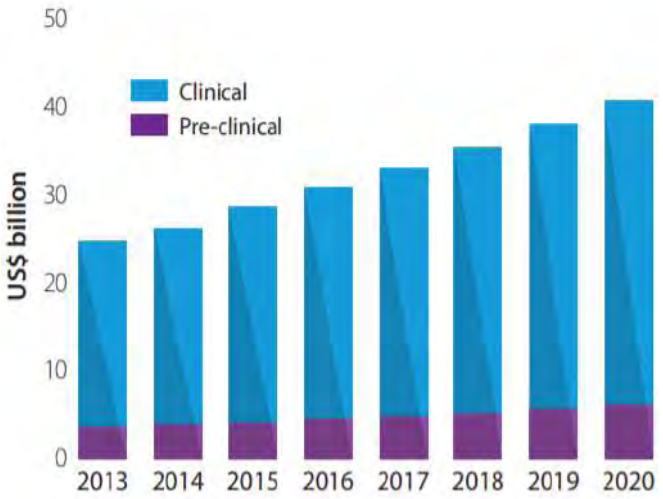
Exhibit 31: Global CDMO market region-wise presence



Source: PWC Report, Nirmal Bang Institutional Equities Research

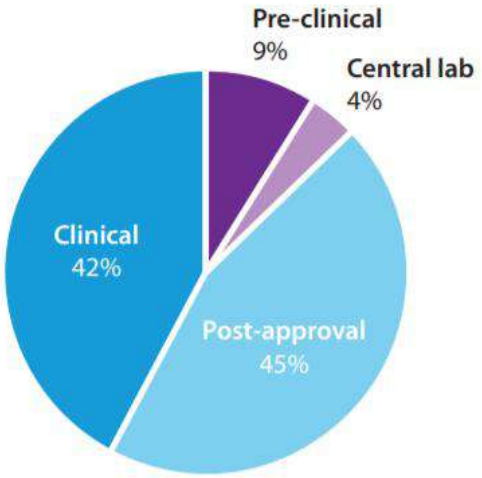
The complexity and intensity involved at different stages of the drug development process is reflected in the CRO market size per function wherein the share of CRO has been significantly higher in clinical and post approval stage. CROs' ability to participate in multiple stages of the drug development process would expand the growth opportunity.

Exhibit 32: Break-up of development spends by CROs



Source: Result Healthcare, Nirmal Bang Institutional Equities Research

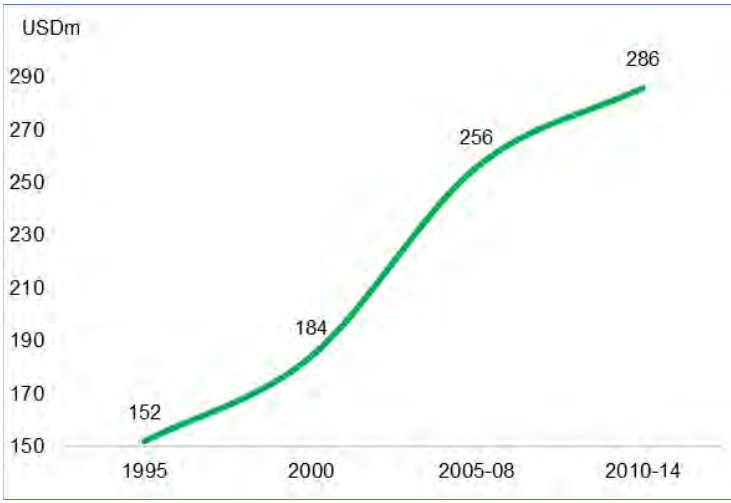
Exhibit 33: CRO market size by function



Source: Result Healthcare, Nirmal Bang Institutional Equities Research

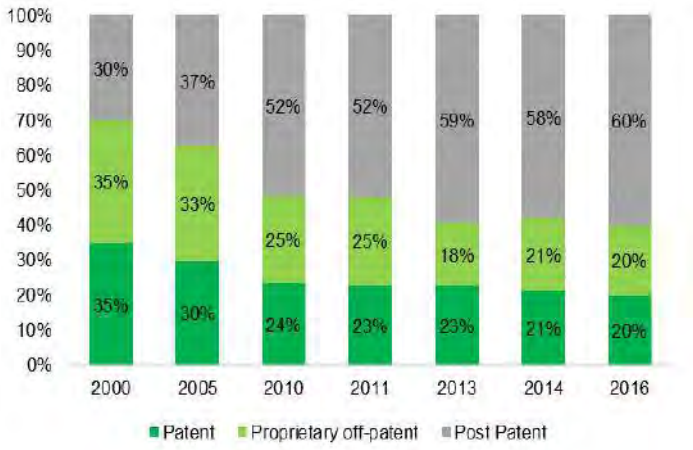
Similar to Pharmaceuticals, CRAMS has emerged as a cost-effective and efficient preference for new product development in the Agrochemicals industry as well. On account of rising product development costs, new molecules launched in the global agrochemicals market have been witnessing a declining trend. However, modern agrochemicals molecules are complex, which require comprehensive technology portfolios, extensive R&D and engineering resources to bring new and complex molecules to the market. Global majors prefer high-end CRAMS in order to reduce costs and time-to-market. Key aspects to be taken into consideration while choosing a CRAMS partner include long-term stable supply ability, reasonable prices and protection of intellectual property rights (IPR). India has successfully established itself as a preferred destination for CRAMS due to its strong process chemistry skills, low operational cost etc.

Exhibit 34: Rising development costs of agrochemicals



Source: Phillips McDougall, Nirmal Bang Institutional Equities Research

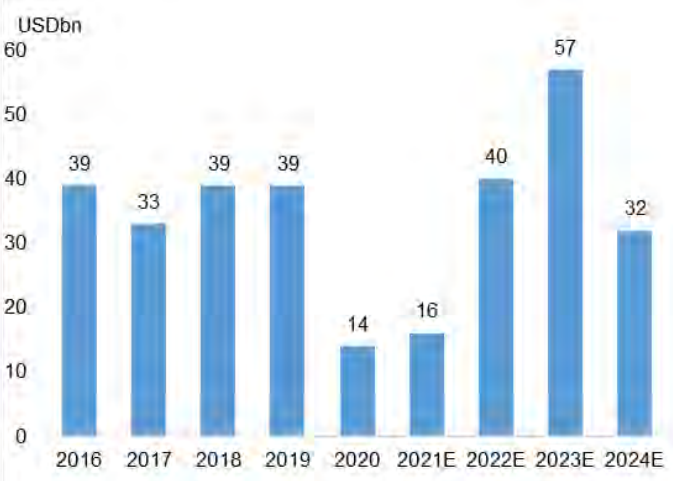
Exhibit 35: Rising share of generic drugs will open up the market



Source: Phillips McDougall, Nirmal Bang Institutional Equities Research

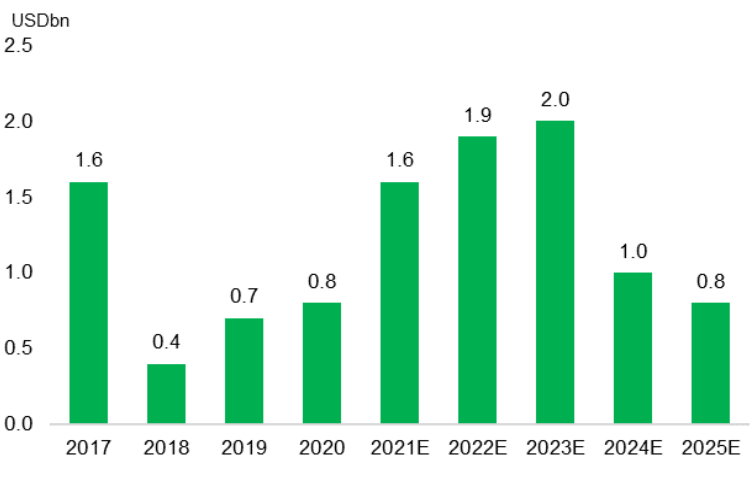
The importance of R&D innovation and speed continues to increase for big pharma and leading agrochemicals companies. Since the share of patented drugs and agrochemicals is going down, there is increasing pressure on innovators to launch new products which enjoy the highest price premiums and profits in the industry. Based on research by Evaluate Pharma, annual sales of drugs about to lose their patent protection have averaged US$40bn since 2011 and the potential loss due to competition from generics is ~50%. Similarly, Agrochemicals worth US$8bn are expected to expire over the next 5 years. We believe that CRAMS companies would significantly benefit from this situation wherein innovators would depend more on these players in order to deliver efficient and faster new product development.

Exhibit 36: Revenue at risk from patent expiration



Source: Evaluate Pharma, Nirmal Bang Institutional Equities Research

Exhibit 37: Agrochemicals going off-patent



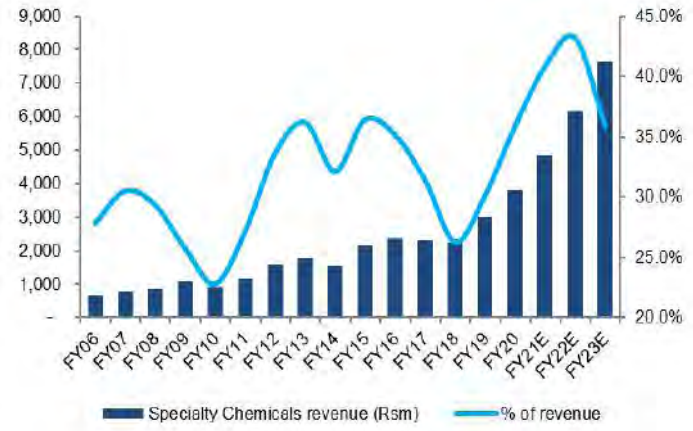
Source: FICCI, Nirmal Bang Institutional Equities Research

NFIL's Specialty Chemicals segment could deliver non-linear growth

NFIL's Specialty Chemicals segment comprises fluorine-based molecules with niche applications in Pharmaceuticals and Agrochemicals segments. Other end user industries are fragrances and hydrocarbons. NFIL is one of the leading high-quality producers of boron trifluoride gas (used mainly in organic chemistry and has other niche uses) and it's adducts. However, the company has shifted its focus to handle more complex chemistries and deliver high quality products. Management is continuously looking at operating in high value chemistries within the fluorination space in order to strengthen its core. It's multipurpose plant to process multi-step products and intermediates enables the company to participate across the entire value chain of these products.

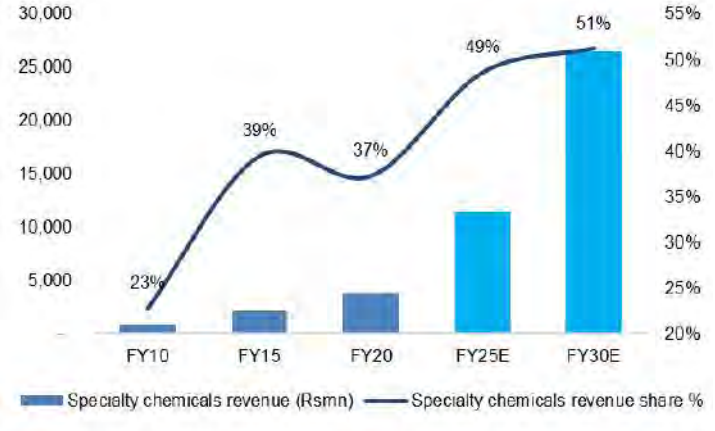
NFIL's Specialty Chemicals segment revenue has grown 6x in the last 14 years i.e. CAGR of ~13%. We believe that growth will accelerate going forward as the next round of capacity expansion would be largely towards this segment. Over the last 5 years, capex focus from the management's side was more towards the CRAMS division. Although the company invested Rs1.4bn in the Piramal JV related asset at Dahej, the same has been transferred to the JV company and NFIL has received the net bank value of the asset. We believe that over the next 5 years, the company's Specialty Chemicals segment will attract a large part of the overall capacity expansion considering the strong order inflows and the management's various initiatives apart from Pharma and Agrochemicals sectors. Agility from the management's side gives us confidence about the future growth path of this segment. We believe that NFIL would be a key beneficiary of increased usage of fluorine in various applications (along with Pharma and Agrochemicals), led by its expertise in fluorine chemistry. Involvement in multiple stages in the product development stages will enable the company to bag multi-year contracts after commercialization of product, similar to the HPP contract received recently. Growth from this vertical would be non-linear over the next decade in our view and we are building in ~26% revenue CAGR (excluding HPP) for this segment over FY20-23E.

Exhibit 38: Specialty Chemical revenue growth- we are building in ~26% CAGR over FY20-23E



Source: Company, Nirmal Bang Institutional Equities Research

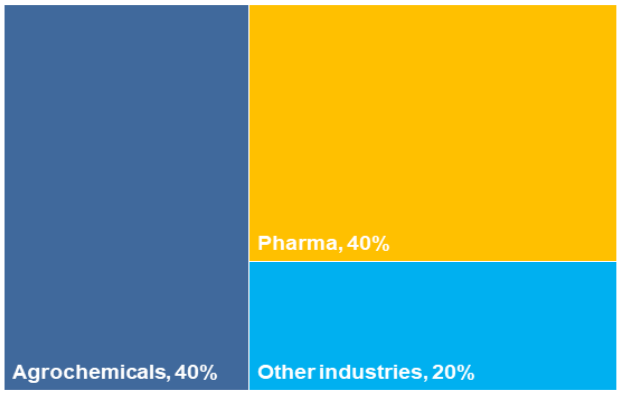
Exhibit 39: Rising share of Specialty Chemicals business would improve overall profitability and return ratios



Source: Company, Nirmal Bang Institutional Equities Research

Fluorine-based chemistry is gaining importance in Agrochemicals and Pharma molecules, owing to the stability and activity that it provides. For NFIL, Pharma and Agrochemicals industries have ~40% share each in this vertical whereas the balance ~20% is shared with other industries. NFIL has built strong relationships with both Indian and Global pharma and agrochemicals majors. New CEO in his previous stints has dealt with many global majors and has an excellent track record. However, we believe that NFIL's expertise is more towards pharma side and the company has deliberately shifted focus to Pharma over the last few years on account of relatively stable order book profile and better margins compared to Agrochemicals.

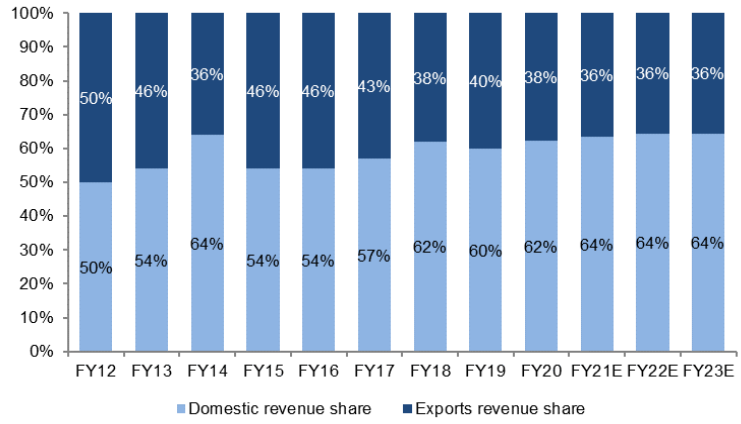
Exhibit 40: Break-up of Specialty Chemicals business based on end-user industries



Source: Company, Nirmal Bang Institutional Equities Research

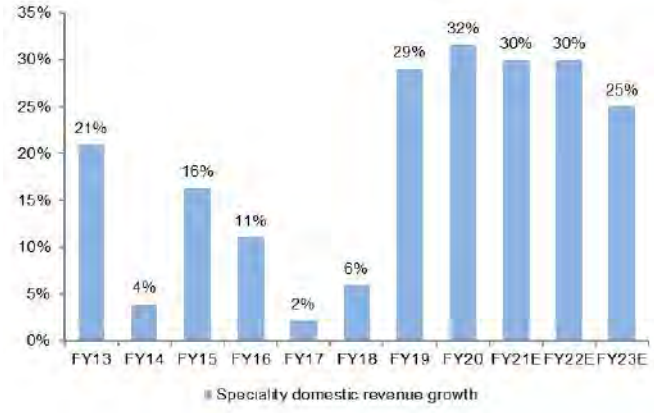
Specialty Chemicals accounted for ~36% of total revenue in FY20 compared to ~29% in FY06. Rising revenue share of the Specialty Chemicals segment is positive from the overall earnings improvement perspective. This segment is less susceptible to margin pressure on account of fluctuations in raw material prices due to its R&D centric nature as against Inorganic Fluorides, which is a commodity business and Refrigerant Gases wherein regulations determine the demand-supply situation. This segment enjoys higher margins compared to Refrigerant Gases and Inorganic Fluorides businesses (legacy businesses). Domestic revenue share of Specialty Chemicals segment was ~62% in FY20 and we expect the same to improve further, led by high growth in the Pharma industry.

Exhibit 41: Specialty Chemicals business skewed towards domestic on account of pharma salience



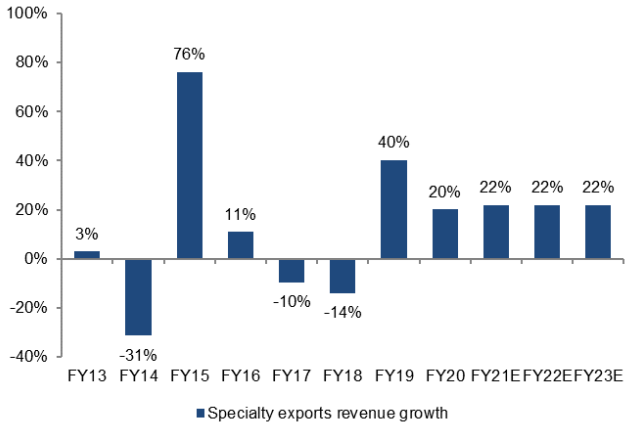
Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 42: Specialty Chemicals growth (domestic)



Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 43: Specialty Chemicals growth (exports)



Source: Company, Nirmal Bang Institutional Equities Research

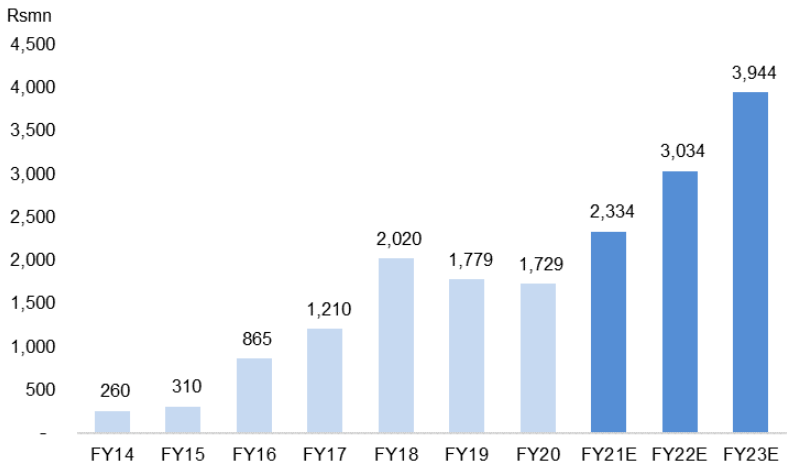
CRAMS can become Rs10bn business in next 7-8 years for NFIL

We expect NFIL's CRAMS segment to consistently deliver growth in excess of ~20% in the medium term. NFIL offers custom synthesis of fluorinated compounds for Pharmaceuticals, Agrochemicals and Specialty Chemical industries by leveraging its experience in the fluorine chemistry, fluorination and reagents, both in research (CRO) and manufacturing (CMO). NFIL provides a comprehensive basket of services for developing new products, processes and novel technologies to its clients with complete large-scale manufacturing support ensuring stringent customer specifications and regulatory compliances. NFIL accelerates innovation in early lifecycles of product and focusses on providing services in cost-effective and timely manner. The recently commissioned cGMP3 multi-purpose plant at Dewas, Madhya Pradesh will enable the company to service clients from milligram to kilogram to multi ton scale in an integrated manner. It has signed a multi-year contract with a US-based client wherein the molecule is in the commercialization phase. We believe that as other molecules approach the commercialization phase, NFIL is expected to win more such contracts in future. We expect the company's CRAMS segment to deliver non-linear growth, led by huge growth opportunities in CRO and CDMO markets globally.

NFIL's CRAMS business was initially restricted to 2-3 compounds, which contributed majority of the revenue. However, after the acquisition of Manchester Organics (MOL), it has a portfolio of over 27,000 compounds and over 3,000 IP protected compounds developed through the MOL product portfolio. Active involvement of MOL's research team will help NFIL to cater to all areas of chemical industry, ranging from Pharmaceuticals and Agrochemicals to Electronics. Acquiring MOL in 2016 will act as one the key growth drivers going forward for NFIL in our view. This will enhance the company's presence among the R&D fraternities and customers in Europe and the US. NFIL is incrementally looking to expand capacities in MOL going forward. On 3rd May 2011, the company made a strategic investment by taking a 51% stake in MOL in the UK to derive value from the latter's fluorine R&D capability, which can eventually lead to higher scale in Indian operations. The remaining stake was bought in 2016. Although, initially it took time in streamlining the processes at MOL, we believe this opens up a huge opportunity for NFIL, particularly in the US and the EU.

The management has indicated that order book pipeline for FY21 is very solid and we expect growth to accelerate. Starting of cGMP3 capacity indicates that few molecules must be approaching commercialization phase. Similarly, in CRAMS, NFIL has made strong inroads into the Pharma industry. Also, greater traction of EU clients is positive compared to higher share of US-based clients earlier. cCGMP 3 capacity is expected to reach optimum utilisation by FY23 and peak revenue potential from the same would be ~Rs2.5bn.

Exhibit 44: We are building in ~29% revenue CAGR in CRAMS over FY20-23E



Source: Company, Nirmal Bang Institutional Equities Research

Entry in new segment (HPP) - more opportunities underway?

NFIL announced its largest ever long-term contract worth ~USD 29bn with a global major for manufacturing a new product in fluorochemicals. This is categorized under 'High Performance Segment' – new segment for NFIL. This contract will be executed through a new subsidiary called Navin Fluorine Advanced Sciences Limited (NFASL) to optimize tax benefits. Total capex for this project would be ~Rs4.6bn (including captive power plant) and the same will be executed at Dahej. The contract tenure is 7 years and revenue would be evenly distributed over the period. The project is expected to be commissioned from 4QFY22 and the progress of construction work is running as planned despite Covid related disruptions. The management has guided that both the product and technology are highly patented. This product has multiple applications and the penetration of this product is expected to grow significantly. NFIL and its customers are the only players operating in this segment. The intermediate for this product can be used later for other applications in future. EBITDA margin would be similar to that of high-value business.

Exhibit 45: Pro-forma financials for HPP contract- Project IRR at ~23% as per our estimates

Particulars (Rsmn)	FY23E	FY24E	FY25E	FY26E	FY27E	FY28E	FY29E
Revenue	4,157	4,157	4,157	4,157	4,157	4,157	4,157
Gross margin	*60%*	*60%*	*60%*	*60%*	*60%*	*60%*	*60%*
Gross profit	2,494	2,494	2,494	2,494	2,494	2,494	2,494
Staff costs	624	624	624	624	624	624	624
% of sales	*15%*	*15%*	*15%*	*15%*	*15%*	*15%*	*15%*
Other expenses	582	582	582	582	582	582	582
% of sales	*14%*	*14%*	*14%*	*14%*	*14%*	*14%*	*14%*
EBITDA	1,289	1,289	1,289	1,289	1,289	1,289	1,289
EBITDA margin	*31%*	*31%*	*31%*	*31%*	*31%*	*31%*	*31%*
Depreciation	450	450	450	450	450	450	450
Interest	20	20	20	20	20	20	20
Other income	50	55	61	67	73	81	89
PBT	869	874	879	885	892	899	907
Tax	149	150	151	152	153	154	156
ETR	*17%*	*17%*	*17%*	*17%*	*17%*	*17%*	*17%*
PAT	720	724	728	733	739	745	752

Source: Nirmal Bang Institutional Equities Research

As NFIL has been constantly working towards higher value chemistries within the fluorine value chain and other complex chemistries/segments, we expect similar opportunities like HPP will come its way in future. Fluorine application for industries other than Pharma and Agrochemicals is still at a nascent stage and these other industries could be new avenues of growth for NFIL going forward. We like the management's approach of handling only complex chemistries with high entry barriers on account of technical and R&D expertise. Thrust on R&D will play a key role in new product development and would drive growth in the coming years.

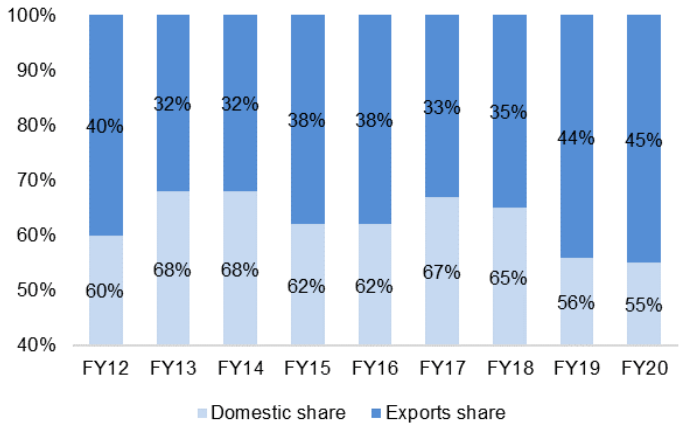
Refrigerant Gases - not a priority segment for NFIL

NFIL pioneered the manufacture of Refrigerant Gases in India in 1967, marketed under the 'Mafron' brand. In India, the company has a strong distribution network with 120 dealers. The company's refrigerant product is also exported to South Asia, Southeast Asia, the Middle East and Turkey. NFIL produces only R-22 gas, which is a HCFC and will be phased out by 2030 for emissive purposes. Non-emissive applications are allowed i.e. feedstock in Pharmaceuticals, Agrochemicals, Polymer etc. FY21 will be a challenging year on account of Covid-19 related disruptions. Also, due to phase out wef 1st January 2020, there will be an impact as non-emissive segments will take time to cope with the lost demand from emissive uses. Therefore, for the next 3 years, we are building in ~3% annualized decline (mainly on account of ~17% expected decline in FY21).

Exhibit 46: Refrigerants revenue - we are building in ~3% annualized decline over FY20-23E

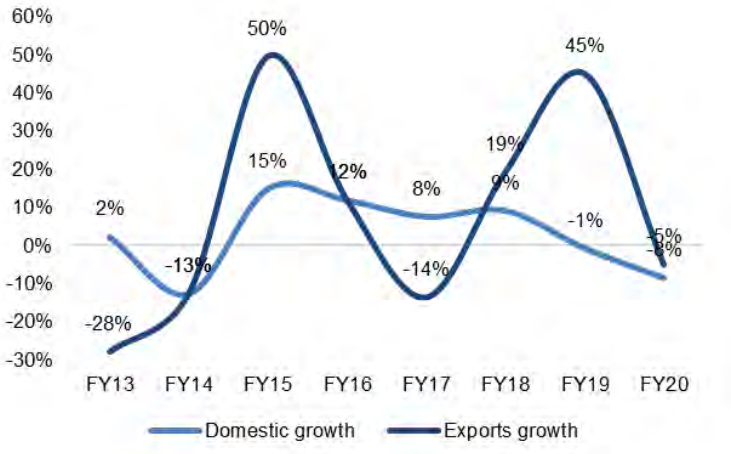
Source: Company, Nirmal Bang Institutional Equities Research.

Exhibit 47: Refrigerants revenue break-up



Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 48: Refrigerants revenue growth (Domestic vs Exports)



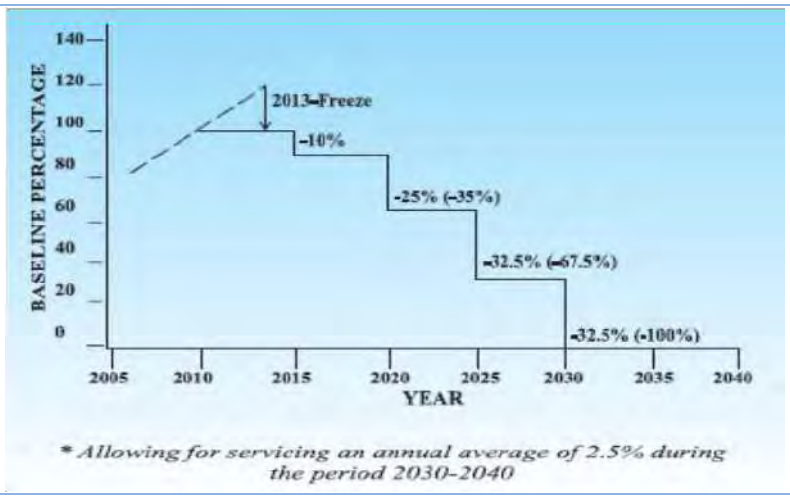
Source: Company, Nirmal Bang Institutional Equities Research

SRF would gain market share on account of R-22 phaseout

R-22 (and its by product R-23) have high ozone depleting effect and are also potent greenhouse gases. Phasing-out of R-22 was therefore agreed in the Montreal Protocol, thus significantly restricting future use and availability of R-22. As per the Montreal Protocol, India would need to phase out R-22 (HCFC-22) and a few other HCFCs by 2030. The first phase of reduction kicked-in from 1st January 2015 when HCFC consumption and production quota was cut by 10% from the baseline (baseline benchmarked to 2009 and 2010 consumption). The next reduction in HCFC production quota for emissive use happened w.e.f. 1st January 2020, which was a steep 25% cut (aggregate 35% from baseline). However, this restriction is only with respect to emissive uses and companies like NFIL and SRF can utilise R-22 capacities for non-emissive uses continuously. Both NFIL and SRF use ~10-15% of their total R-22 capacity for non-emissive uses like feedstock for Pharmaceuticals, Agrochemicals, Polymer etc. Majority of the R-22 exports from India is to the Gulf region. Due to reduction in consumption quota, competitive intensity has gone up significantly in the past, particularly from Chinese manufacturers. SRF is planning to enter another segment i.e. Fluoropolymer business through its ongoing additional R-22 capacity and new Poly-tetrafluoroethylene capacity project at Dahej.

SRF developed R-134a production capability indigenously in 2006 and has capacity to produce ~16,000 TPA (after debottlenecking of Dahej capacity but before considering doubling of HFC capacity in FY20), catering to both domestic and export markets. SRF has ~60% market share in R-134a in India while the remaining demand is met by imports. SRF is the sole manufacturer of R-134a, which is mainly used in automobile ACs. Hence, demand is dependent on auto industry growth. As SRF enjoys exclusivity, once the auto demand comes back on track, it would be a key beneficiary. India has extended an anti-dumping duty of US$ 1.22/kg on R-134a refrigerant from China for five years till July 2021. India had first imposed the anti-dumping duty in July 2011. An investigation by the Directorate General of Anti-dumping and Allied Duties found that imports from China were undercutting the prices of the domestic industry significantly and depressing the domestic prices. Apart from domestic demand, there is large scope for exports demand as USA also imposed anti-dumping duty on imports ofR-134a from China. In February 2017, the US Department of Commerce prescribed anti-dumping duties ranging from 148.79% to 167.02%. Meanwhile, the deal to supply pre-filled R-134a cans to Walmart establishes SRF' credibility in the US market.

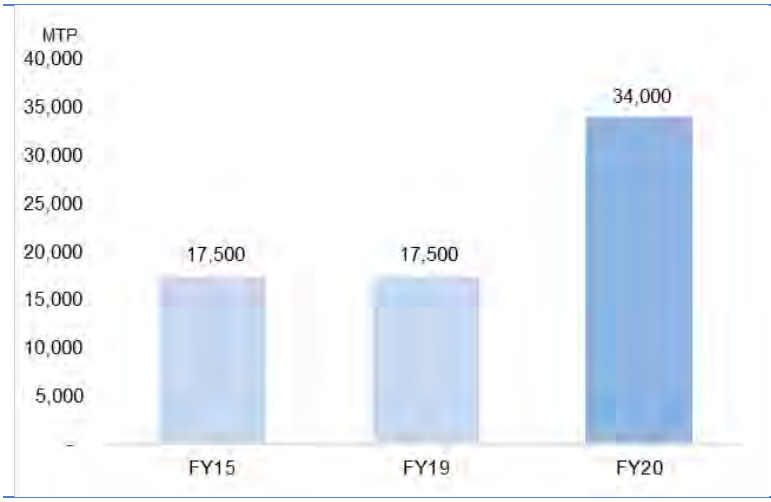
Exhibit 49: HCFC phaseout schedule



Source: Industry reports, Nirmal Bang Institutional Equities Research

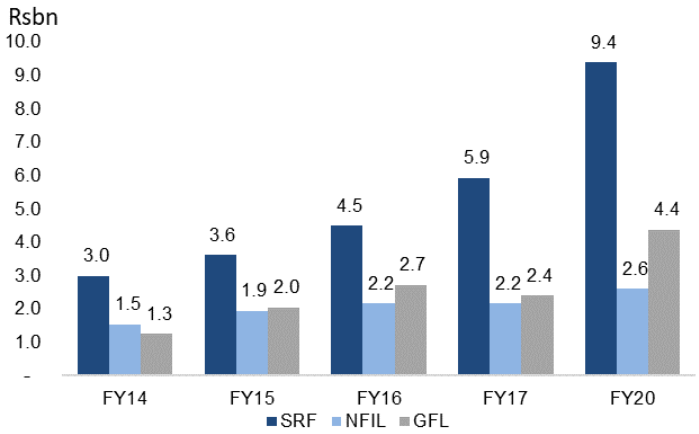
The Kigali Amendment is a key step in the evolution of refrigerants to ensure that they are used after considering their impact on the environment. This landmark agreement mandates a global reduction in the production and consumption of HFCs in CO2 equivalent. HFC reduction in CO2 equivalent began in 2019 for developed countries, who must reduce 85% of HFCs in CO2 equivalent by 2036, and 2024/2028 for developing countries, which have to achieve 80% of HFCs in CO2 equivalent reduction by 2045 or 85% by 2047.

Exhibit 50: SRF has nearly doubled its HFC capacity



Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 51: Refrigerant Gases revenue - SRF is significantly ahead of NFIL and GFL



Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 52: Usage of refrigerant gases by key brands of ACs and Refrigerators

Brand	AC	Refrigerator
Voltas	R-410a	-
Samsung	R-410a	R-600a
Daikin	R-32, R-410a	-
LG	R-410a	R-600a, R-134a
Blue Star	R-32, R-410a	-
Hitachi	R-410a	-
O General	R-410a	-
Godrej	R-410a, R-290	R-600a
Panasonic	R-410a	-
Videocon	R-410a	-

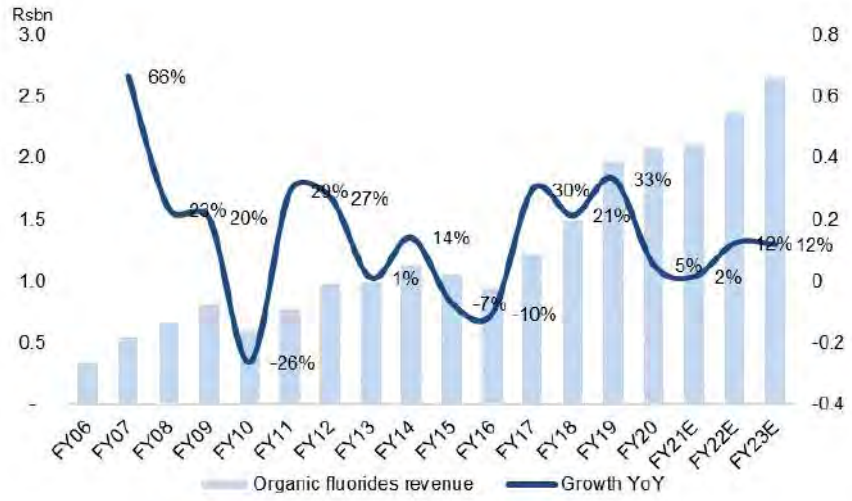
Source: Nirmal Bang Institutional Equities Research

Inorganic Fluorides to grow at a modest pace

NFIL is one of the largest manufacturers of inorganic fluorides in India. Bulk fluorides primarily comprise Hydrofluoric Acid (HF), Potassium Fluoride (KF), Cryolite and Ammonium Bifluoride. Bulk fluorides cater mainly to the Steel and Aluminum sectors with downstream applications in Glass, Pharma and Agrochemicals industries. India is a prominent fluorination hub after China and an increasingly important market as global OEMs shift their strategic attention from China to alternative markets. Owing to relocation of major downstream players from China to India, the headroom for fluorination sector in India is expected to grow.

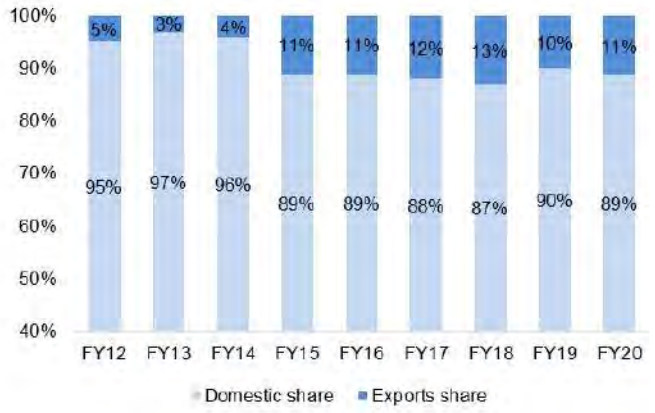
Hydrogen fluoride is extensively used in manufacturing aluminum through electrolysis, which in turn is being increasingly used in automobiles to reduce weight and enhance fuel efficiency. Per capita usage of steel products in India is just about 1/3rd of the global average. Whereas China's per capita steel consumption is ~9x higher than India. So, definitely there is a significant headroom to grow. However, this is a cyclical industry and linked to overall macro-economic factors. NFIL has >85% domestic salience in Inorganic Fluorides and hence overall segment growth is largely dependent on the domestic growth rates of sectors like Steel, Aluminum and Glass. The company is engaged with one of the largest stainless-steel brands in India, offering a strong offtake visibility. However, in the last couple of years, NFIL has witnessed good traction from international markets like the US and the EU on account of diversification of supplies away from China and trade war related issues. Also, in FY19, the company completed successful trials for a few Korean and Japanese customers. Therefore, we believe that exports market has opened up and reducing dependence on China could be a very large play if executed properly. In terms of margins, this business has the lowest profitability for NFIL compared to other segments and hence we do not expect significant capex focus in the coming years. But, opening up of exports markets could support the overall growth going forward.

Exhibit 53: Inorganic Fluorides revenue - we are building in ~9% CAGR over FY20-23E



Source: Company, Nirmal Bang Institutional Equities Research.

Exhibit 54: Inorganic Fluorides focused on domestic business



Source: Company, Nirmal Bang Institutional Equities Research

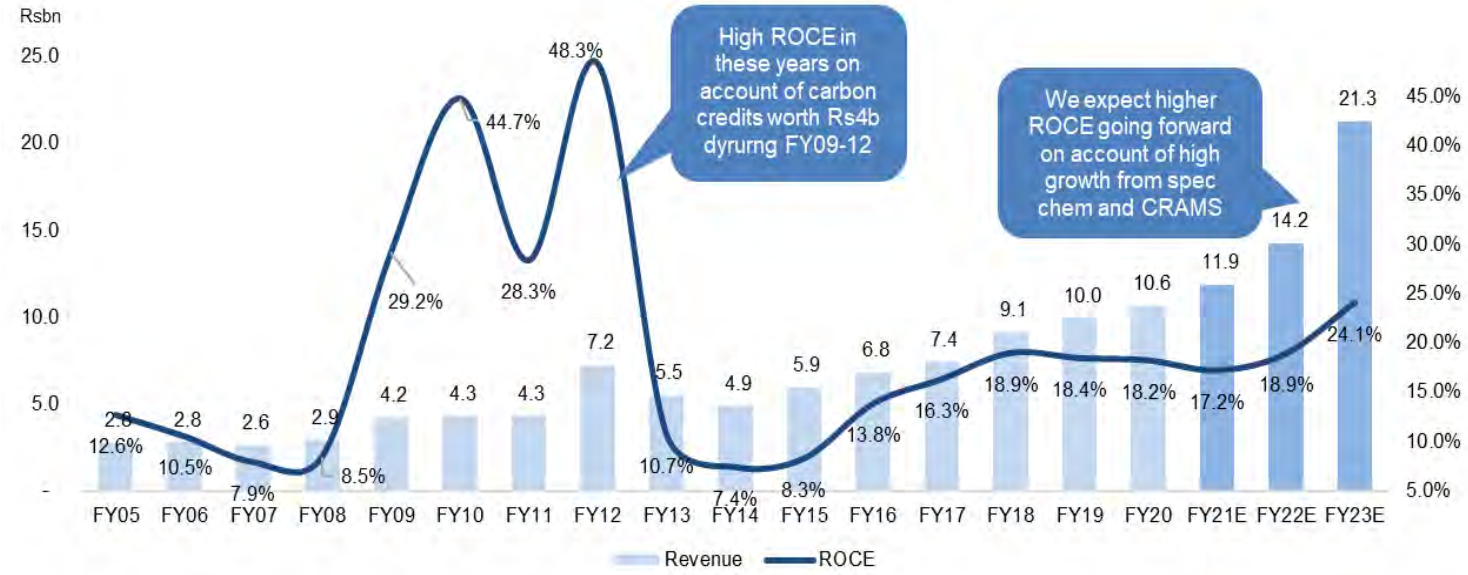
Exhibit 55: Inorganic Fluorides growth rates (domestic vs exports)

Source: Company, Nirmal Bang Institutional Equities Research

Financials – we are building in ~31% earnings CAGR over FY20-23E

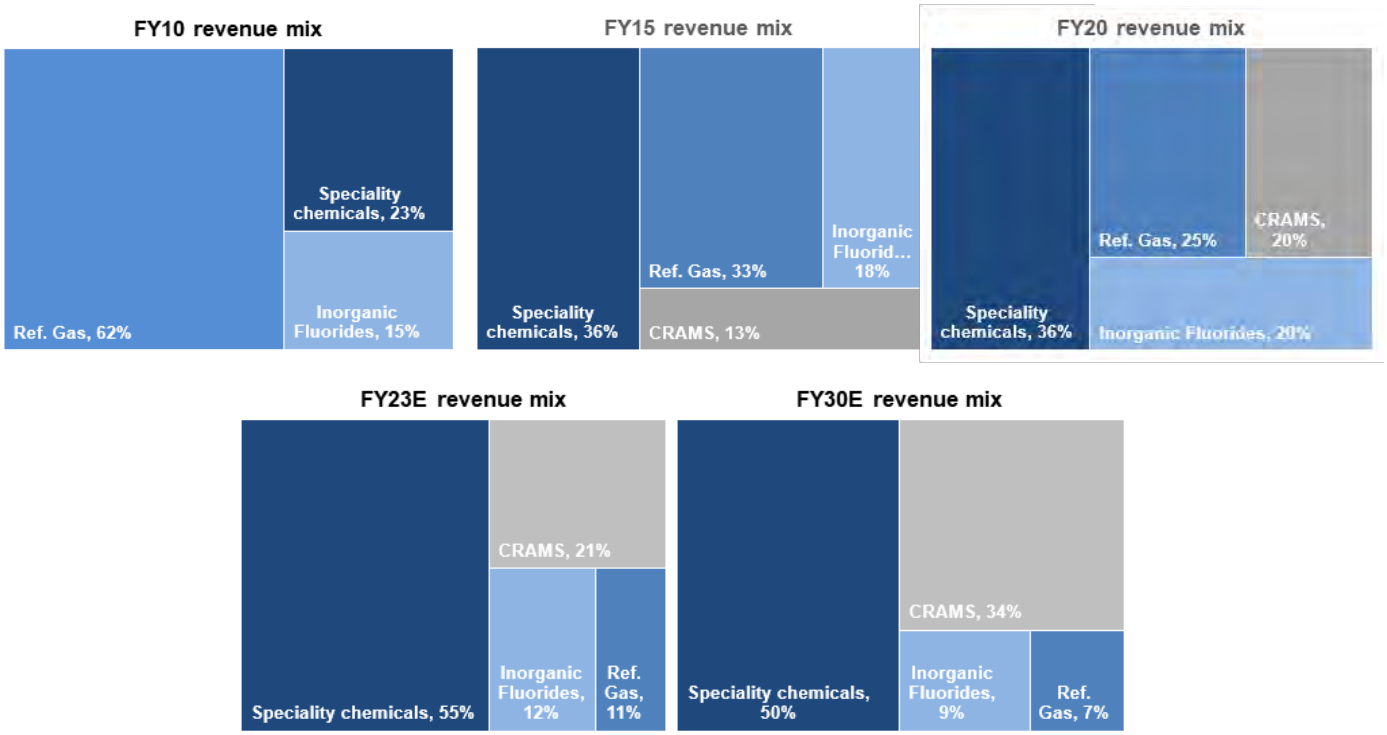
We are building in ~26% revenue CAGR over FY20-23E. Also, we expect NFIL's product mix to change significantly over the coming years. As per our estimates, the contribution of high-value businesses can go up from ~56% in FY20 to ~77% in FY23. Average EBITDA margin of high-value businesses would be ~2x compared to the legacy businesses. Therefore, this mix change would improve the overall profitability and return ratios of NFIL meaningfully. We are building in higher ROCE, especially from FY23 onwards when the new HPP project is slated to be commissioned. We are building in ~31% earnings CAGR over FY20-23E.

Exhibit 56: NFIL revenue growth vis-à-vis ROCE



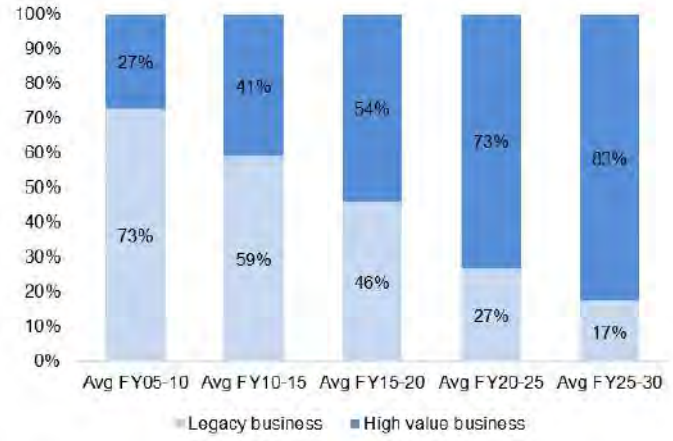
Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 57: Change in revenue mix



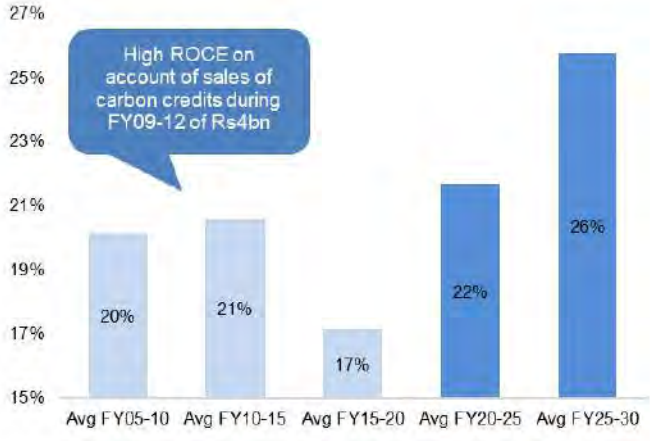
Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 58: Share of legacy business vs high value (5-yr band)- we expect significant shift towards high value business



Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 59: ROCE band – improved share of high value business will lift the overall ROCE



Source: Company, Nirmal Bang Institutional Equities Research

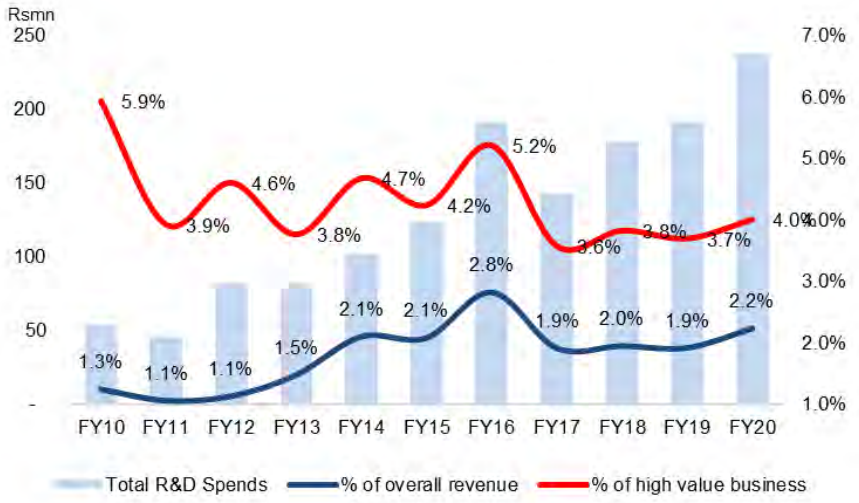
Exhibit 60: Historical revenue growth trend

Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 61: Future growth expectations

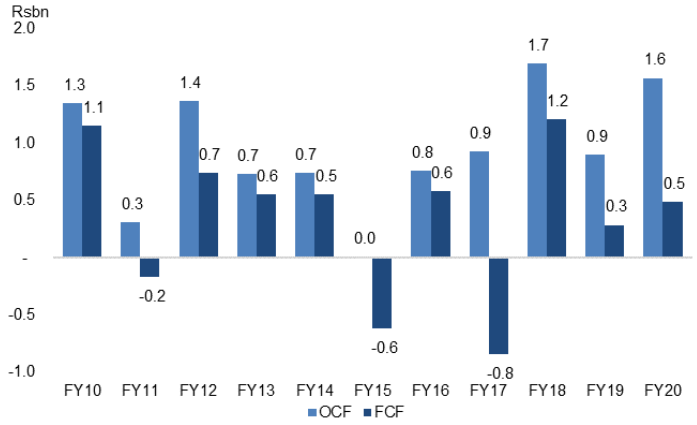
Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 62: Focus on R&D is key - NFIL spends ~4% of high value business revenue on R&D



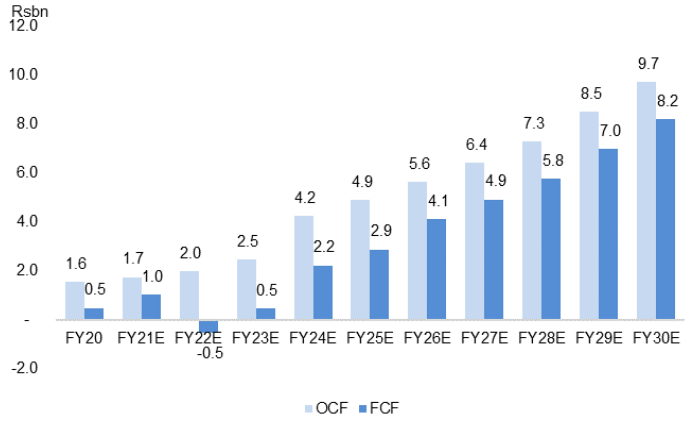
Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 63: Cash flow generation



Source: Company, Nirmal Bang Institutional Equities Research

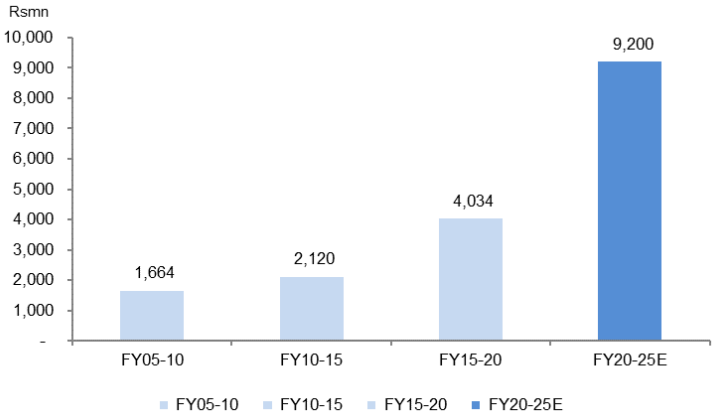
Exhibit 64: Cash flow generation expectations



Source: Company, Nirmal Bang Institutional Equities Research

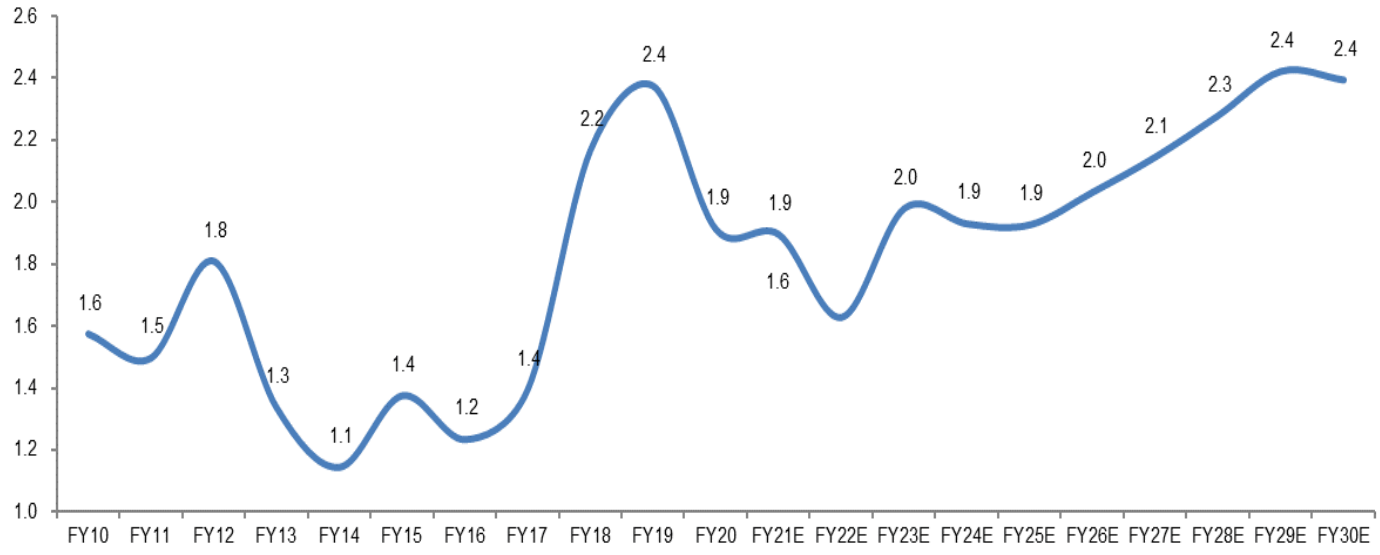
NFIL has consistently increased capex intensity over the years. However, we believe that over the next 5 years NFIL will incur capex higher than the cumulative capex of the last 15 years. The HPP project involves capex of Rs4.5bn whereas further capex announcement for Specialty Chemicals is expected.

Exhibit 65: Significant increase in capex intensity



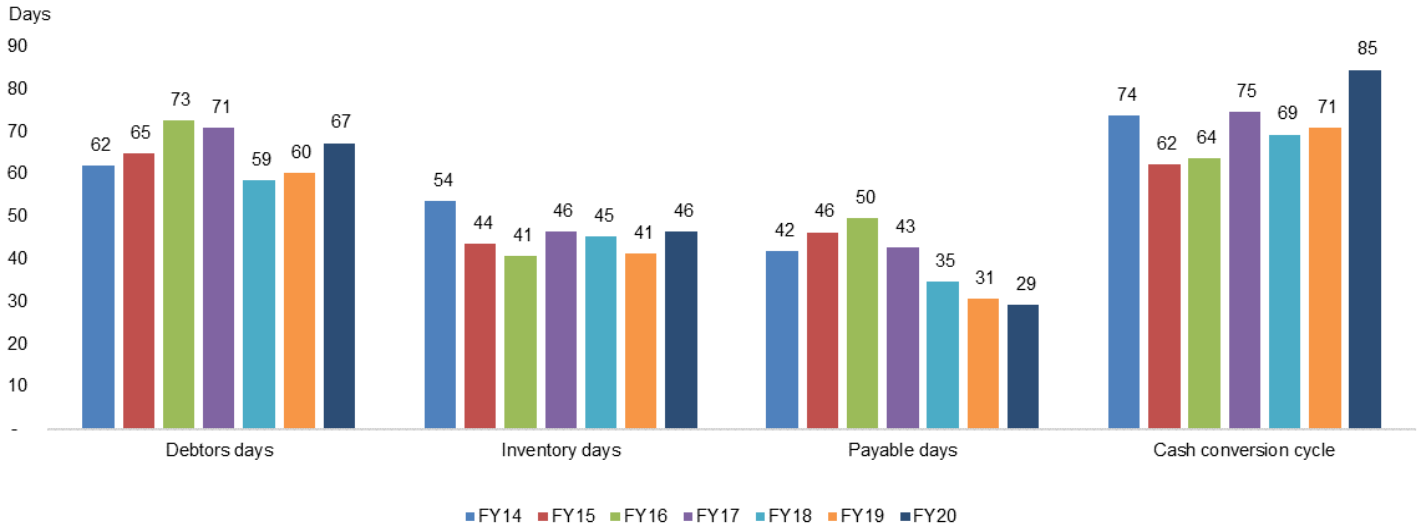
Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 66: Asset turnover ratio - higher share of CRAMS will improve asset turns



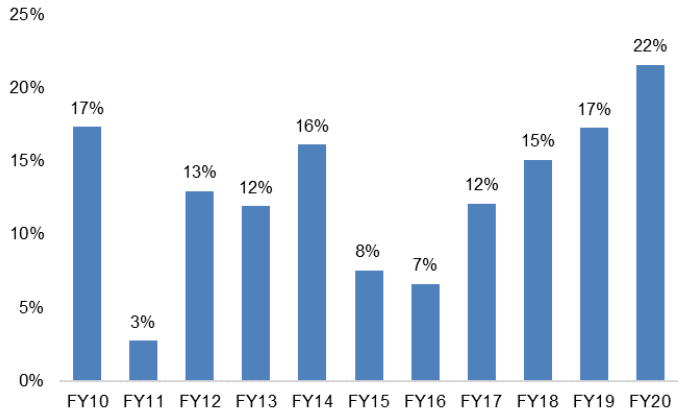
Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 67: Working capital cycle



Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 68: NFIL is a debt free company and C&CE form ~22% of its total assets

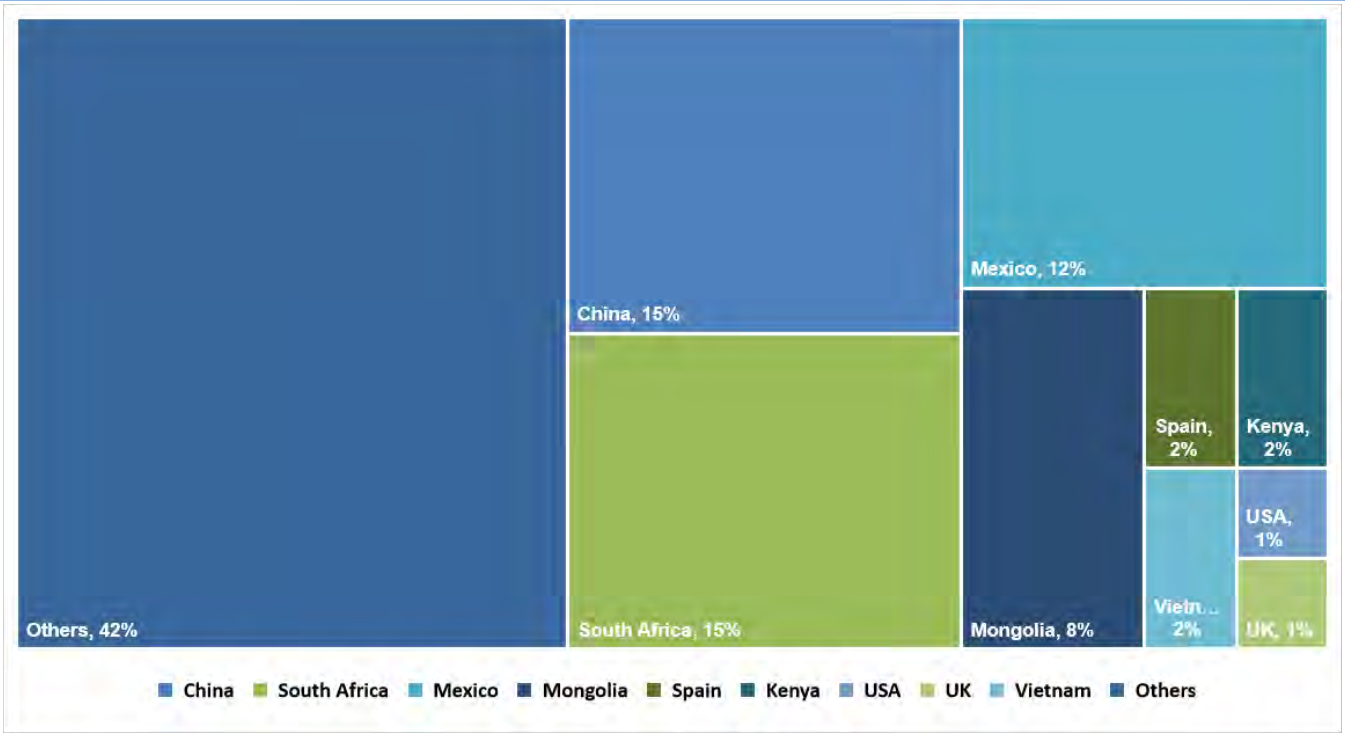


Source: Company, Nirmal Bang Institutional Equities Research

Raw materials - low/nil dependency on China

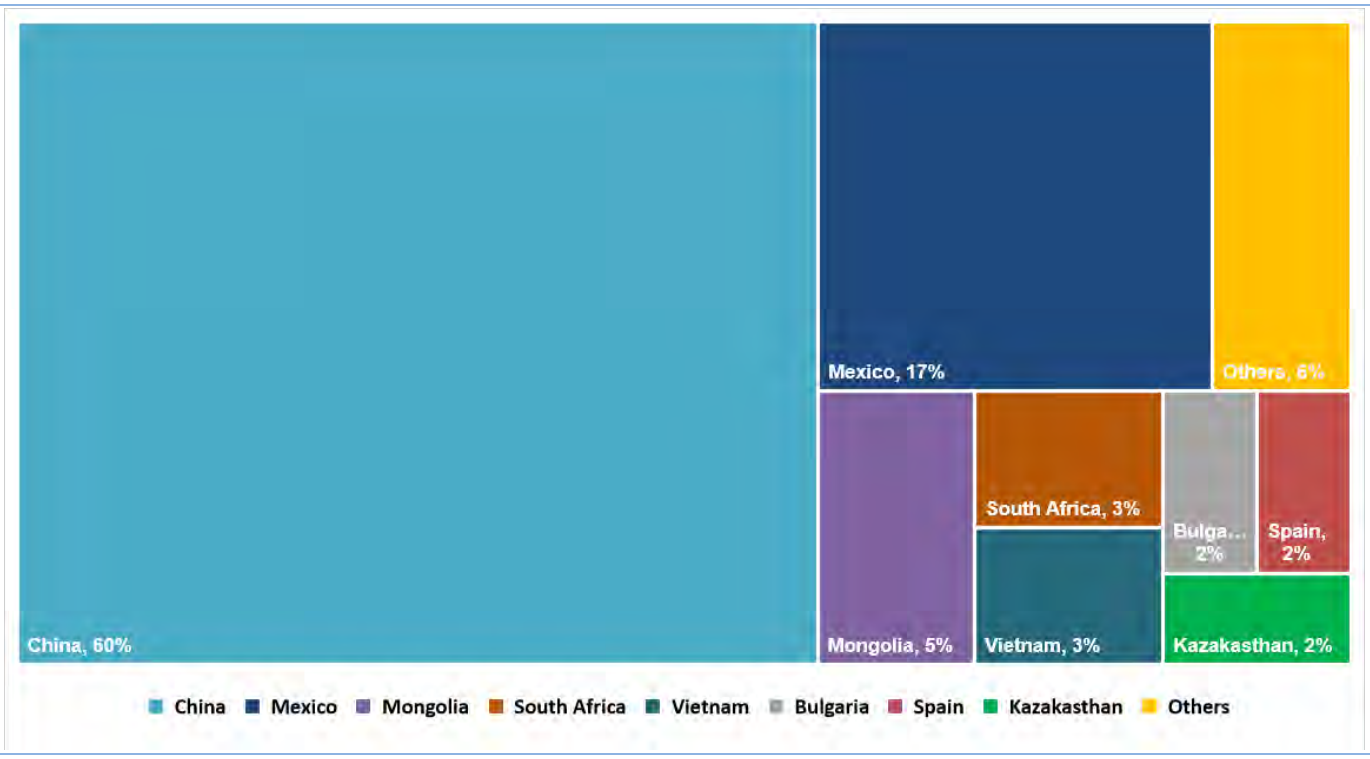
For NFIL, fluorspar is the key raw material. Although China has a higher share of fluorspar reserves, NFIL has strategically reduced its dependence on China over from 2011. Therefore, although pricing can undergo disruption due to Chinese dominance, availability of fluorspar from other countries should not be a challenge.

Exhibit 69: Global fluorspar reserves (2018)



Source: Ministry of Mines, Nirmal Bang Institutional Equities Research

Exhibit 70: World production of fluorspar (2015)



Source: Minitstry of Mines, Nirmal Bang Institutional Equities Research

Financial summary

Y/E March (Rsmn)	FY19	FY20	FY21E	FY22E	FY23E
Net Sales	9,959	10,616	11,850	14,246	21,279
Growth YoY%	*9.1%*	*6.6%*	*11.6%*	*20.2%*	*49.4%*
Gross margin %	*52.1%*	*54.4%*	*54.7%*	*54.9%*	*56.1%*
EBITDA	2,184	2,635	2,999	3,721	5,829
EBITDA margin %	21.9%	24.8%	25.3%	26.1%	27.4%
Adj PAT	1,491	1,819	2,395	3,010	4,129
Growth YoY%	*-17%*	*22%*	*32%*	*26%*	*37%*
RoCE	*18.4%*	*18.2%*	*17.2%*	*18.9%*	*24.1%*
RoE	*14.5%*	*14.6%*	*16.0%*	*17.9%*	*21.3%*
P/E	*23.5*	*33.2*	*41.3*	*32.9*	*24.0*
EV/EBITDA	*15.0*	*21.6*	*31.5*	*25.7*	*16.4*
P/BV	*3.3*	*4.3*	*6.3*	*5.5*	*4.7*

Source: Company, Nirmal Bang Institutional Equities Research

Variance with consensus

Particulars	NBIE estimates			Consensus estimates			Variance (%)		
	FY21E	FY22E	FY23E	FY21E	FY22E	FY23E	FY21E	FY22E	FY23E
Revenue	11,850	14,246	21,279	11,652	14,088	19,785	1.70%	1.12%	7.55%
EBITDA	2,999	3,721	5,829	2,894	3,665	5,469	3.64%	1.53%	6.57%
EBITDA margin	25.3%	26.1%	27.4%	24.8%	26.0%	27.6%	47bps	10bps	-25bps
APAT	2,395	3,010	4,129	2,193	2,719	3,934	9.23%	10.72%	4.95%

Source: Bloomberg, Nirmal Bang Institutional Equities Research

Valuation

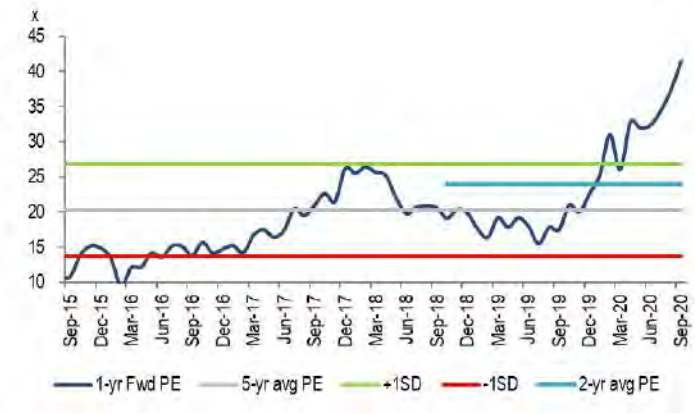
NFIL's 5-year and 2-year average PE are ~20x and ~24x, respectively. Currently, the stock is trading well above 1 SD based on 5-year average. However, we believe that the stock has re-rated significantly over the last one year on account of order wins and strong visibility on high-value businesses. We expect the company's product mix to change significantly over the next 5 years and hence the stock deserves a premium valuation. Average revenue share of high-value businesses was 53% over FY15-20 and we expect the same to go up to ~72% over FY20-25. This will improve the company's overall profitability and return ratios going forward. Currently, the stock is trading at ~41x 1-year forward earnings. We assign 30x PE multiple based on Sept'22E earnings (in-line with last 1 year's average PE) to arrive at a TP of Rs2,200, indicating an upside of ~10% from CMP.

Exhibit 71: TP calculation

Particulars	
Sept'22 Consolidated EPS (Rs)	72
Target PE multiple (x)	30
Target Price (Rs)	**2,200**

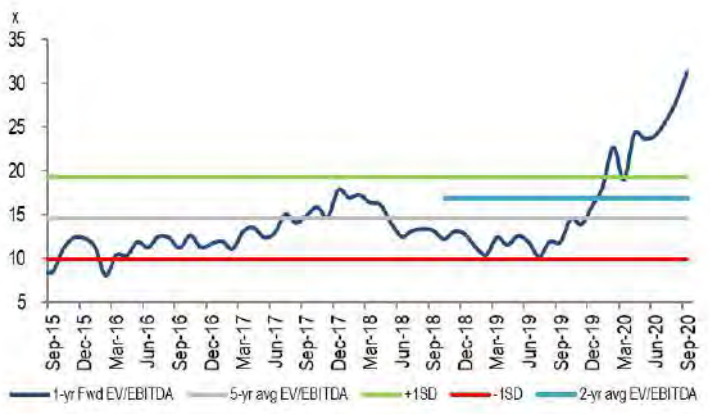
Source: Nirmal Bang Institutional Equities Research

Exhibit 72: 1-year forward PE trend



Source: Bloomberg, Nirmal Bang Institutional Equities Research

Exhibit 73: 1-year forward EV/EBITDA trend



Source: Bloomberg, Nirmal Bang Institutional Equities Research

Exhibit 74: Peer valuation

Company Name	FY20-23E CAGR (%)			EBITDA margin (%)			ROE (%)				P/E (x)			P/B (x)			EV/EBITDA (x)		
	Revenue	EBITDA	PAT	FY20	FY23E	Change	FY20	FY21E	FY22E	FY23E	FY21E	FY22E	FY23E	FY21E	FY22E	FY23E	FY21E	FY22E	FY23E
Indian companies																			
UPL Ltd	9.2	11.9	24.9	20.8	22.4	158bps	15.0	15.4	16.5	17.8	13.4	11.1	9.5	1.9	1.6	1.5	7.6	6.4	5.3
Coromandel International Ltd	7.7	11.4	15.6	12.3	13.6	132bps	25.1	26.4	24.1	22.7	16.4	15.0	13.9	4.0	3.4	2.9	11.0	10.0	9.1
PI Industries Ltd	22.6	25.3	28.2	21.2	22.7	145bps	19.5	19.7	20.5	20.0	44.8	34.5	29.1	6.7	5.8	4.9	32.9	26.1	21.4
Rallis India Ltd	11.6	17.3	17.3	12.8	14.9	207bps	14.6	15.3	16.3	17.1	22.9	19.0	15.8	3.3	2.9	2.5	14.9	12.4	10.5
Bayer CropScience Ltd/India	13.7	21.3	21.8	18.3	22.3	395bps	21.7	24.0	23.6	22.7	37.7	32.8	29.1	8.7	7.2	6.1	27.8	23.9	20.6
BASF India Ltd	11.9	18.8	-284.6	3.0	3.6	59bps	-1.8	5.1	10.1	11.5	38.9	25.0	21.1	4.2	3.7	3.3	19.7	16.0	Na
Navin Fluorine International L	**26.1**	**30.3**	**31.4**	**24.8**	**27.4**	**257bps**	**14.6**	**16.0**	**17.9**	**21.3**	**41.3**	**32.9**	**24.0**	**6.3**	**5.6**	**4.7**	**31.5**	**25.7**	**16.4**
SRF Ltd	**13.8**	**22.0**	**25.9**	**20.2**	**24.9**	**470bps**	**15.2**	**16.4**	**17.3**	**17.1**	**26.9**	**20.9**	**18.3**	**3.9**	**3.4**	**2.9**	**14.8**	**12.6**	**10.3**
Aarti Industries Ltd	**17.0**	**19.1**	**24.2**	**23.3**	**24.6**	**128bps**	**19.1**	**17.1**	**19.7**	**24.2**	**31.5**	**23.8**	**16.6**	**5.1**	**4.4**	**3.7**	**19.2**	**15.3**	**11.4**
Vinati Organics Ltd	**18.8**	**15.6**	**12.2**	**40.3**	**37.2**	**-312bps**	**28.6**	**22.1**	**22.9**	**24.2**	**42.7**	**35.1**	**27.7**	**8.8**	**7.4**	**6.1**	**29.9**	**24.8**	**19.3**
Atul Ltd	5.3	7.6	7.3	22.1	23.6	149bps	20.9	16.9	17.3	17.5	30.6	25.3	22.0	4.9	4.3	3.6	21.0	17.2	15.3
Sudarshan Chemical Industries	11.5	16.2	12.4	15.1	17.2	201bps	22.2	17.5	20.5	22.3	28.5	21.6	17.5	4.7	4.0	3.5	14.3	11.7	9.6
Global companies																			
DuPont de Nemours Inc	0.6	0.0	0.3	26.1	25.7	-42bps	6.4	5.8	6.8	7.5	19.5	17.1	15.0	1.1	1.1	1.0	12.0	10.8	9.9
BASF SE	0.6	2.7	0.5	13.5	14.4	87bps	11.2	3.1	7.1	8.8	21.8	14.9	12.4	1.3	1.3	1.2	9.1	7.7	7.0
Chemours Co/The	-0.4	3.5	5.0	18.3	20.5	220bps	44.8	37.6	44.2	44.5	14.6	10.2	8.1	5.4	4.6	3.9	8.3	6.9	5.8
Solvay SA	-1.4	-2.3	-3.8	22.4	21.8	-62bps	7.6	2.8	7.4	9.3	13.6	12.2	10.1	1.0	1.0	1.0	5.5	5.4	4.8
FMC Corp	4.9	7.6	9.7	26.4	28.5	207bps	27.3	30.4	30.4	30.2	16.8	14.9	13.3	4.7	4.4	4.0	13.1	11.9	11.1
China Petroleum & Chemical Cor	-1.8	-3.0	-4.1	6.8	6.6	-25bps	7.7	2.5	5.0	6.3	31.6	12.9	9.7	0.6	0.6	0.6	4.0	3.0	2.5
Exxon Mobil Corp	-4.9	1.2	3.4	13.9	16.7	285bps	5.3	-1.0	3.0	7.0	-123.7	24.9	12.3	0.8	0.9	0.9	10.8	7.2	5.5

Source: Bloomberg, Nirmal Bang Institutional Equities Research (For companies under coverage, our estimates have been used)

Exhibit 75: India chemical companies has consistently outperformed

Company Name	0.5yr absolute	1yr absolute	1.5yr CAGR	2yr CAGR	3yr CAGR	4yr CAGR	5yr CAGR	10yr CAGR	15yr CAGR
Nifty 50	33	4	1	6	5	9	8	7	11
Sensex 30	33	5	3	8	8	10	8	7	11
Average of Indian chemical companies	36	57	34	32	21	20	25	27	26
MSCI World Chemical Index	35	12	7	8	3	8	8	6	7
Indian chemical companies									
UPL	48	-11	-11	10	-1	3	10	15	15
Coromandel	36	77	38	37	14	28	30	8	25
PI Industries	44	54	57	61	39	26	24	45	47
Rallis India	31	59	42	20	5	4	5	7	19
Bayer Cropscience India	49	70	21	14	15	6	8	18	23
BASF India	28	55	3	-8	-5	4	7	8	13
Navin Fluorine	**45**	**178**	**102**	**80**	**41**	**44**	**51**	**42**	**25**
SRF	**32**	**68**	**47**	**58**	**37**	**24**	**28**	**28**	**19**
Aarti Industries	**8**	**30**	**15**	**25**	**30**	**29**	**31**	**40**	**25**
Vinati Organics	**51**	**22**	**34**	**42**	**39**	**44**	**43**	**42**	**51**
Atul	42	50	43	35	36	26	30	43	30
Sudarshan Chemicals	17	30	20	14	7	6	33	22	23
Global chemical companies									
Du Pont Nemours Inc	65	-10	-20	-16	-17	-6	-3	3	-0
BASF SE	21	-18	-18	-12	-16	-9	-6	0	4
Chemours	139	56	-31	-21	-26	11	27	na	na
Solvay SA	12	-23	-22	-15	-16	-8	-4	-0	-1
Sinopec	-13	-22	-23	-22	-12	-6	-5	-6	2
Exxonmobil Chemical	-16	-51	-44	-35	-25	-21	-16	-6	-4

Source: Bloomberg, Nirmal Bang Institutional Equities Research

Company background

Navin Fluorine International Ltd (NFIL) is one of the largest and the most respected Indian manufacturers of specialty fluorochemicals. It belongs to the Padmanabha Mafatlal Group – one of India's oldest industrial houses. Established in 1967, NFIL operates one of the largest integrated fluorochemicals complexes in India with manufacturing locations at Surat and Dahej in Western India and Dewas in Central India. NFIL operates in 4 business segments, namely Refrigerant Gases, Inorganic Fluorides, Specialty Fluorides and CRAMS. NFIL produces over 60 fluorinated products for domestic and international customers. More than 40% of its products are exported to North America, Europe, the Middle East and Asia Pacific regions. NFIL has emerged as a preferred source and a partner of choice for a variety of fluorochemicals globally. Its clientele includes top-tier life sciences, crop protection, petrochemicals and specialty chemicals companies with several of them being part of Fortune 500.

Exhibit 76: Journey of NFIL so far

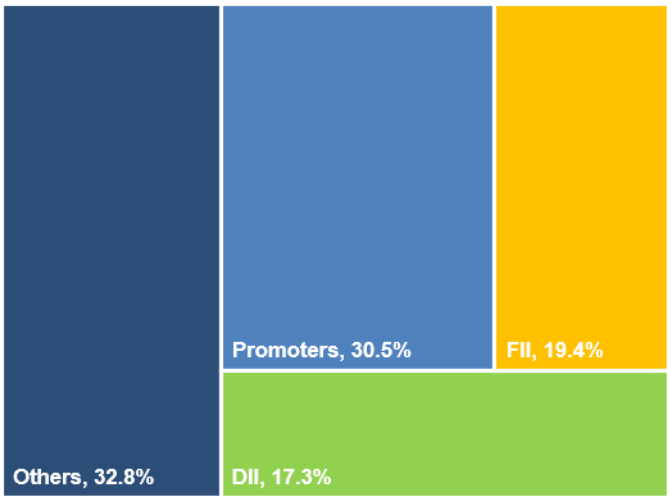
Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 77: Profile of top management team

Name	Designation	Description
Radhesh R. Welling	Managing Director	With 22 years of work experience, he has worked in and handled many functions ranging from Innovation to Sales & Marketing to Corporate Strategy to Manufacturing, across multiple geographies. In his previous role, he was CEO and Executive Director of Laxmi Organic Industries Ltd., where he was responsible for leading a Rs.1400 crores specialty chemicals company. Earlier, he worked with J.M. Huber Corporation for 8 years and was based out of their HO in Atlanta, USA for most of this period. He has obtained Mechanical Engineering degree from National Institute of Technology, India and has done his Masters in International Business from IIFT, New Delhi. He has also done his MBA from IMD, Lausanne, Switzerland.
Dr. Ashis Mukherjee	President - CRAMS & Chief Technology Officer	He is a post graduate in Science, Ph.D. from SUNY@Stony Brook, NY and a postdoctoral fellowship from The Rockefeller University, NY, USA with a work experience of 21 years in Pharma, R&D and CRO/CRAMS. He has been with the company since 2009.
Gyanchand Jain	President - Operations	He is a chemical engineer and has done Adv. Diploma Management with a total work experience of 34 years. He has been with the company since 2011.
Ketan Sablok	Chief Financial Officer & Head of IT	He is a Chartered Accountant and a Cost Accountant, having an experience of more than 22 years. He has been with the Company since 1997.
P.S. Haridas	President – Supply Chain Management	He is a graduate in commerce and MBA in material management with a total work experience of 37 years. He has been with the company since 2008.

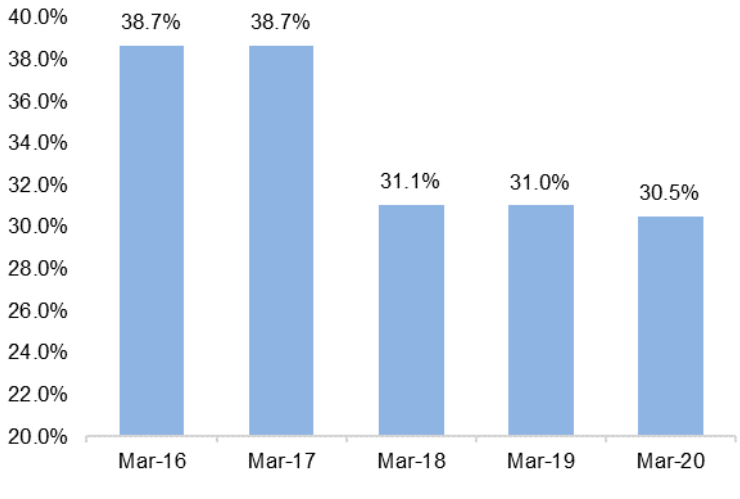
Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 78: Shareholding pattern (as on June 20)



Source: BSE, Nirmal Bang Institutional Equities Research

Exhibit 79: Change in promoters' shareholding



Source: BSE, Nirmal Bang Institutional Equities Research

Exhibit 80: Top 5 public shareholders

Particulars	% holding
Nippon India MF	3.5%
Sundaram MF	3.3%
L&T MF	2.8%
Canara Robecco MF	1.8%
SBI Small Cap MF	1.7%

Source: BSE, Nirmal Bang Institutional Equities Research

Financials (Consolidated)

Exhibit 81: Income statement

Y/E March (Rsm)	FY19	FY20	FY21E	FY22E	FY23E
Net Sales	**9,959**	**10,616**	**11,850**	**14,246**	**21,279**
Growth YoY%	*9.1*	*6.6*	*11.6*	*20.2*	*49.4*
COGS	4,766	4,838	5,368	6,421	9,341
Gross margin %	***52.1***	***54.4***	***54.7***	***54.9***	***56.1***
Staff costs	1,155	1,308	1,444	1,679	2,630
Other expenses	1,855	1,835	2,039	2,425	3,480
EBITDA	**2,184**	**2,635**	**2,999**	**3,721**	**5,829**
Growth YoY%	*1.6*	*20.7*	*13.8*	*24.1*	*56.6*
EBITDA margin %	***21.9***	***24.8***	***25.3***	***26.1***	***27.4***
Depreciation	275	370	432	549	1,164
EBIT	1,908	2,265	2,567	3,172	4,664
Interest	8	20	20	15	32
Other income	344	333	550	759	676
PBT (bei)	2,244	2,578	3,098	3,915	5,308
PBT	2,244	2,578	3,098	3,915	5,308
ETR	34.3	32.3	25.0	25.0	23.6
PAT	1,491	4,086	2,395	3,010	4,129
Adj PAT	**1,491**	**1,819**	**2,395**	**3,010**	**4,129**
Growth YoY%	***-17.1***	***22.0***	***31.7***	***25.7***	***37.1***

Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 82: Cash flow

Y/E March (Rsm)	FY19	FY20	FY21E	FY22E	FY23E
PBT	**2,244**	**2,578**	**3,098**	**3,915**	**5,308**
Depreciation	275	370	432	549	1,164
Interest	8	20	20	15	32
Other adjustments	-292	-233	-550	-759	-676
Change in Working capital	-615	-706	-478	-774	-2,091
Tax paid	-719	-462	-775	-977	-1,251
Operating cash flow	**902**	**1,566**	**1,747**	**1,970**	**2,486**
Capex	-616	-1,077	-700	-2,500	-2,000
Free cash flow	**286**	**489**	**1,047**	**-530**	**486**
Other investing activities	373	1,929	1,486	297	122
Investing cash flow	**-243**	**851**	**786**	**-2,203**	**-1,878**
Issuance of share capital	21	12	-	-	-
Movement of Debt	-85	-87	-	-	-
Dividend paid (incl DDT)	-611	-714	-691	-872	-983
Other financing activities	-8	-20	-20	-15	-32
Financing cash flow	**-683**	**-809**	**-711**	**-887**	**-1,015**
Net change in cash flow	**-25**	**1,609**	**1,821**	**-1,119**	**-406**
Opening C&CE	184	159	1,767	3,589	2,469
Closing C&CE	159	1,767	3,589	2,469	2,063

Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 83: Balance sheet

Y/E March (Rsm)	FY19	FY20	FY21E	FY22E	FY23E
Share capital	99	99	99	99	99
Reserves	10,626	14,023	15,655	17,722	20,795
Net worth	**10,724**	**14,122**	**15,754**	**17,821**	**20,894**
Long term debt	-	-	-	-	-
Short term debt	41	14	14	14	14
Total debt	**41**	**14**	**14**	**14**	**14**
Other non-current liabilities	579	391	391	391	391
Total Equity & Liabilities	**11,345**	**14,527**	**16,160**	**18,226**	**21,300**
Gross block	4,197	5,556	6,256	8,756	10,756
Accumulated depreciation	785	1,155	1,588	2,137	3,301
Net Block	**3,411**	**4,400**	**4,668**	**6,619**	**7,455**
CWIP	393	389	389	389	389
Intangible and others	891	887	887	887	887
Other non-current assets	379	1,495	1,495	1,794	2,152
Investments	2,391	1,279	1,279	1,279	1,279
Trade receivables	1,727	2,185	2,184	2,625	3,921
Inventories	1,119	1,579	1,506	1,810	2,704
Cash & Cash equivalents	2,253	3,513	4,399	3,442	3,230
Other current assets	508	559	559	671	805
Total current assets	**5,607**	**7,836**	**8,648**	**8,549**	**10,661**
Trade payables	713	981	428	512	745
Other current liabilities	1,014	777	777	777	777
Total current liabilities	**1,727**	**1,758**	**1,205**	**1,289**	**1,523**
Total Assets	**11,345**	**14,527**	**16,160**	**18,226**	**21,300**

Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 84: Key ratios

Y/E March (Rsm)	FY19	FY20	FY21E	FY22E	FY23E
Per share (Rs)					
Adj EPS	30.2	36.8	48.4	60.9	83.5
Book value	216.9	285.6	318.6	360.4	422.5
Valuation (x)					
EV/EBITDA	15.0	21.6	31.5	25.7	16.4
P/E	23.5	33.2	41.3	32.9	24.0
P/BV	3.3	4.3	6.3	5.5	4.7
Return ratios (%)					
RoCE	18.4	18.2	17.2	18.9	24.1
RoE	14.5	14.6	16.0	17.9	21.3
Profitability ratios (%)					
Gross margin	52.1	54.4	54.7	54.9	56.1
EBITDA margin	21.9	24.8	25.3	26.1	27.4
PAT margin	14.5	16.6	19.3	20.1	18.8
Liquidity ratios (%)					
Current ratio	3.2	4.4	7.1	6.6	6.9
Quick ratio	2.5	3.5	5.9	5.2	5.2
Solvency ratio (%)					
Debt to Equity ratio	0.0	0.0	0.0	0.0	0.0
Turnover ratios					
Fixed asset turnover ratio (x)	2.4	1.9	1.9	1.6	2.0
Debtor days	60	67	67	67	67
Inventory days	41	46	46	46	46
Creditor days	31	29	29	29	29
Net Working capital days	71	85	85	85	85

Source: Company, Nirmal Bang Institutional Equities Research

Aarti Industries

16 October 2020

Reuters: ARTI.BO; Bloomberg: ARTO IN

Initiating Coverage

Story of becoming a 'Global Partner Of Choice'

Aarti Industries (ARTO) is the leading manufacturer of benzene/toluene based specialty chemicals and pharmaceuticals APIs with a global footprint. ARTO's thrust on R&D and diversification has enabled the company to expand its portfolio to 200 products, which are marketed to 400 global and 700 domestic clients. These products cater to various end-user industries like Agrochemicals, Pharmaceuticals, Polymer Additives, Pigment & Dyes, Rubber Chemicals etc. The global benzene value chain has been dominated by a few large players like Lanxess, Du Pont, Sumitomo Chemicals, Honeywell etc. ARTO ranks among the top 3 global players for Nitrochlorobenzene (NCB) and Dichlorobenzene (DCB). Ability of ARTO to form downstream derivates by engaging in value-added chemistries like hydrogenation, ammonolysis, halex chemistry etc and cost-plus contracts have enabled the company to maintain strong profitability even during the period of declining input prices (which affect absolute revenue growth). We believe that ARTO's inroads into toluene chemistry could be a future growth driver as there is opportunity to expand its product portfolio further. There exists a huge import substitution opportunity and the ARTO management has identified 15-20 chemical products, which could be taken up for manufacturing. Also, in our view, ARTO ticks all the necessary boxes in order to garner incremental share as part of the 'Plus One' strategy of global supply chain majors. The winning of back-to-back 3 multi-year contracts implies the strong foothold that ARTO has established in the global chemicals space. ARTO's specialty chemicals division is not dependent on China for raw material supplies and that has supported the new multi-year contracts. While the Pharma API business is relatively small (~15% of total revenue), it has shown consistent improvement over the last 5 years, both in terms of revenue and profitability. ROCE of the Pharma business is also approaching that of Specialty Chemicals business. We are building in revenue and earnings CAGR of ~17% and ~24%, respectively over FY20-23E

Initiate with ~28% upside: We initiate coverage on ARTO with TP of Rs1,250, valuing it at ~25x Sept'22E earnings. We believe that ARTO should trade at a premium to 5-year average PE multiple as over the same period things such as capital intensity, product mix, performance of the Pharma business etc have improved significantly. Winning long-term contracts indicates ARTO's strong position in the global chemicals space. Also, we believe that as global supply chains are increasingly working towards reducing dependence on China, ARTO is expected to be one of the key beneficiaries.

Y/E March (Rsmn)	FY19	FY20	FY21E	FY22E	FY23E
Net Sales	41,676	41,863	42,198	50,987	67,105
Growth YoY%	*9.5%*	*0.4%*	*0.8%*	*20.8%*	*31.6%*
Gross margin %	*48.3%*	*50.9%*	*51.0%*	*51.5%*	*51.6%*
EBITDA	9,651	9,773	9,795	12,352	16,525
EBITDA margin %	23.2%	23.3%	23.2%	24.2%	24.6%
Adj PAT	4,917	5,361	5,410	7,151	10,270
Growth YoY%	*47.7%*	*9.0%*	*0.9%*	*32.2%*	*43.6%*
RoCE	*19.5%*	*16.6%*	*14.9%*	*17.0%*	*21.0%*
RoE	*23.4%*	*19.1%*	*17.1%*	*19.7%*	*24.2%*
P/E	27.6	24.9	32.2	24.4	17.0
EV/EBITDA	15.4	15.3	19.6	15.6	11.7
P/BV	5.2	4.5	5.2	4.5	3.8

Source: Company, Nirmal Bang Institutional Equities Research

BUY

Sector: Chemicals

CMP: Rs978

Target Price: Rs1,250

Upside: 28%

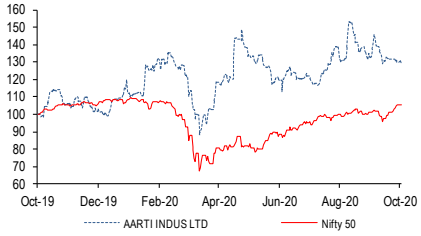
Abhishek Navalgund
Research Analyst
abhishek.navalgund@nirmalbang.com
+91-22-6273-8013

Key Data

Current Shares O/S (mn)	174.2
Mkt Cap (Rsbn/US$bn)	174.9/2.4
52 Wk H / L (Rs)	1,229/662
Daily Vol. (3M NSE Avg.)	444,629

Share holding (%)	1QFY20	2QFY20	3QFY20
Promoters	47.3	47.8	48.3
Public	52.6	52.3	51.8
Non-Institutions	47.3	47.8	48.3

One Year Indexed Stock Performance



Price Performance (%)

	1 M	6 M	1 Yr
Aarti Industries	(5.0)	11.5	30.2
Nifty Index	1.4	30.9	2.2

Source: Bloomberg

Initiate coverage on ARTO with TP of Rs1,250

ARTO is trading at ~25x PE currently, in-line with the 2-year average. 5-year average PE multiple is ~22x. We believe that over the last 2 years, there have been various changes like winning of long-term contracts and overall annoucement of capex for expansion. Also, as global supply chains are increasingly working towards reducing dependence on China, ARTO is expected to be one of the key beneficiaries. The company's Pharma business has shown consistent improvement over the last 5 years, both on revenue and profitability front. Hence, we are of the view that ARTO should trade at premium compared to its 5-year average PE multiple. We initiate coveage on ARTO with Buy rating and TP of Rs1,250, indicating upside of 28% from the CMP. Our TP is based on Sept'22E consolidated EPS and target PE multiple of 25x, in line with last 2-years' average.

Exhibit 1: We initiate coverage on ARTO with TP of Rs1,250

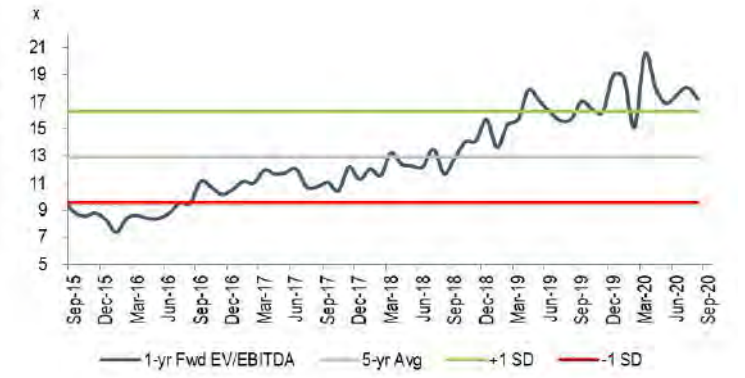
Particulars	
Sept'22 Consolidated EPS	50
Target PE	25
Target price	**1,250**

Source: Nirmal Bang Institutional Equities Research

Exhibit 2: 1-year fwd PE ratio

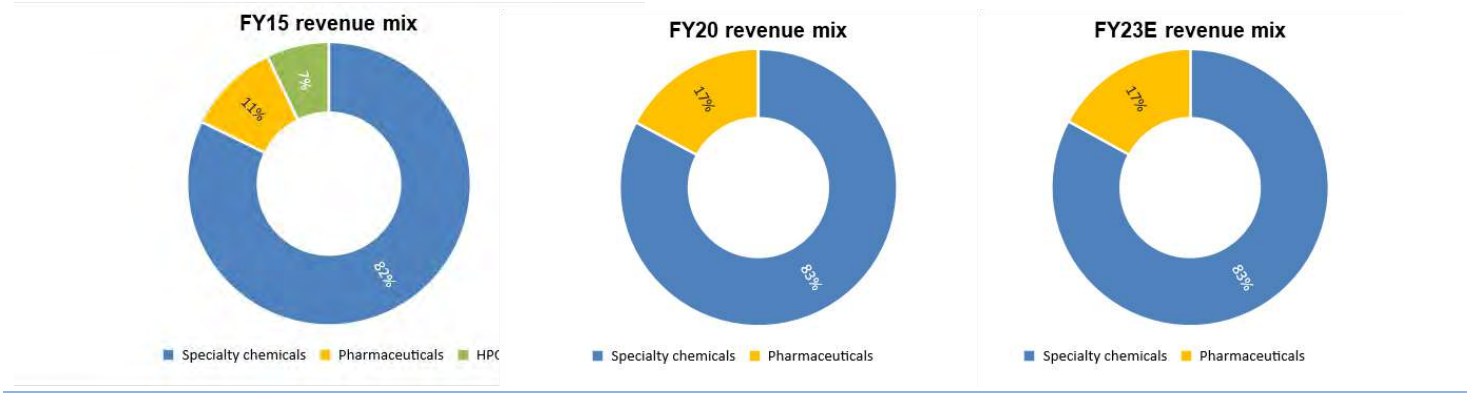
Source: Bloomberg, Nirmal Bang Institutional Equities Research

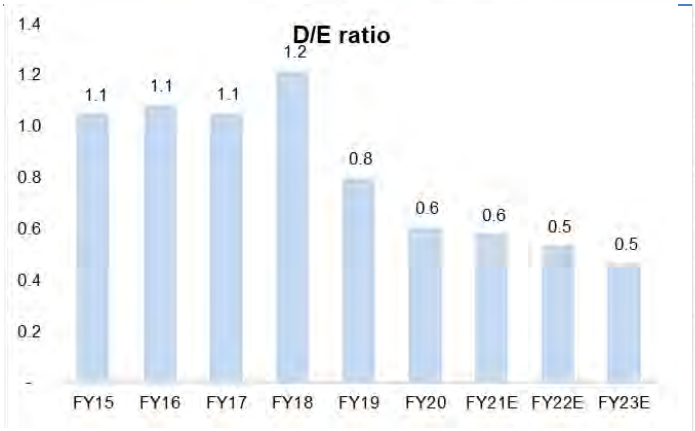
Exhibit 3: 1-year fwd EV/EBITDA ratio

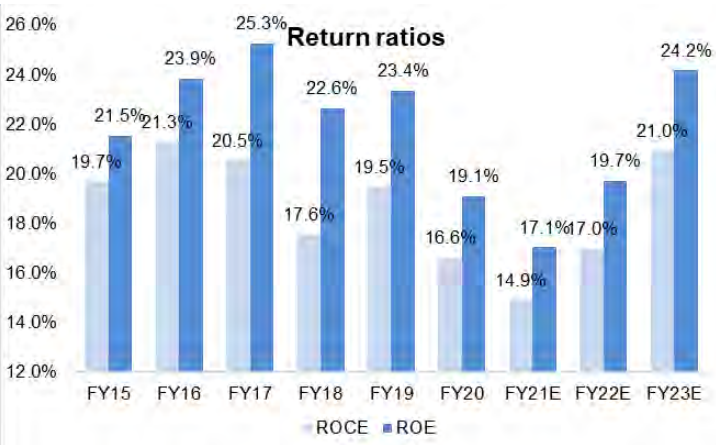


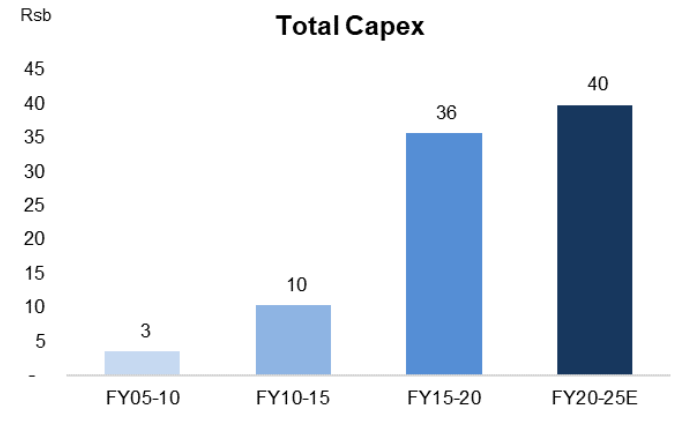
Source: Bloomberg, Nirmal Bang Institutional Equities Research

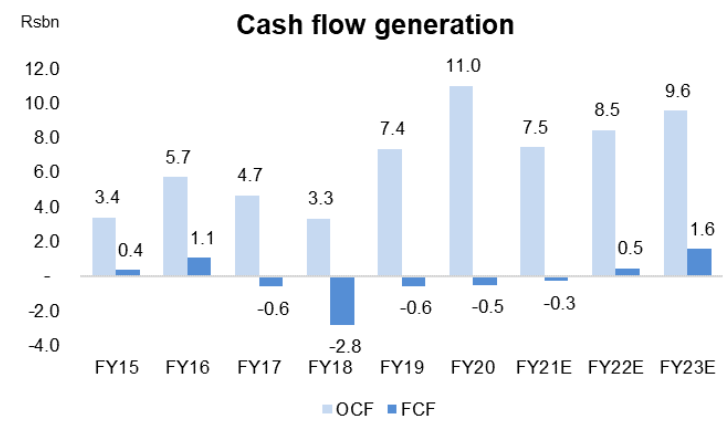
Exhibit 4: Financial Dashboard









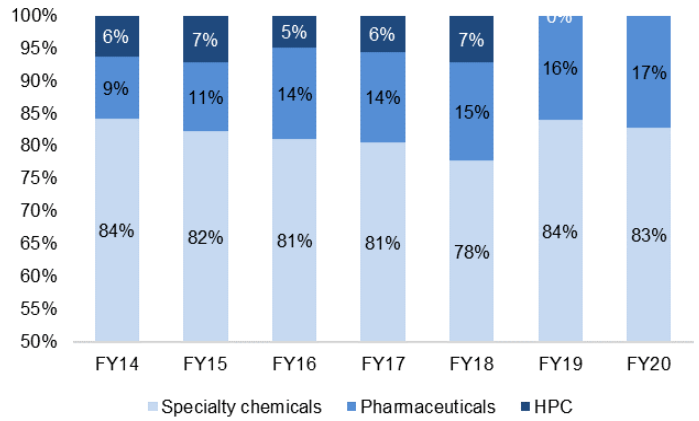


Source: Company, Nirmal Bang Institutional Equities Research

Specialty Chemicals and Pharma are key segments

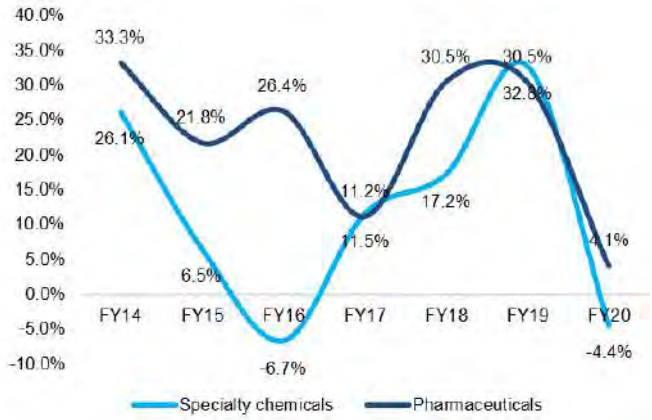
ARTO's Specialty Chemicals business forms ~83% of the total revenue and the rest is contributed by the Pharma segment. Historically, margin performance of the Specialty Chemicals segment has been far superior compared to Pharma, but the latter has shown significant improvement on a consistent basis over the last 5 years. We believe that with focus on R&D and value-added products, the company's Pharma business can continue to deliver robust profitable growth. The Specialty Chemicals segment's proportion will increase further in the next 3 years as ARTO starts generating revenues from the 2 long-term contracts that it has received. ROCE of the Specialty Chemicals segment has been in excess of ~25% on an average (FY20 was lower on account of significant capex done during the year). The Pharma segment clocked mid-teens ROCE in FY20 as against 7-8% 5-6 years back.

Exhibit 5: Segment-wise revenue share – Pharma gradually gaining share



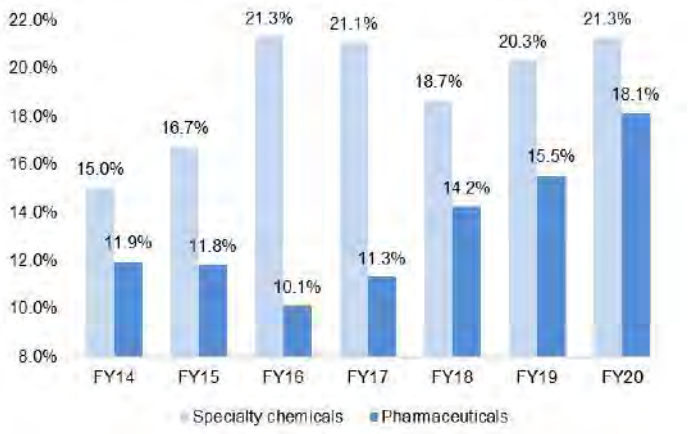
Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 6: Segment-wise revenue growth- strong growth in both divisions over last 5 years



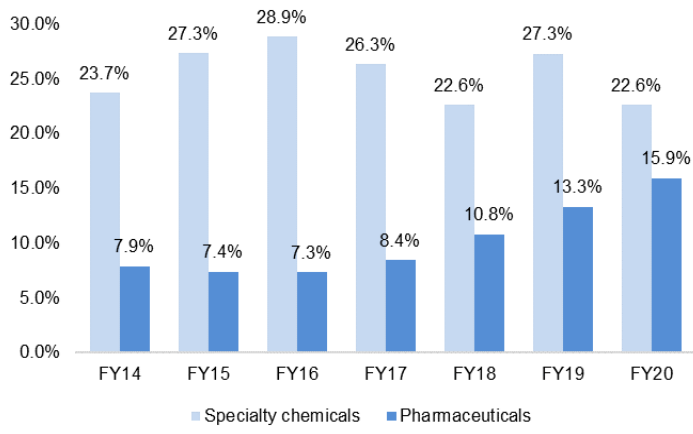
Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 7: Segment-wise EBIT margin – Specialty Chemicals margins unaffected by crude volatility; Pharma showing consistent improvement



Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 8: Segment-wise ROCE trend- Lower Specialty Chemicals ROCE in FY20 on account of capex; Pharma narrowing the gap with Specialty Chemicals

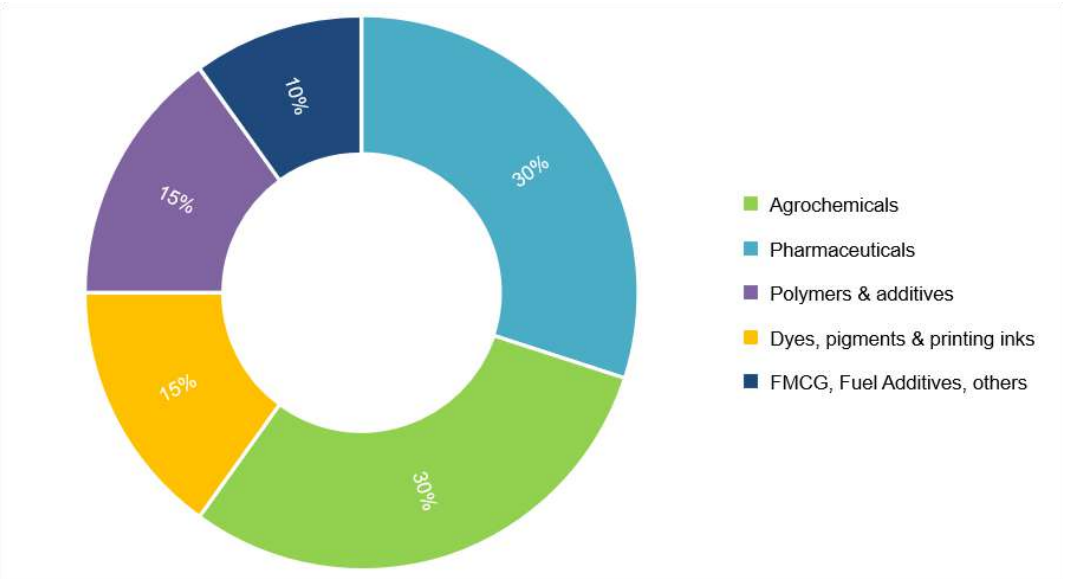


Source: Company, Nirmal Bang Institutional Equities Research

Overall diversification works as a natural hedge in challenging times

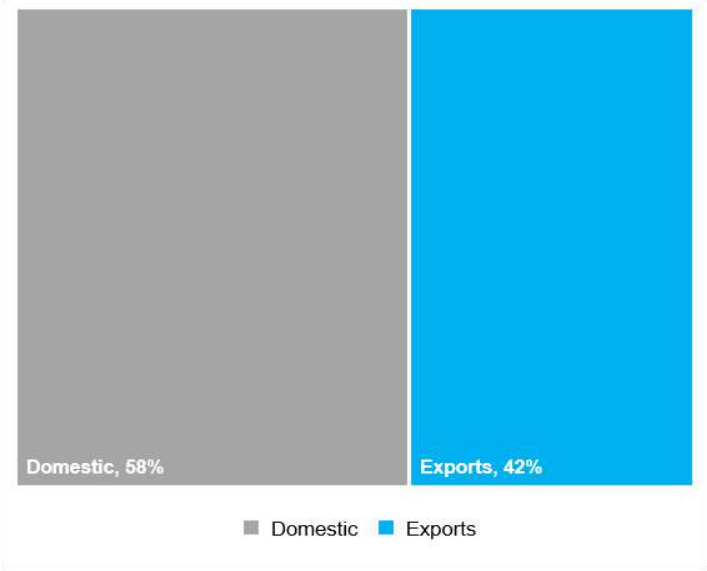
ARTO's products cater to various end-user industries across the globe. Also, in terms of geographical reach, it is a fairly diversified company. Both, product and geographical diversification offers better earnings stability. ~60% of the company's business is derived from Agrochemicals and Pharma segments, which are expected to do well in the medium term. We highlight that the weak outlook in the near term for few other industries (non-discretionary in nature) would be offset by growth in these 2 key segments, thereby maintaining the overall earnings profile. Also, having multi-user products in its portfolio helps it to navigate the challenges faced by specific end-user industries in challenging times. Similarly, ~58% of the overall revenue is domestic revenue whereas the rest is contributed by major geographies outside India. Also, some portion of the Indian revenue is ultimately routed to overseas geographies.

Exhibit 9: ARTO's end-user industry wise revenue share- ~60% share of Agrochemicals and Pharma is positive



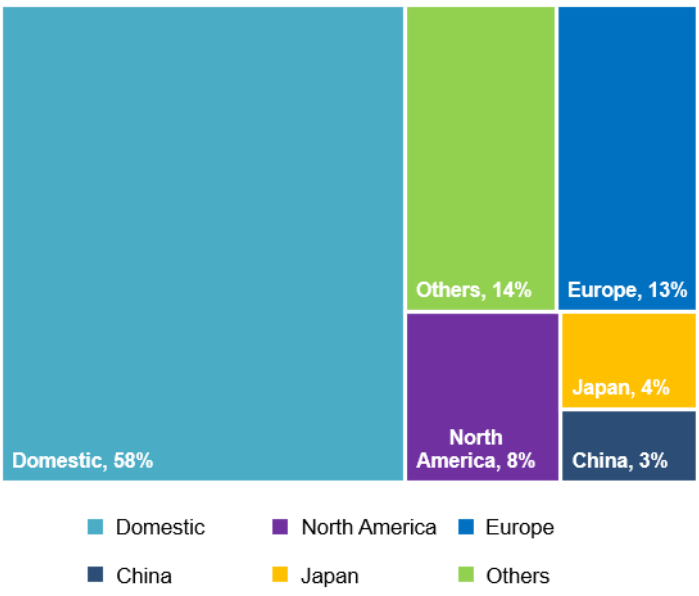
Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 10: Domestic revenue share (FY20) at ~58% and….



Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 11: …. EU and North America are key overseas markets



Source: Company, Nirmal Bang Institutional Equities Research

'Plus One' strategy could be a game changer

As global supply chains are increasingly looking for stable sourcing locations outside China in order to reduce dependence on the latter, we believe that Indian chemical companies having strong R&D expertise, scale and ability to offer products at lower costs (through efficiency measures) stand to benefit significantly over the next decade. We believe that India would be a key beneficiary of this structural shift in the global chemicals value chain wherein global majors would prefer their partners also to be not dependent on China in order to effectively reduce their overall dependence on China. Also, in our view, post environmental crackdown in China, aggression in opening new capacities would be lower than the past. Further, old facilities would become irrelevant considering the new environmental and pollution related norms. The ongoing US-China trade war and the current pandemic situation will cause the structural shift away from China to other destinations like India and Vietnam. China accounts for ~18% (~USD35bn) of the global specialty chemicals exports i.e. more than 4x of Indian exports. Even if India could garner ~5% of the global exports pie, this would translate into incremental business of USD10bn.

India is emerging as a significant player in the global chemical supply chain with its scalable low-cost manufacturing ecosystem, improving infrastructure and established VHS compliance framework. India offers low cost operations, availability of feedstock, skilled manpower, access to port and strong IP protection etc. Going forward, the Indian government's initiatives on making India a manufacturing hub will benefit market leaders in niche chemistries and processes significantly in our view. The country is well positioned to expand its market share globally and there are also opportunities to replace imports with domestic production. Investment in operational excellence and new product development can create differentiation and strong long-term business visibility. There is a huge appetite for sourcing from India. Although, overall Chinese costs are still lower, the gap is getting narrowed. Chinese labor cost is now double than India and environmental costs are identical. So, inherently, there is a cost advantage in India. While no one can accurately quantify the benefit from the 'Plus One' theme, we expect select Indian players in the chemicals industry ticking all the required boxes to witness non-linear growth over the next decade.

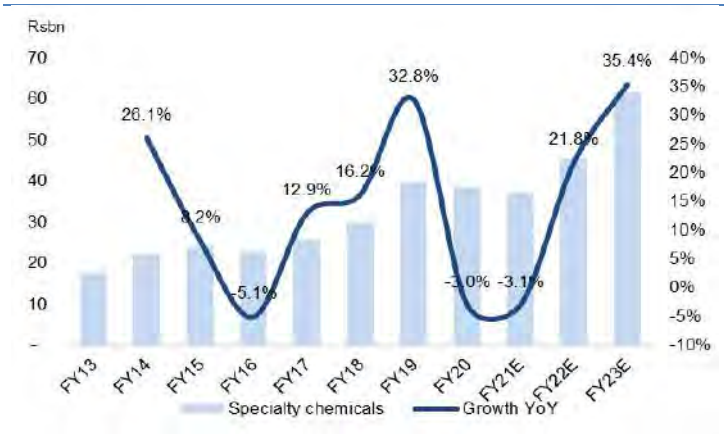
ARTO ticks all the right boxes

- We believe that ARTO would be one of the key beneficiaries as it is the world's leading player in Benzene chemistry and deals with all the big chemical companies across the globe. ARTO is a company with integrated operations and high level of cost optimization.
- Also, its consistent focus on process improvement and innovating downstream derivatives (value-added products) through processes like high value chlorination, hydrogenation, ammonolysis etc. indicates its R&D expertise. It has 4 R&D facilities and dedicated pool of ~400 scientists. It has IPRs for developing customized products. 2 of its 17 plants are USFDA approved and 3 are WHO/GMP approved.
- Capex intensity has gone up significantly, especially over the last 2 years. 3 multi-year contracts (including one which was cancelled later on due to change in strategy from client's end) demonstrate the client's confidence in the company's ability to deliver the desired results. Also, awarding of long-term contracts confirms that the trend is here to stay.
- The company's Chemicals business is completely backward integrated and imports from China are nil. Even in the Pharm business, Xanthene derivates are completely backward integrated. ARTO is dependent on China only for steroids in API manufacturing. The company's management has indicated that it has identified 15-20 products where there is an import substitution opportunity and could possibly consider putting up manufacturing unit(s) for the same. Hence, in our view, ARTO ticks all the right boxes in order to garner further market share.

Specialty Chemicals - focus on complex processes & innovation are key growth drivers

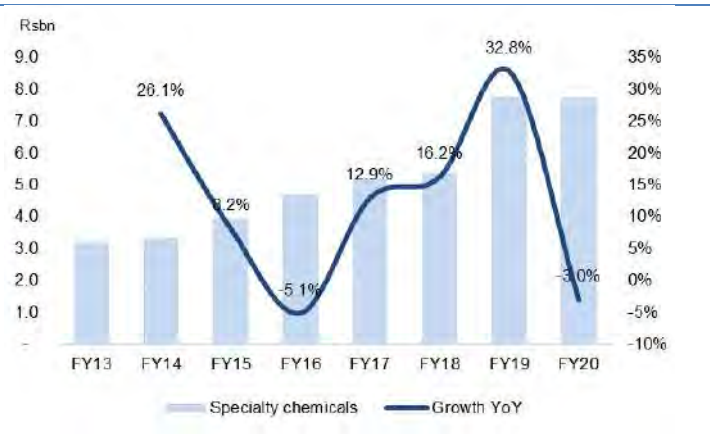
Specialty Chemicals forms ~83% of overall revenue for ARTO. It has integrated operations across the product chain of benzene, sulphur and toluene, which gives it the ability to effectively use co-products and generate value-added products. We believe that ARTO's product and end-user diversification will enable it to deliver consistent performance. Products in the Specialty Chemicals segment have varied applications across Agrochemicals, Pharmaceuticals, Polymer Additives, Pigments and Dyes industries. The various processes used in the manufacturing operations include chlorination, nitration, ammonolysis, hydrogenation, ethylation and fluoro compounding. Factoring in expansion plans, long-term contracts and overall thrust on R&D, we expect the company's Specialty Chemicals division to report ~17% revenue CAGR over FY20-23E (despite considering flattish growth in FY21 on account of Covid-19 related disruption and declining raw material prices). As absolute revenue is a function of input prices, revenue growth historically looks lower over the last 5 years. However, the cost-plus approach ensures profitability from the segment. Therefore, EBIT has grown disproportionately (~2x) over the last 5 years. We expect this trend to continue going forward with sharper focus on VAP and R&D. Growth in domestic revenue over the last 3-4 years has been ahead of exports revenue, which has resulted in a higher share for the domestic market. However, as execution of long-term contracts begins, exports business' share is expected increase to ~44% in FY23 (~41% in FY20).

Exhibit 12: Specialty Chemicals revenue - we are building in ~17% CAGR over FY20-23E



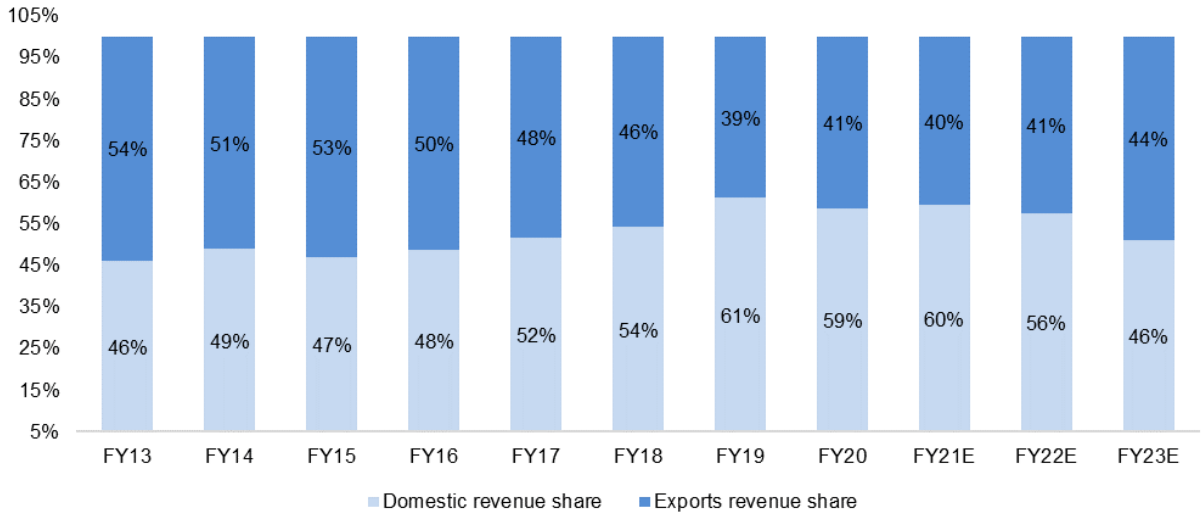
Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 13: Specialty Chemicals EBIT grew ~2x over FY15-20 despite volatility in input prices



Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 14: Specialty Chemicals domestic vs exports mix - exports will gain share after execution of long-term contracts



Source: Company, Nirmal Bang Institutional Equities Research

Operating margin in the Specialty Chemicals segment has been in excess of ~20% for the last few years. Although we acknowledge that margin in % terms looks on the higher side in cost-plus contracts during declining input prices, we believe that underlying margin has increased over the years due to significant new product launches, which are mainly downstream derivatives having high entry barriers. Similarly, return ratios of the Specialty Chemicals segment are superior than company average. The declining trend over the last 2 years was on account of rising capex intensity. Higher ROCE should be restored as soon as these projects get commissioned. Although peak ROCE over the last 7-8 years was ~29%, we expect ~25-27% range to be sustainable. However, in one of the long-term contracts, capex is being funded by the client. Peak revenue potential of the contract would be ~13% of FY20 Specialty Chemicals revenue. Therefore, once that contract comes on board, there could be an upside of ~2-3% in our view.

Exhibit 15: Specialty Chemicals EBIT margin - improvement in underlying margin led to robust growth

Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 16: Specialty Chemicals ROCE - we expect ~2-3% upside after execution of one of the long-term contracts

Source: Company, Nirmal Bang Institutional Equities Research

Most of its Specialty Chemicals products are primarily along the benzene-based value chain. Other chemicals such as sulphuric acid and its derivatives, single super phosphate, toulene-based derivatives, calcium chloride granules, fuel additives and phthalates are also part of its manufacturing portfolio. As 60% of the business is contributed by Agrochemicals and Pharma, we believe that the impact of Covid-19 outbreak in the near term would be limited compared to niche players specializing in a chemistry catering to particular industries other than these two. Increasing number of products/drugs going off-patent would drive the growth of Agrochemicals and Pharma sectors going forward. Also, consolidation by global majors with focus on core R&D will enable key chemical suppliers in the respective chemistry to grow substantially. Also, the growing global theme of reducing dependence on China by global supply chain majors will benefit companies like ARTO having sufficient capacity and expertise to fulfill that demand. In one of the interactions, the ARTO management has indicated that it has identified 15-20 products in the Specialty Chemicals business with import substitution opportunity and it could consider manufacturing them based on the magnitude of the growth opportunity. Some of the expansion plans include expansion of Nitro Chloro Benzenes, Chlorination plant, debottlenecking of existing plants etc. Also, 2 multi-year contracts would start contributing to revenue from FY22/23E.

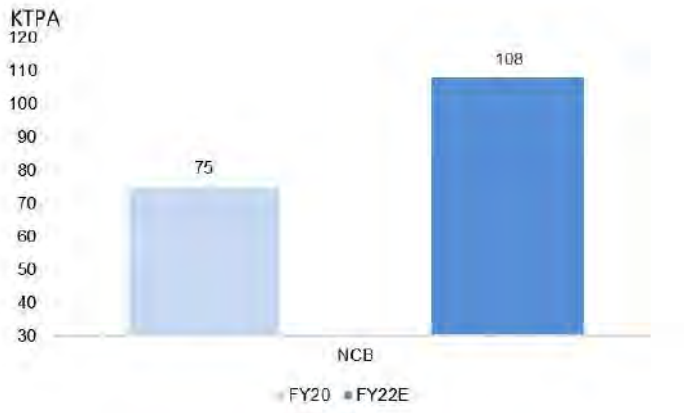
ARTO is the leading player in benzene chemistry

ARTO is ranked among the top 3 players globally for the manufacture of Nitro Chloro Benzenes (NCB) and Di-chloro Benzenes (DCB). As per our estimates, ARTO has ~20% share in global NCB capacity and ~10% share in DCB capacity. Key end-user industries are Agrochemicals, Pharma, Pigments, Rubber etc. ARTO is planning to expand the capacity of NCB from 75,000 TPA to 108,000 TPA (~44% increase) in 2 phases. As per the management, the entire capacity expansion would be completed by the end of FY22. Considering the growth outlook for the Pharma and Agrochemicals sectors, we believe that the incremental capacity would be absorbed immediately. The existing capacity clocked utilisation in excess of ~90% in FY19; FY20 capacity utilisation was lower on account of shortage in supply of nitric acid (on account of technical issues at supplier's end). We also highlight that when China shut down its plants on account of environmental crackdown, global supply chain was exposed to huge risk of supply constraints. For instance, US-based manufacturers were virtually completely dependent on China for ONCB, which has applications in Pharma and Agrochemicals sectors. Therefore, with diversification of supplies coming into play, ARTO would be a key beneficiary of this structural shift taking place globally. Also, NCB will continue to drive growth due to the company's ability to carve out further downstream derivates and combining chemistries.

Exhibit 17: ARTO is one of the leading players in Benzene chemistry worldwide

Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 18: NCB capacity expansion - ~44% increase in capacity is expected by end of FY22



Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 19: NCB utilisation has reached ~90%; FY20 was a one-off year

Source: Company, Nirmal Bang Institutional Equities Research

India is net exporter of Benzene and Paraxylene

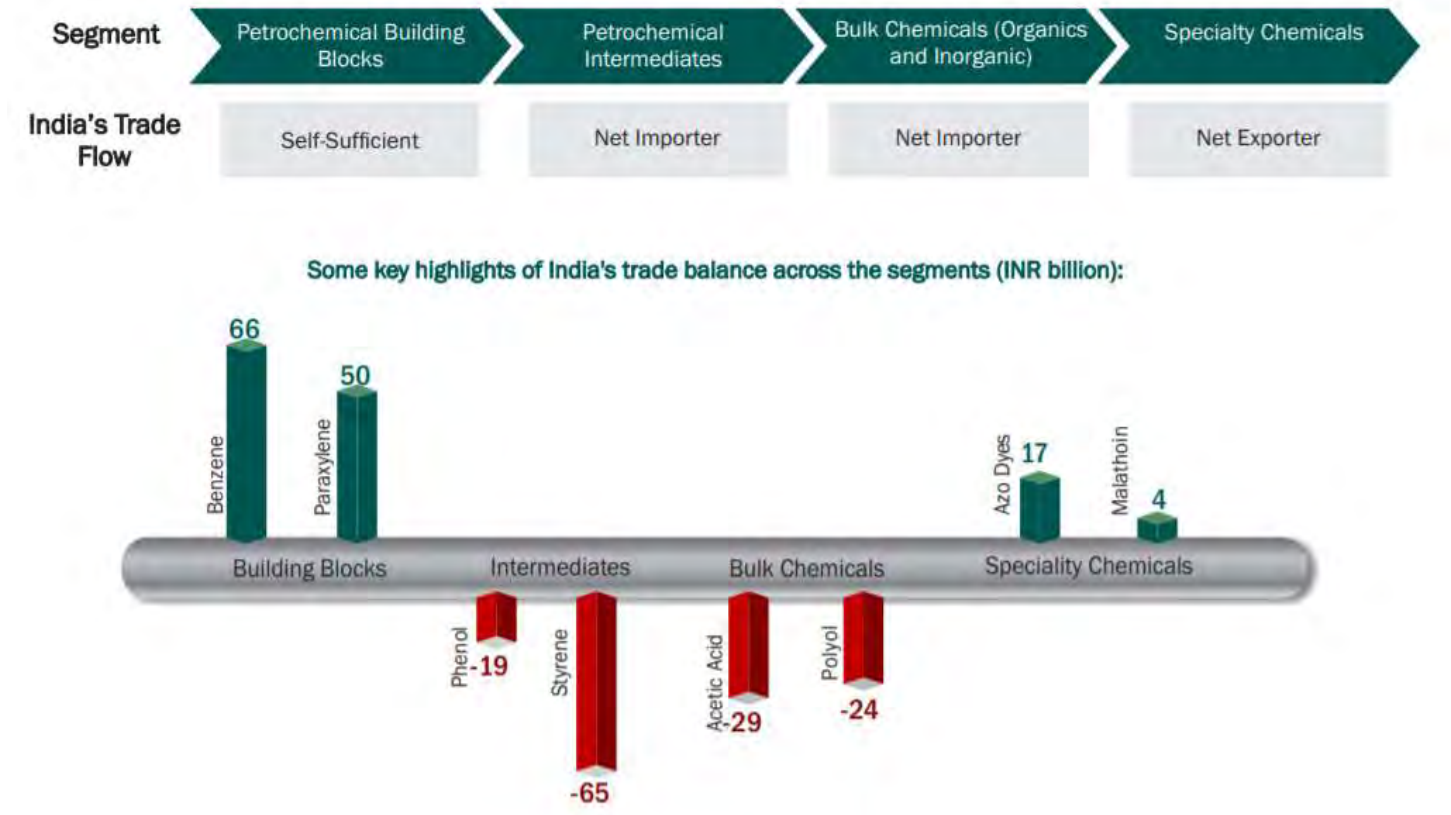
Benzene is a large-volume commodity petrochemical that is primarily produced in oil refineries and steam crackers, or as a by-product of p-xylene production. The primary chemicals produced from benzene are ethylbenzene, cumene, cyclohexane and nitrobenzene. Ultimately, benzene is used in a wide range of downstream sectors such as Construction, Automobiles, Electronics & Appliances and diverse other durables and consumables.

Over the past decade, benzene consumption has shifted from the West (Western Europe and North America) to the East (Northeast Asia, the Middle East and Southeast Asia). China has become an increasingly important influence on the benzene market. China's benzene consumption from 2013 has been well ahead of the rest of world, led by focus on infrastructure development and overall increase in income levels. As per industry reports, global consumption of benzene will continue to grow at an average annual growth rate of 2.9% during 2018–23, driven primarily by the developing markets in Asia. Benzene consumption and growth will vary by region based on the development of downstream derivative capacity.

Similar to all other petrochemicals, the benzene industry is cyclical, with the equilibrium between supply and demand driving the state of the industry. Overall, benzene consumption is broadly tied to the general economy and has been increasingly linked to emerging countries, where the improvement in living standards is driving an increasing use of a wide range of polymers and chemicals.

Benzene production is influenced by many different dynamics that vary from one region to other. As benzene is produced primarily as a co-product, its supply is not driven by global benzene demand but rather by the demand for other products (gasoline, ethylene, p-xylene and steel). Wide variety of potential sources includes refineries, steam crackers, PX units and coke ovens.

Exhibit 20: India is self sufficient in petrochemical building blocks



Source: Industry reports, Nirmal Bang Institutional Equities Research

Entry in Toluene chemistry - a future growth driver

Diversification has been in the DNA of ARTO. With continuing focus on benzene value chain, it entered toluene chemistry in FY18. While India is a net importer of toluene despite having various players with manufacturing capacity, players with the ability to produce downstream derivatives by extending the processes and new chemistries stand to benefit significantly. ARTO set up a 30,000-tonne nitro-toluene facility in FY18 (commissioned in Sept'17) at Jhagadia with a capex of Rs1,900mn. Capacity utilisation in FY19 was ~53%. At peak utilisation, ARTO expects potential revenue of Rs2,000mn from the same facility. FY20 utilisation was weak (<30%) on account of shortage of key input material i.e. nitric acid due to technical issue at supplier's end. We expect peak utilisation by the end of FY22.

A large part of toluene is used for manufacturing benzene and xylene, which have applications in multiple sectors. Key end user industries of toluene value chain include Dyes & Pigments, Agrochemicals, Pharma etc. Also, toluene is consumed in the manufacture of toluene diisocyanate (TDI), which is used in the manufacture of polyurethane flexible foams used in upholstery, mattresses and automotive seats. ARTO's focus on the expansion of chlorination facility and dedicated hydrogenation capacity for toluene will further boost revenue from the toluene value chain, as these are the advanced stages in the toluene value chain. Currently, there are no producers of chlorotoluene in India. Similar to NCB, going forward, ARTO will develop chemistry of photochlorination and hydrogenation in the toluene value chain (advanced value chain/processes). We believe that along with the import substitution benefit, availability of capacity will boost domestic consumption.

Most of the domestic demand for toluene is met through imports in India and the international market has a direct bearing on domestic prices. Production of toluene depends significantly on the differential between toluene and naphtha prices. Toluene prices are directly proportionate to naphtha prices due to which production and supply patterns are directly affected by the swing in the prices of its feedstock. RIL, IOCL, BPCL, GNFC, ARTO and Deepak Nitrite are the key producers of toluene in India. Despite having number of producers, import dependence is high on account of underutilization of capacities. Singapore is the major importing source of toluene and the UAE is the major exporting destination.

Creating its own niche: only producer of PDA and Nitro Fluoro Aromatics

ARTO is the only Indian company involved in the manufacture of phenylenediamine (PDA) with capacity of 12,000TPA. Key end users of PDA are Hair Dyes, Pigments, Engineering Polymers and Specialty Additives. As PDA's major application is in the industrial segments, slowdown has affected utilisation. Also, there were some technical issues, which led to ~40% utilisation in FY20. We highlight that FY20 utilisation would have been even lower had there been no blast at the Chinese factory supplying PDA. This led to a demand-supply imbalance and ARTO's EBITDA was positively impacted to the tune of ~Rs500mn. We believe that with growing environmental and compliance oversight in China and overall theme of global supply chains reducing dependence on China, ARTO could benefit in the medium to long term. There is room for further expansion of capacity by debottlenecking the capacity and hence higher demand could be fulfilled.

ARTO is also the only manufacturer of nitro fluoro aromatics using the Halex process. In chemistry, the Halex process is used to convert aromatic chlorides into corresponding aromatic fluorides. ARTO has hydrogenation capacity of 36,000 MTPA. Key end use industries for the same are Basic Pharma and Agrochemicals. Since the outlook for both these segments is strong, we expect this product to contribute reasonably well to ARTO's overall revenue going ahead.

Getting multi-year contracts indicates the strong foothold of ARTO at the global levvel

ARTO has won 3 multi-year contracts over the last 3 years. Although recently one of the contracts was cancelled on account of change of strategy at the customer's end, we believe that winning multiple long-term contracts indicates the strong foothold that ARTO has established at the global level. ARTO is going to get the stated compensation of ~US$120mn for cancellation of contract from the client in 2 tranches as per the terms of the contract. Also, as the company is planning to commission the capacity, this can support overall growth. We highlight that, through these 3 contracts, ARTO would be making completely new products by using customer's technology knowhow. This will result in further diversification and open up further avenues of growth for the company. In contract two, ARTO merely does tolling with raw materials and technology being provided by the customer; capex has also been funded by the same customer. Although, EBITDA margins from such contracts are low, ROCE would be in the range of ~30-40%, which is significantly higher than the company average. Therefore, the ARTO management is in talks with other customers for similar contracts.

We also believe that ARTO ticks all the right boxes in order to become a key beneficiary of the 'Plus One' theme wherein global supply chain majors are planning to reduce dependence on China. We expect ARTO to bag further long-term contracts based on customer's requirements as it has the scale, R&D expertise and ability to execute projects by optimizing production costs.

Exhibit 21: Details of long-term contracts

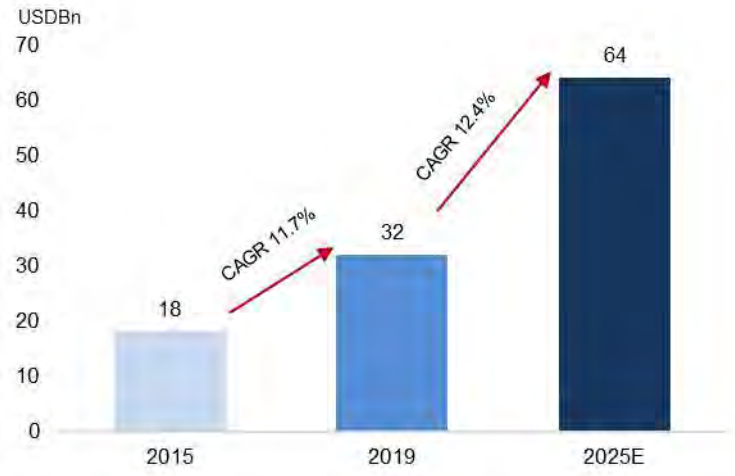
Particulars	Contract I	Contract II	Contract III
Status	Terminated	Live	Live
Value (Rsbn)	40	100	90
Duration (years)	10	20	10
Annual revenue potential (Rsbn)	4	5	9
Commissioning	4Q20	FY21	4QFY21
Capex	USD 62mn	USD 40mn (advance from client USD 42mn)	USD 15mn
Asset turnover	1x	2x	1x
ROCE	At par	Very high	At par
Segment	High value intermediate for herbicides	Spec chem intermediate	High value Spec chem intermediate

Source: Company, Nirmal Bang Institutional Equities Research

Indian Specialty Chemicals industry is expected to grow at 12.4% CAGR over 2019-25

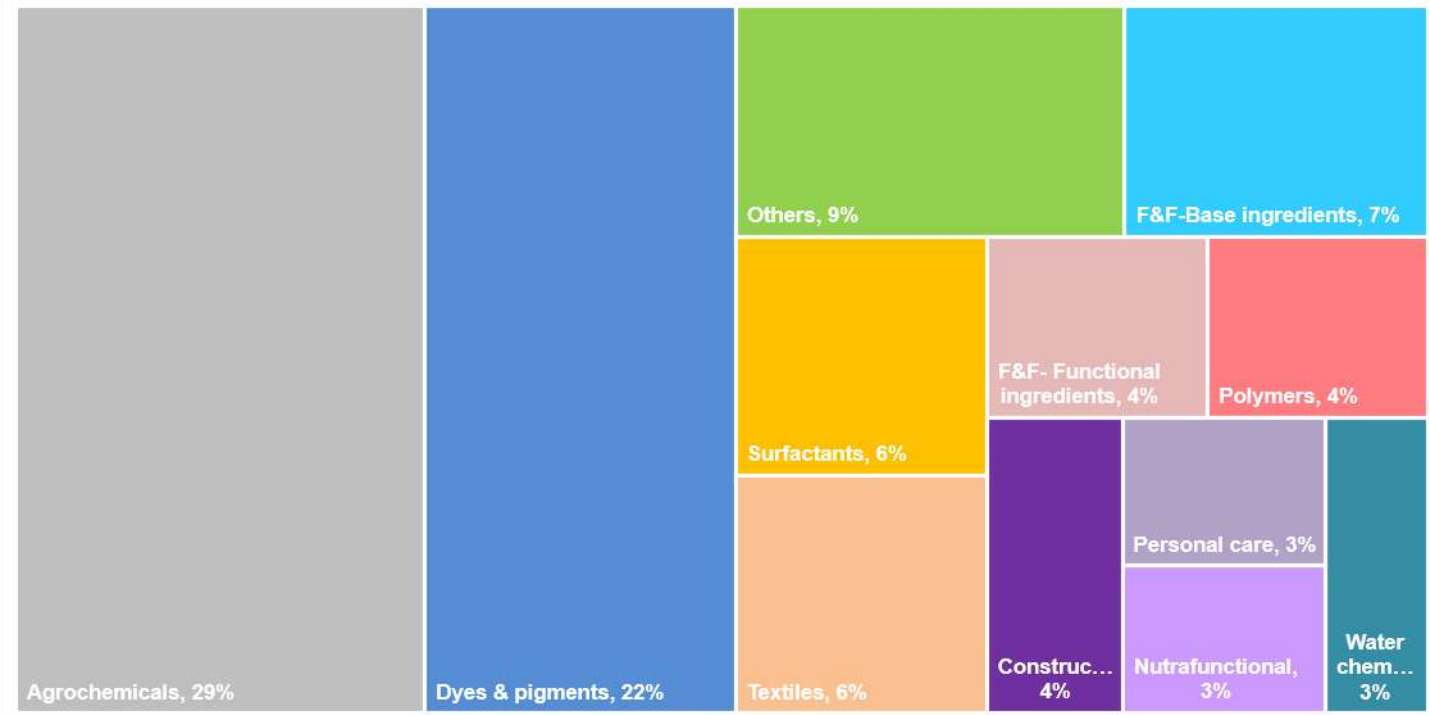
ARTO's domestic revenue forms ~58% of the overall revenue and its products cater to majority of the key end-user industries. Therefore, it is important to understand the growth of these key end-user industries. Indian Specialty Chemicals industry is expected to grow at 12.4% CAGR over 2019-25 despite the Covid-19 related impact in the short run. We present overall growth expectations from some of the key end-user industries along with the overall growth.

Exhibit 22: Indian Specialty Chemicals industry is expected to grow at 12.4% CAGR over 2019-25



Source: FICCI Report, Nirmal Bang Institutional Equities Research

Exhibit 23: Indian Specialty Chemicals industry break-up by end-usee industries (2019)



Source: FICCI Report, Nirmal Bang Institutional Equities Research

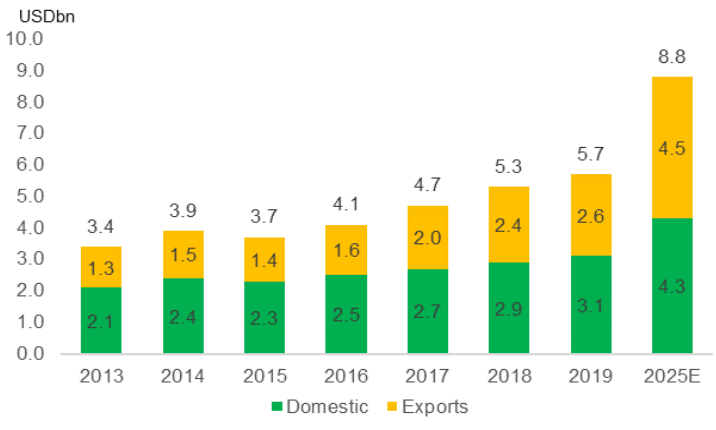
Exhibit 24: Indian Specialty Chemicals industry break-up by end-use industry (2019)

Segment	Market Size (USD bn)	2014-2019 CAGR	2019-2025 CAGR	Entry Barriers	Product Specialization	Presence of scaled up Indian players	End market growth potential
Agrochemicals	9.2	10.0%	12.0%	H	M	H	M
F&F and Nutra Ingredients	2.4	16.1%	17.1%	H	H	H	H
Dyes and Pigments	7.0	7.3%	10.0%	M	M	H	M
Personal Care Chemicals	1.0	15.5%	15.0%	H	H	L	H
Surfactants	2.0	6.4%	11.0%	M	M	L	M
Textile Chemicals	1.8	10.4%	11.5%	M	M	L	L
Construction Chemicals	1.4	13.5%	15.0%	H	M	L	H
Polymer Additives	1.3	12.8%	10.0%	L	M	M	M
Water Chemicals	0.8	14.9%	15.0%	H	M	L	H

H - High, M - Medium, L - Low

Source: FICCI Report, Nirmal Bang Institutional Equities Research

Exhibit 25: Indian Agrochemicals growth outlook



Source: UPL, Nirmal Bang Institutional Equities Research

Exhibit 26: Global Agrochemicals growth outloook

Source: UPL, Nirmal Bang Institutional Equities Research

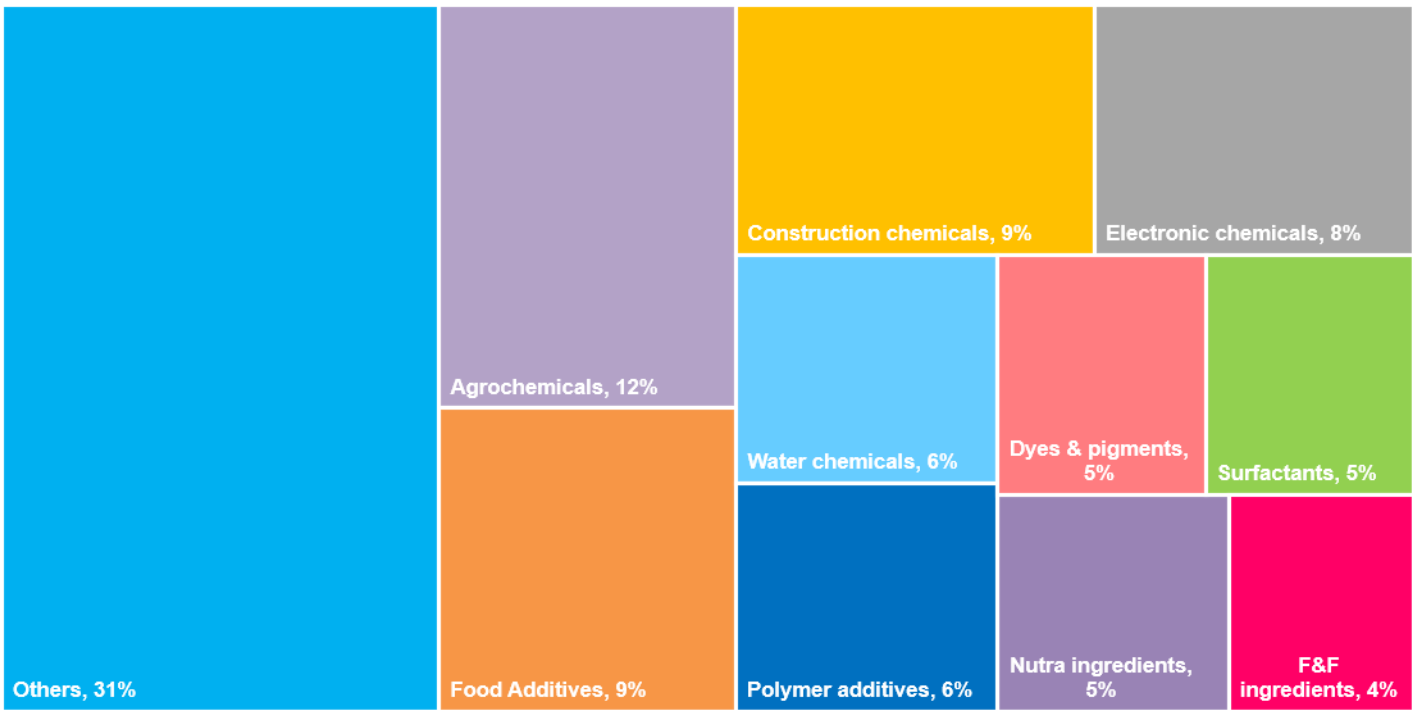
Global Specialty Chemicals industry is expected to grow at 6.4% CAGR over 2019-25

The share of exports in ARTO's total revenue as on FY20 was ~42% and the same is expected to rise further once the execution of long-term contracts begins. Hence, similar to India, global Speciality Chemicals industry's outlook will in turn decide the pace at which ARTO can grow in the medium term. Globally, the Specialty Chemicals industry grew at 5.7% CAGR over the last 5 years, reaching US$805bn in 2019. It is estimated to grow at 6.4% CAGR over the next 5 years and reach ~US$1.2 trillion by 2025, led by growth in Asian markets. We believe that players like ARTO would also gain market share on account of the global 'Plus One' theme as it is well equipped to capture the incremental demand. Long-term relationships with majority of the global chemical titans would ensure strong visibility on orders.

Exhibit 27: Global Specialty Chemicals industry is expected to grow at 6.4% CAGR over 2019-25

Source: FICCI Report, Nirmal Bang Institutional Equities Research

Exhibit 28: Global Specialty Chemicals industry break-up by end-use industry (2019)

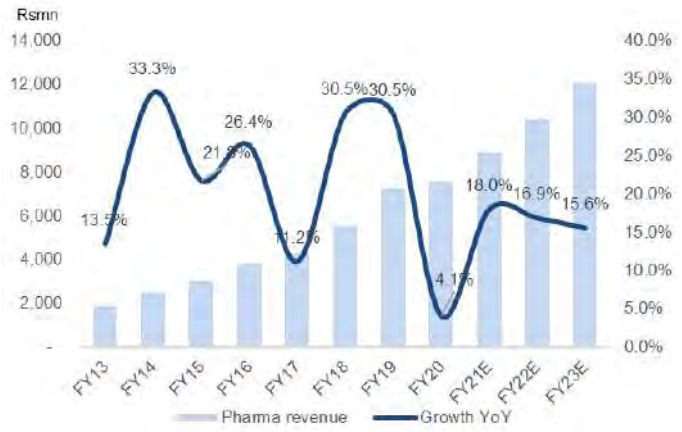


Source: FICCI Report, Nirmal Bang Institutional Equities Research

Pharma - story of consistent improvement

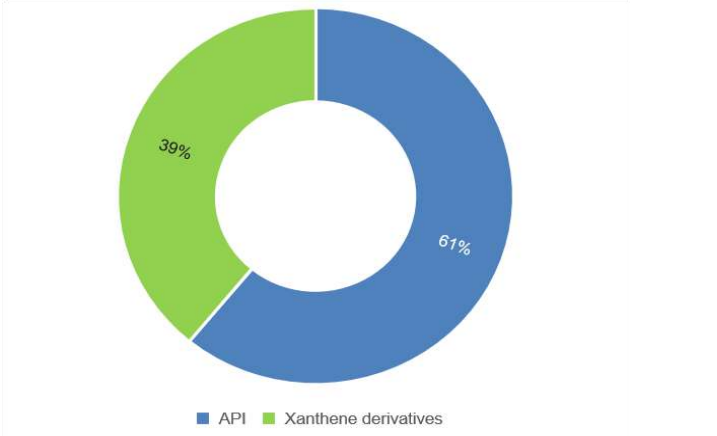
Under its Pharmaceuticals business, ARTO manufactures APIs, intermediates and xanthine derivatives. ARTO also has CRAMS business, but its share currently is very small. Broadly, APIs form ~61% of the Pharma segment revenue and the balance is accounted by xanthene derivatives. The share of the Pharma segment in total revenue was ~16% in FY20. Over the last 5 years, the Pharma segment has grown at a CAGR of ~20%. We expect similar growth in the medium term on account of the company's continuous focus on R&D, import substitution opportunity and positive global demand outlook for Pharmaceuticals. As per Evaluate Pharma, global prescription drugs and OTC sales are expected to growth at ~7% CAGR over 2018-24. India's API industry is ranked the third largest in the world and the country contributes approximately 57% of APIs to pre-qualified list of the WHO. Operating margin from the Pharma business is lower compared to the Specialty Chemicals business. But, we believe that operating leverage benefits will be visible as the overall operations are scaled up. Also, focus on key therapies like oncology would increase realisations going ahead. Further, over the last 5-6 years, ARTO's Pharma business has consistently shown improvement on margin and ROCE front wherein the gap has narrowed between the Pharma and Specialty Chemicals segments.

Exhibit 29: Pharma revenue - we expect ~20% CAGR over FY20-23E



Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 30: Pharma revenue break-up – API has major share of the overall pie

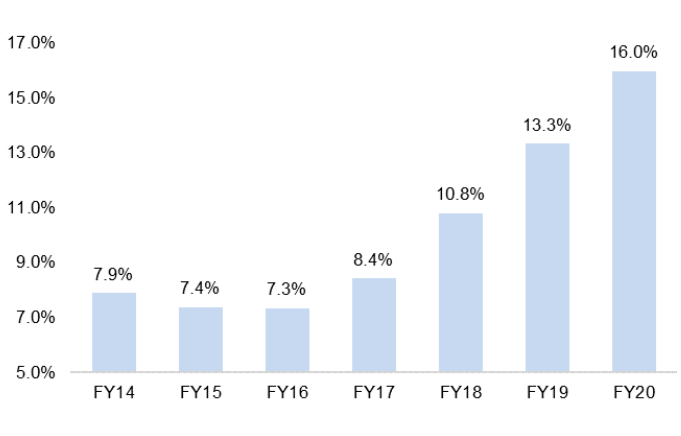


Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 31: Pharma EBIT margin showing consistent improvement

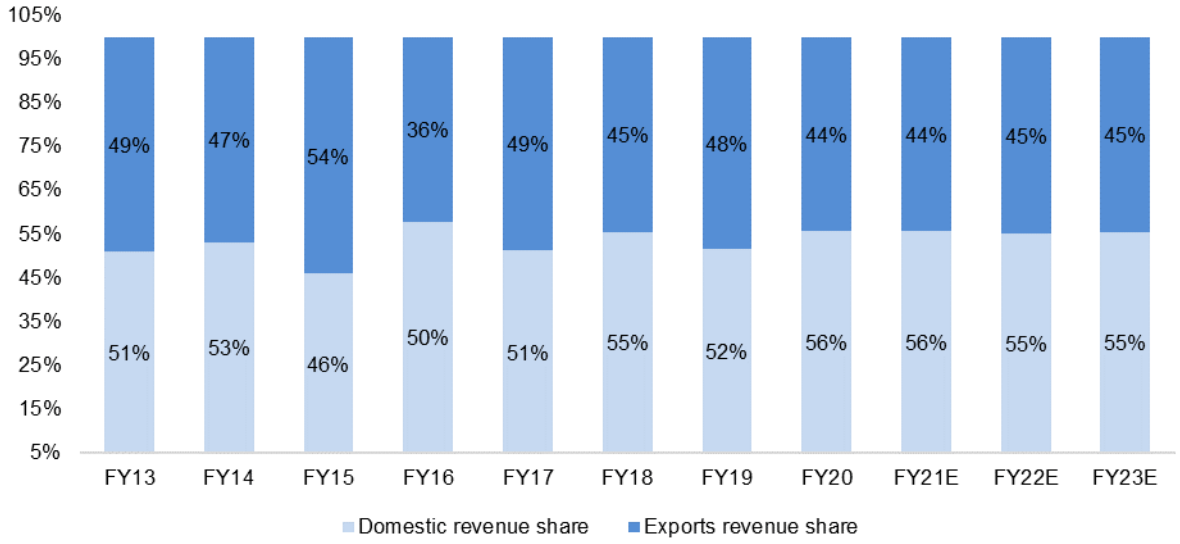
Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 32: Pharma ROCE - narrowing the gap with Specialty Chemicals



Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 33: Pharma domestic vs exports share - domestic pharma business forms ~56% of the overall segment revenue

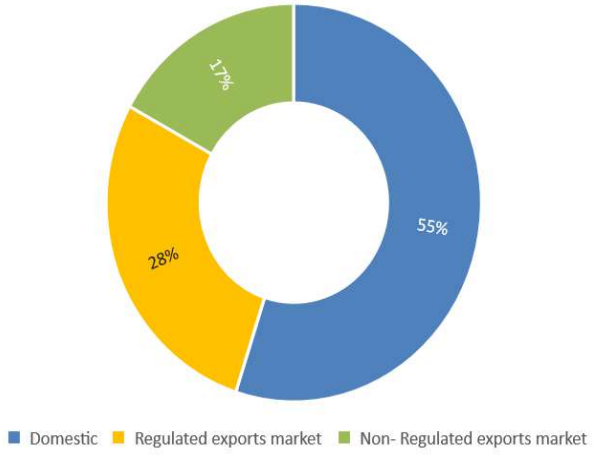


Source: Company, Nirmal Bang Institutional Equities Research

ARTO has five Pharma manufacturing plants, two of which are approved by the United States Food and Drug Administration (USFDA) and the remaining three are World Health Organisation (WHO) and Good Manufacturing Practices (GMP) certified. Additionally, the company has two R&D facilities that are dedicated to the Pharmaceutical business. ARTO manufactures APIs for a wide range of therapeutic purposes, including anti hypertension, anti-asthma, anti-cancer, Central Nervous System (CNS) agents, skincare, decongestant, anti-thalassemic, analgesic and ophthalmologic. The company has dedicated production facility for APIs related to oncology and steroids, which are fast growing markets. It manufactures >40 APIs and also manufactures intermediates for over 35 APIs. The APIs are exported to regulated markets globally, including the US, several countries in the EU and Japan. Currently, ARTO manufactures various commercial APIs with 30 US Drug Master Files (USDMF), 12 Drug Master Files (DMF), of which seven are under assessment, and 18 Certificates of Suitability (CEP), two of which are under assessment.

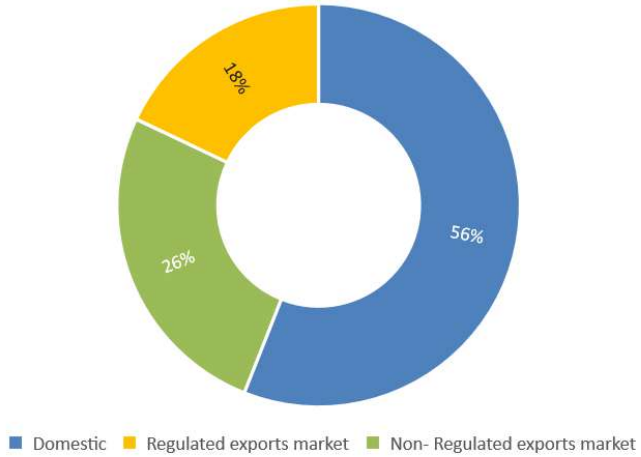
Under xanthine derivatives division, which forms ~39% of the Pharma revenue, ARTO manufactures various derivatives like caffeine theophylline anhydrous, aminophylline, etophylline, theobromine etc. Key end user industries for xanthine derivatives include beverages, nutraceuticals and pharma sectors. Xanthene derivatives are completely backward integrated. ARTO uses it's own intermediates produced in-house (four stage to five stage process that ARTO does in-house). In regulated APIs, all other intermediates are largely multi-stage ones with manufacturing done in the in-house intermediate plant, except steroids. Also, the company sells these intermediates to other manufacturers, which are mostly big generic companies.

Exhibit 34: Pharma API revenue break-up by geography



Source: Company, Nirmal Bang Institutional Equities Research

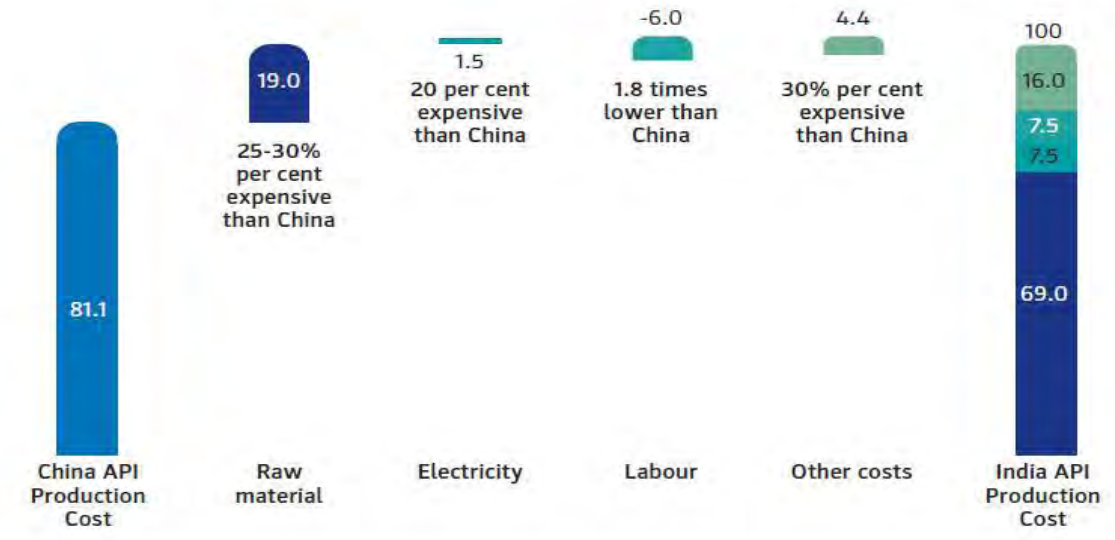
Exhibit 35: Pharma Xanthenes' revenue break-up by geography



Source: Company, Nirmal Bang Institutional Equities Research

The global API market is estimated at US$180bn, growing at ~6% annually. Out of the total global API market size, ~42% (USD 75bn) is comprised of generic APIs. Including domestic consumption, the size of the Indian API industry is ~USD 11bn. Out of this, USD 7bn is domestic consumption and API exports are US$4bn. The Indian API industry ranks third globally, next to China and Italy. Chinese API exports are in excess of USD 20bn. Increasingly, there is a shift towards moving out of China for supplies or reducing dependence on China. USA API imports share from China declined in CY19. Even 5% of existing China API exports are shifted to India, it would result in ~25% upside. Announcement of Production Linked Incentives (PLI) and setting up of 3 bulk drug parks is positive. Currently, India is largely dependent on China for API imports (~68% share), which is expected to fall over the next 5 years. Chinese API costs are still ~20% cheaper than India. However, doubling of labour costs and rise in environmental costs will place China on a level playing field and pharma majors would anyway reduce dependence on China in order to hedge themselves from supply related disruptions. Similar to Speciality Chemicals, India could be a big beneficiary in Pharma APIs. While ARTO is a small player in Indian APIs, it has grown at a ~20% CAGR over the last 5 years. We expect this growth momentum to continue going forward. Thrust on R&D and availability of USFDA approved API facilities are key positives for ARTO.

Exhibit 36: Cost comparison - cost of production in China is ~20% lower than India



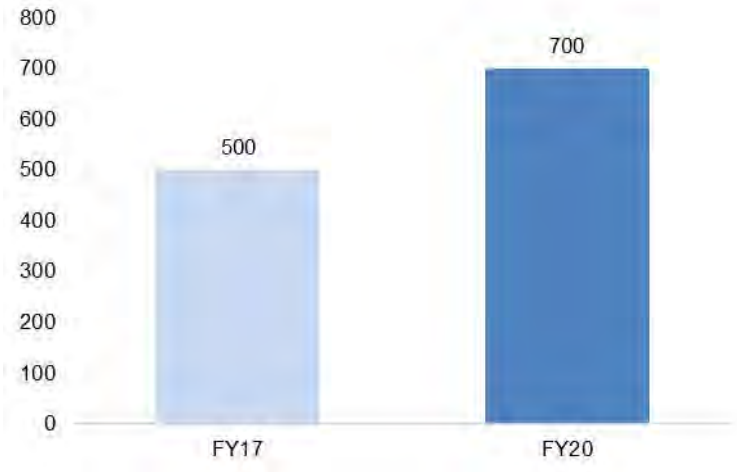
Note: Cost of production in India assumed to be 100 units. Other costs include financing, logistics, production and set-up costs

Source: CII, Nirmal Bang Institutional Equities Research

R&D is the key pillar for future growth

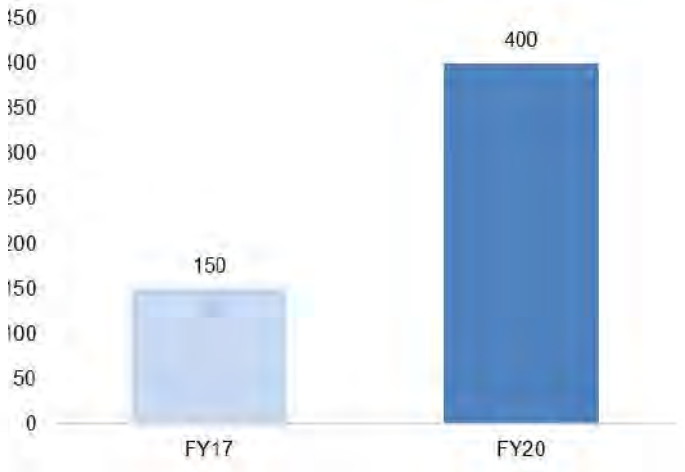
ARTO has 4 state-of-the-art R&D centres with more than 400 scientists. Greater focus on innovation has enabled the company to increase revenues from downstream products where it sees less competition and can create stronger customer engagements. Strong thrust on R&D has paid off in the form of multi-year contracts over the last couple of years. Share of VAP has gone up further from 70% in FY19 to ~75%. R&D spends as % of VAP revenue were in excess of ~2% in FY20, up from 1.4% in FY19. Higher number of customer additions (both on domestic and overseas front) and rising number of products (200+ in FY20 vs 125 in FY17) augurs well for the overall growth prospects of the company in the long run.

Exhibit 37: Rising number of domestic clients



Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 38: Rising number of global clients

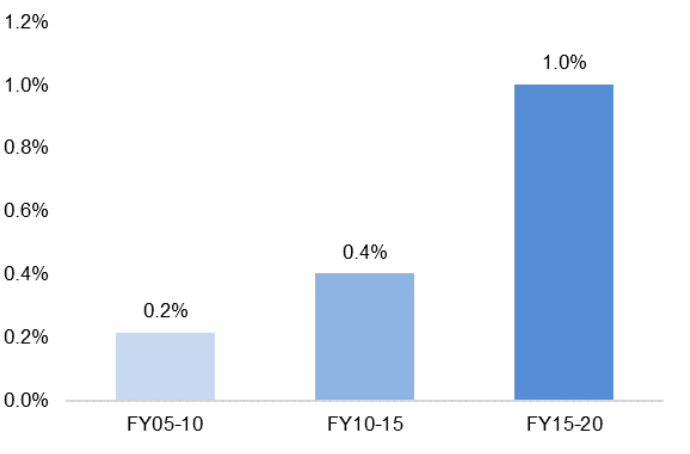


Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 39: R&D spends as % sales have risen meaningfully in last 3 years

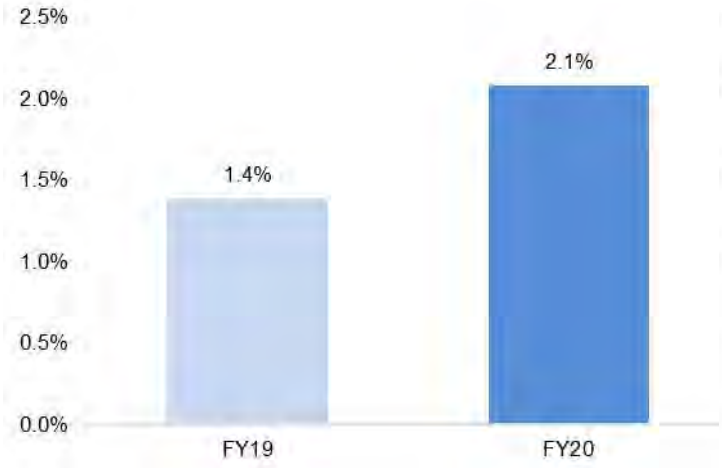
Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 40: Avg R&D spends % of sales over the last 15 years clearly indicate rising R&D focus



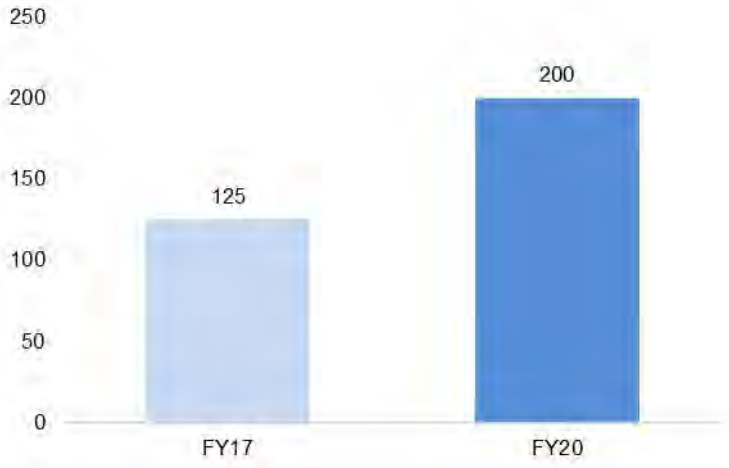
Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 41: R&D spends as % of VAP revenue shows a better picture



Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 42: No of products- higher thrust on R&D is reflected in number of new product launches over the last 3 years



Source: Company, Nirmal Bang Institutional Equities Research

Financial performance - we expect ~24% earnings CAGR over FY20-23E

We believe that although FY21 could be a challenging year for the company's Specialty Chemicals segment due to some of the end-user segments getting impacted significantly (excluding Agrochemicals and Pharma), the overall segment will bounce back sharply FY22E onwards. Also, various expansion plans and execution of long-term contracts will drive growth in the medium term. The Pharma segment is expected to grow rapidly over the next 3 years. Overall, we are building in ~17% revenue CAGR and ~24% earnings CAGR for ARTO over FY20-23E

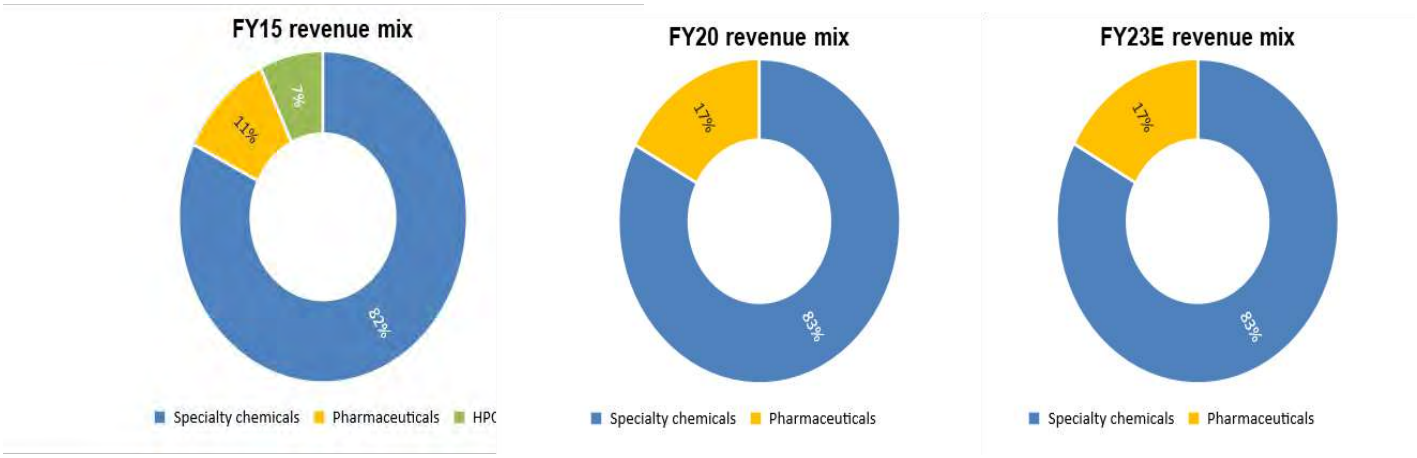
Exhibit 43: Consolidated revenue growth- we are building in ~17% CAGR over FY20-23E

Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 44: Consolidated earnings growth- we are building in 24% CAGR over FY20-23E

Source: Company, Nirmal Bang Institutional Equities Research

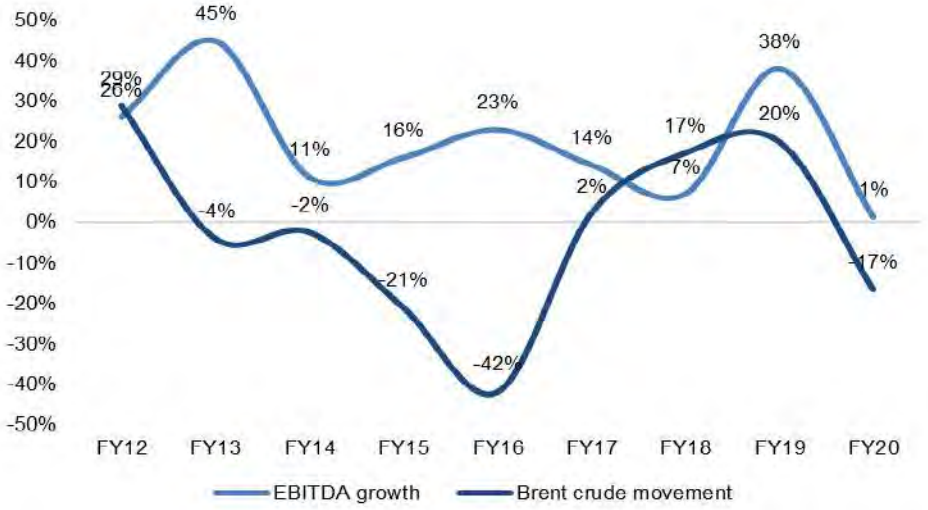
Exhibit 45: Cost plus model hedges against crude volatility on which all the major raw materials are dependent



Source: Company, Nirmal Bang Institutional Equities Research

We highlight that all the major raw materials are directly or indirectly related to crude oil. However, ARTO follows a cost-plus approach, which hedges against extreme volatility in crude and other raw material prices. Chart showing EBITDA growth vis-à-vis crude movement YoY clearly indicates the same. In a declining input price trend, absolute revenue gets affected but profit growth remains robust. Disproportionate earnings growth despite a modest ~8% revenue CAGR over FY15-20 confirms the trend.

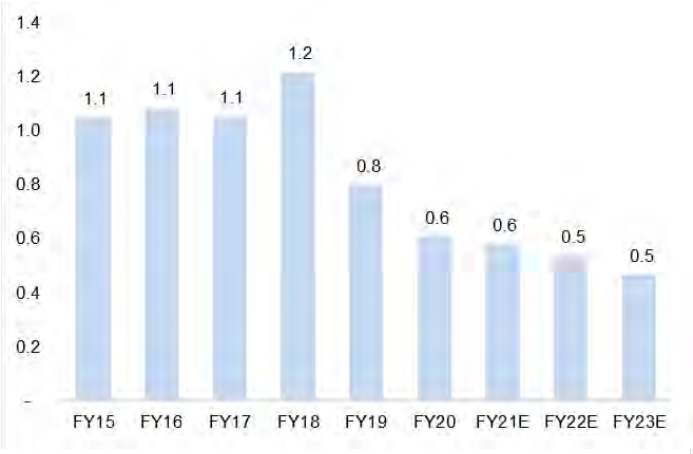
Exhibit 46: Cost plus model hedges against crude volatility on which all the major raw materials are dependent



Source: Company, Nirmal Bang Institutional Equities Research

ARTO's D/E in excess of 1x till FY18 was a cause for concern for select investors. However, the company has managed to bring it down post that. QIP was one of the measures to fund the capex for future expansion apart from internal accruals. We expect D/E to remain at similar levels despite various expansion plans announced by the company. Return ratios have shown a declining trend in the last 2 years on account of significant increase in capex. Return ratios will improve as the respective capacities come on board and start generating revenues. Capex intensity for ARTO has gone up significantly over the last 15 years and we believe this shows the confidence on the part of the management as far demand is concerned. In our view, ARTO could be one of the key beneficiaries of the import substitution story apart from the global 'One Plus' theme wherein global supply chains are increasingly working towards reducing their dependence on China.

Exhibit 47: D/E ratio- we expect it to remain at current level despite various expansion plans

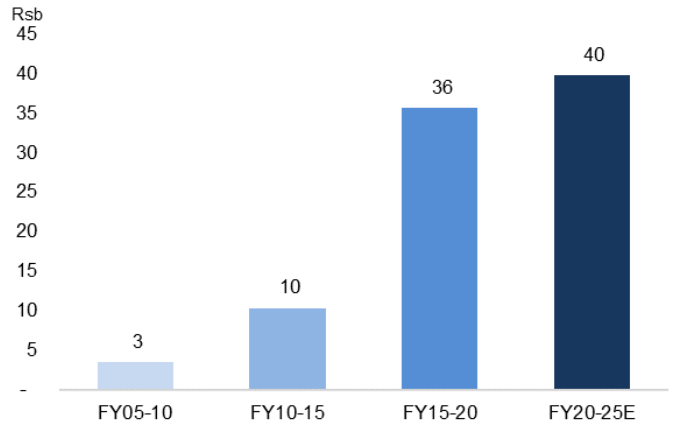


Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 48: Return ratios- we expect significant improvement from FY23 once the projects commission

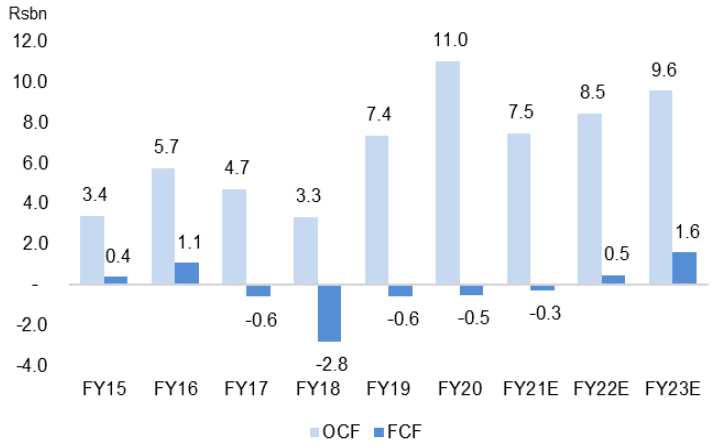
Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 49: Capex intensity has gone up significantly over last 15 years



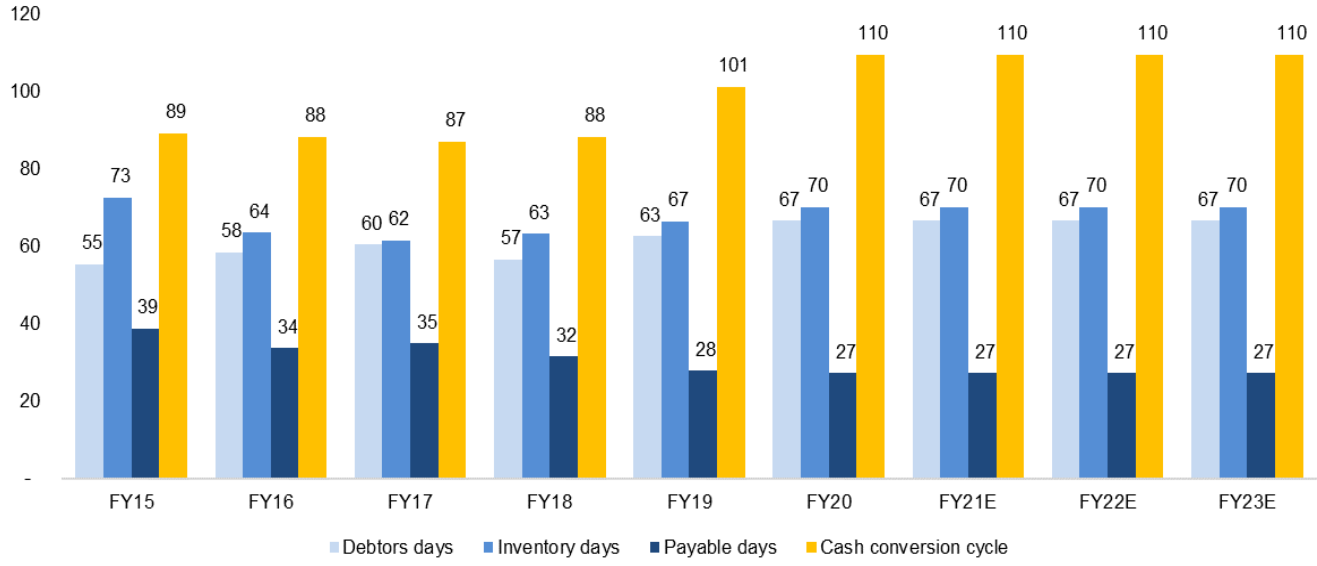
Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 50: Cash flow generation- ARTO in expansion mode; FCF will improve over the medium term



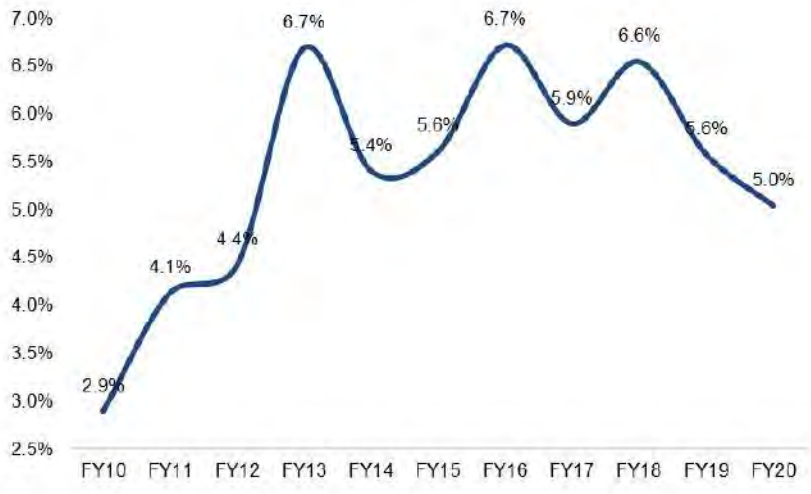
Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 51: Working capital cycle



Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 52: Management remuneration as % of PAT has remained range bound over the last 5 years



Source: Company, Nirmal Bang Institutional Equities Research

Financial summary

Y/E March (Rsmn)	FY19	FY20	FY21E	FY22E	FY23E
Net Sales	9,959	10,616	11,850	14,246	21,279
Growth YoY%	*9.1%*	*6.6%*	*11.6%*	*20.2%*	*49.4%*
Gross margin %	*52.1%*	*54.4%*	*54.7%*	*54.9%*	*56.1%*
EBITDA	2,184	2,635	2,999	3,721	5,829
EBITDA margin %	21.9%	24.8%	25.3%	26.1%	27.4%
Adj PAT	1,491	1,819	2,395	3,010	4,129
Growth YoY%	*-17%*	*22%*	*32%*	*26%*	*37%*
RoCE	*18.4%*	*18.2%*	*17.2%*	*18.9%*	*24.1%*
RoE	*14.5%*	*14.6%*	*16.0%*	*17.9%*	*21.3%*
P/E	*23.5*	*33.2*	*41.3*	*32.9*	*24.0*
EV/EBITDA	*15.0*	*21.6*	*31.5*	*25.7*	*16.4*
P/BV	*3.3*	*4.3*	*6.3*	*5.5*	*4.7*

Source: Company, Nirmal Bang Institutional Equities Research

Variance with consensus

Particulars	NBIE estimates			Consensus estimates			Variance (%)		
	FY21E	FY22E	FY23E	FY21E	FY22E	FY23E	FY21E	FY22E	FY23E
Revenue	42,198	50,987	67,105	45,417	54,525	65,232	-7.1%	-6.5%	2.9%
EBITDA	9,795	12,352	16,525	10,365	13,058	15,462	-5.5%	-5.4%	6.9%
EBITDA margin	23.2%	24.2%	24.6%	22.8%	23.9%	23.7%	39bps	28bps	92bps
APAT	5,410	7,151	10,270	5,360	7,238	9,309	0.9%	-1.2%	10.3%

Source: Company, Nirmal Bang Institutional Equities Research

Initiate coverage with ~28% upside from CMP

ARTO is trading at ~25x PE currently, in-line with the 2-year average. 5-year average PE multiple is ~22x. We believe that over the last 2 years, there has been various changes like winning of long-term contracts and overall annoucement of capex for expansion. Also, as global supply chains are increasingly working towards reducing dependence on China, ARTO is expected to be one of the key beneficiaries. The company's Pharma business has shown consistent improvement over the last 5 years, both on revenue and profitability front. Hence, we are of the view that ARTO should trade at a premium valuation compared to 5-year average. We initiate coveage on ARTO with Buy rating and TP of Rs1,250, indicating upside of 28% from CMP. Our TP is based on Sept'22E consolidated EPS and target PE multiple of 25x, in line with last 2-years' average.

Exhibit 53: We initiate coverage on ARTO with TP of Rs1,250

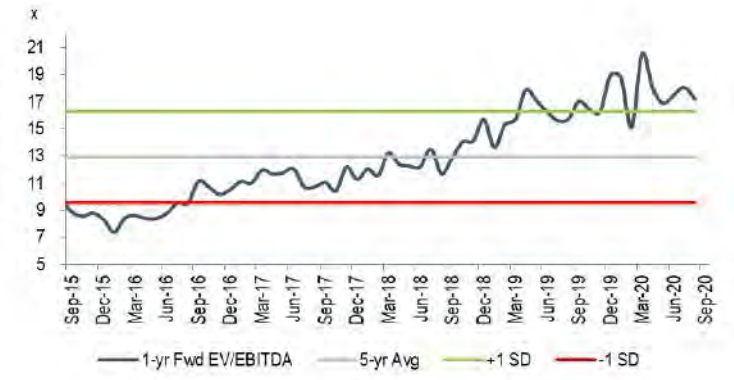
Particulars	
Sept'22 Consolidated EPS	50
Target PE	25
Target price	**1,250**

Source: Nirmal Bang Institutional Equities Research

Exhibit 54: 1-year fwd PE ratio

Source: Bloomberg, Nirmal Bang Institutional Equities Research

Exhibit 55: 1-year fwd EV/EBITDA ratio



Source: Bloomberg, Nirmal Bang Institutional Equities Research

Exhibit 56: Peer valuation

Company Name	FY20-23E CAGR (%)			EBITDA margin (%)			ROE (%)				P/E (x)			P/B (x)			EV/EBITDA (x)		
	Revenue	EBITDA	PAT	FY20	FY23E	Change	FY20	FY21E	FY22E	FY23E	FY21E	FY22E	FY23E	FY21E	FY22E	FY23E	FY21E	FY22E	FY23E
Indian companies																			
UPL Ltd	9.2	11.9	24.9	20.8	22.4	158bps	15.0	15.4	16.5	17.8	13.4	11.1	9.5	1.9	1.6	1.5	7.6	6.4	5.3
Coromandel International Ltd	7.7	11.4	15.6	12.3	13.6	132bps	25.1	26.4	24.1	22.7	16.4	15.0	13.9	4.0	3.4	2.9	11.0	10.0	9.1
PI Industries Ltd	22.6	25.3	28.2	21.2	22.7	145bps	19.5	19.7	20.5	20.0	44.8	34.5	29.1	6.7	5.8	4.9	32.9	26.1	21.4
Rallis India Ltd	11.6	17.3	17.3	12.8	14.9	207bps	14.6	15.3	16.3	17.1	22.9	19.0	15.8	3.3	2.9	2.5	14.9	12.4	10.5
Bayer CropScience Ltd/India	13.7	21.3	21.8	18.3	22.3	395bps	21.7	24.0	23.6	22.7	37.7	32.8	29.1	8.7	7.2	6.1	27.8	23.9	20.6
BASF India Ltd	11.9	18.8	-284.6	3.0	3.6	59bps	-1.8	5.1	10.1	11.5	38.9	25.0	21.1	4.2	3.7	3.3	19.7	16.0	Na
Navin Fluorine International L	**26.1**	**30.3**	**31.4**	**24.8**	**27.4**	**257bps**	**14.6**	**16.0**	**17.9**	**21.3**	**41.3**	**32.9**	**24.0**	**6.3**	**5.6**	**4.7**	**31.5**	**25.7**	**16.4**
SRF Ltd	**13.8**	**22.0**	**25.9**	**20.2**	**24.9**	**470bps**	**15.2**	**16.4**	**17.3**	**17.1**	**26.9**	**20.9**	**18.3**	**3.9**	**3.4**	**2.9**	**14.8**	**12.6**	**10.3**
Aarti Industries Ltd	**17.0**	**19.1**	**24.2**	**23.3**	**24.6**	**128bps**	**19.1**	**17.1**	**19.7**	**24.2**	**31.5**	**23.8**	**16.6**	**5.1**	**4.4**	**3.7**	**19.2**	**15.3**	**11.4**
Vinati Organics Ltd	**18.8**	**15.6**	**12.2**	**40.3**	**37.2**	**-312bps**	**28.6**	**22.1**	**22.9**	**24.2**	**42.7**	**35.1**	**27.7**	**8.8**	**7.4**	**6.1**	**29.9**	**24.8**	**19.3**
Atul Ltd	5.3	7.6	7.3	22.1	23.6	149bps	20.9	16.9	17.3	17.5	30.6	25.3	22.0	4.9	4.3	3.6	21.0	17.2	15.3
Sudarshan Chemical Industries	11.5	16.2	12.4	15.1	17.2	201bps	22.2	17.5	20.5	22.3	28.5	21.6	17.5	4.7	4.0	3.5	14.3	11.7	9.6
Global companies																			
DuPont de Nemours Inc	0.6	0.0	0.3	26.1	25.7	-42bps	6.4	5.8	6.8	7.5	19.5	17.1	15.0	1.1	1.1	1.0	12.0	10.8	9.9
BASF SE	0.6	2.7	0.5	13.5	14.4	87bps	11.2	3.1	7.1	8.8	21.8	14.9	12.4	1.3	1.3	1.2	9.1	7.7	7.0
Chemours Co/The	-0.4	3.5	5.0	18.3	20.5	220bps	44.8	37.6	44.2	44.5	14.6	10.2	8.1	5.4	4.6	3.9	8.3	6.9	5.8
Solvay SA	-1.4	-2.3	-3.8	22.4	21.8	-62bps	7.6	2.8	7.4	9.3	13.6	12.2	10.1	1.0	1.0	1.0	5.5	5.4	4.8
FMC Corp	4.9	7.6	9.7	26.4	28.5	207bps	27.3	30.4	30.4	30.2	16.8	14.9	13.3	4.7	4.4	4.0	13.1	11.9	11.1
China Petroleum & Chemical Cor	-1.8	-3.0	-4.1	6.8	6.6	-25bps	7.7	2.5	5.0	6.3	31.6	12.9	9.7	0.6	0.6	0.6	4.0	3.0	2.5
Exxon Mobil Corp	-4.9	1.2	3.4	13.9	16.7	285bps	5.3	-1.0	3.0	7.0	-123.7	24.9	12.3	0.8	0.9	0.9	10.8	7.2	5.5

Source: Bloomberg, Nirmal Bang Institutional Equities Research (For companies under coverage, our estimates have been used)

Exhibit 57: India chemical companies has consistently outperformed

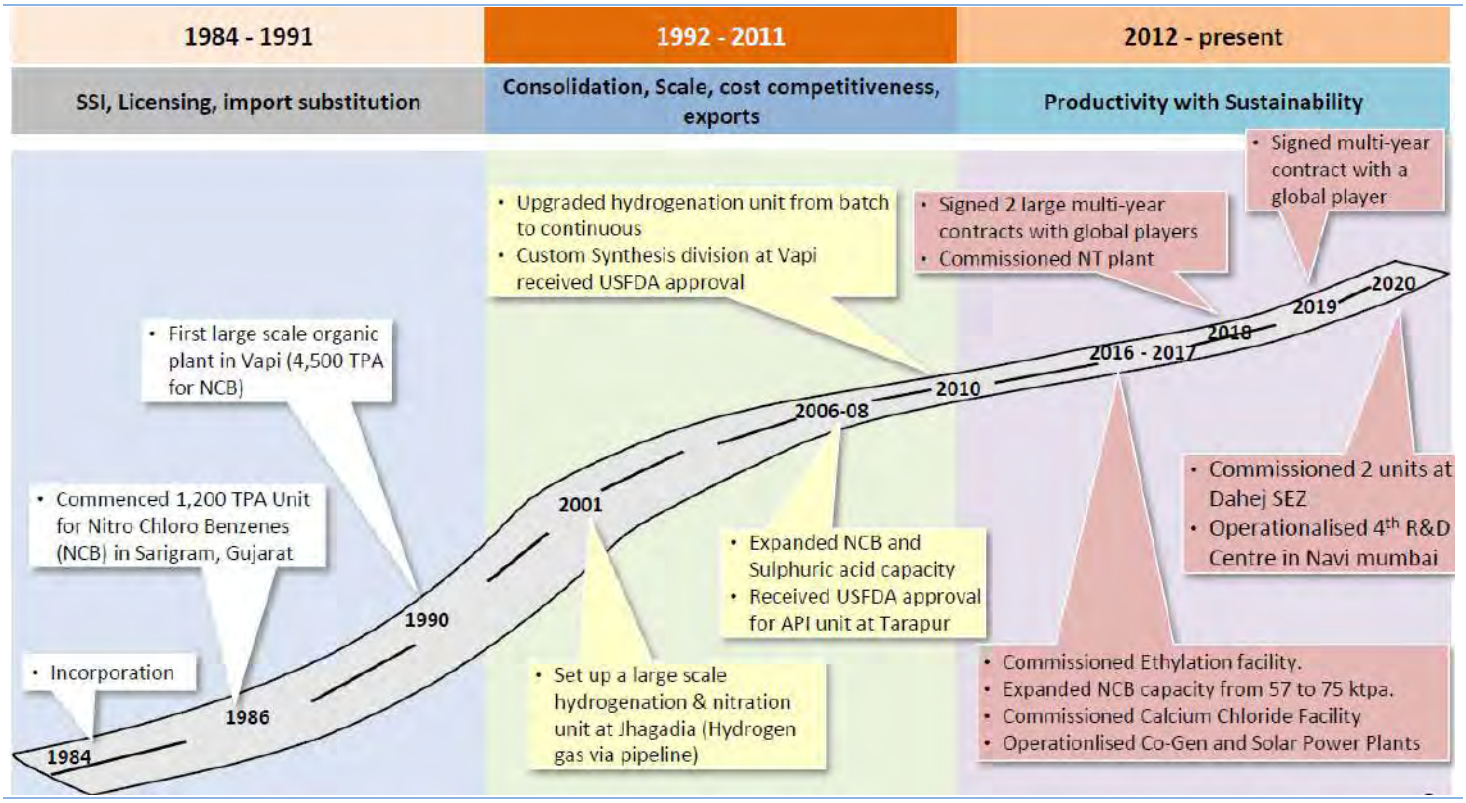
Company Name	0.5yr absolute	1yr absolute	1.5yr CAGR	2yr CAGR	3yr CAGR	4yr CAGR	5yr CAGR	10yr CAGR	15yr CAGR
Nifty 50	33	4	1	6	5	9	8	7	11
Sensex 30	33	5	3	8	8	10	8	7	11
Average of Indian chemical companies	36	57	34	32	21	20	25	27	26
MSCI World Chemical Index	35	12	7	8	3	8	8	6	7
Indian chemical companies									
UPL	48	-11	-11	10	-1	3	10	15	15
Coromandel	36	77	38	37	14	28	30	8	25
PI Industries	44	54	57	61	39	26	24	45	47
Rallis India	31	59	42	20	5	4	5	7	19
Bayer Cropscience India	49	70	21	14	15	6	8	18	23
BASF India	28	55	3	-8	-5	4	7	8	13
Navin Fluorine	**45**	**178**	**102**	**80**	**41**	**44**	**51**	**42**	**25**
SRF	**32**	**68**	**47**	**58**	**37**	**24**	**28**	**28**	**19**
Aarti Industries	**8**	**30**	**15**	**25**	**30**	**29**	**31**	**40**	**25**
Vinati Organics	**51**	**22**	**34**	**42**	**39**	**44**	**43**	**42**	**51**
Atul	42	50	43	35	36	26	30	43	30
Sudarshan Chemicals	17	30	20	14	7	6	33	22	23
Global chemical companies									
Du Pont Nemours Inc	65	-10	-20	-16	-17	-6	-3	3	-0
BASF SE	21	-18	-18	-12	-16	-9	-6	0	4
Chemours	139	56	-31	-21	-26	11	27	na	na
Solvay SA	12	-23	-22	-15	-16	-8	-4	-0	-1
Sinopec	-13	-22	-23	-22	-12	-6	-5	-6	2
Exxonmobil Chemical	-16	-51	-44	-35	-25	-21	-16	-6	-4

Source: Bloomberg, Nirmal Bang Institutional Equities Research

Company background

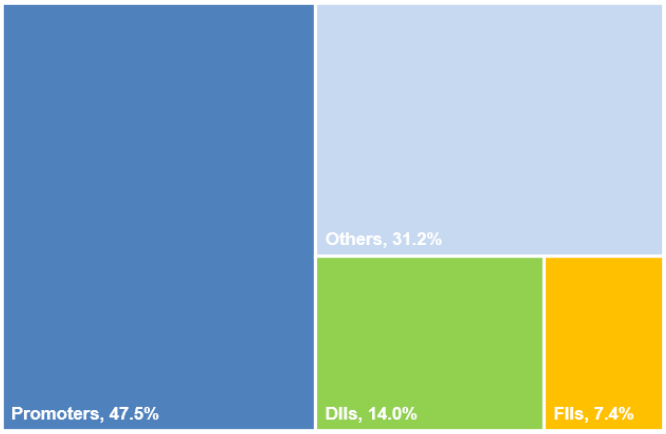
ARTO is a leading Indian manufacturer of Specialty Chemicals and Pharmaceuticals APIs with a global footprint. It is a manufacturer of Benzene/Toulene based Specialty Chemicals and Pharmaceutical APIs. These products are used in the downstream manufacture of pharmaceuticals, agrochemicals, polymers & additives, fuel additive, rubber chemicals, surfactants, pigments, dyes etc. The global benzene derivative chain is dominated by a few large players like Lanxess, Dupont, Sumitomo Chemicals, Honeywell etc. along with a significant number of smaller players too. ARTO ranks among the top three global players for manufacturing NCB and DCB. Most of the products that the company manufactures have integrated chain and scale (creating high entry barriers), require a lot of technical expertise and substantial investments. There are no close substitutes for a number of products. ARTO has a wide basket of 200+ products, which are marketed to 400 global and 700 domestic customers. The company has 17 plants located in high growth western India with proximity to ports, of which 11 are dedicated to Specialty Chemicals, 4 for Pharma (2 USFDA and 2 WHO/GMP approved) and 2 for HPC. ARTO also has 4 state-of-the-art R&D centres with more than 400 scientists. VAP's revenue share in total revenue rose to ~75% in FY20 from ~70% in FY19.

Exhibit 58: Journey of ARTO



Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 59: Shareholding pattern as on June'20



Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 60: Change in promoter holding

Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 61: Top public shareholders

Particulars	% holding
HDFC MF	6.71
Axis MF	1.42
Aditya Birla Sun Life	1.35
L&T MF	1.35

Source: BSE, Nirmal Bang Institutional Equities Research

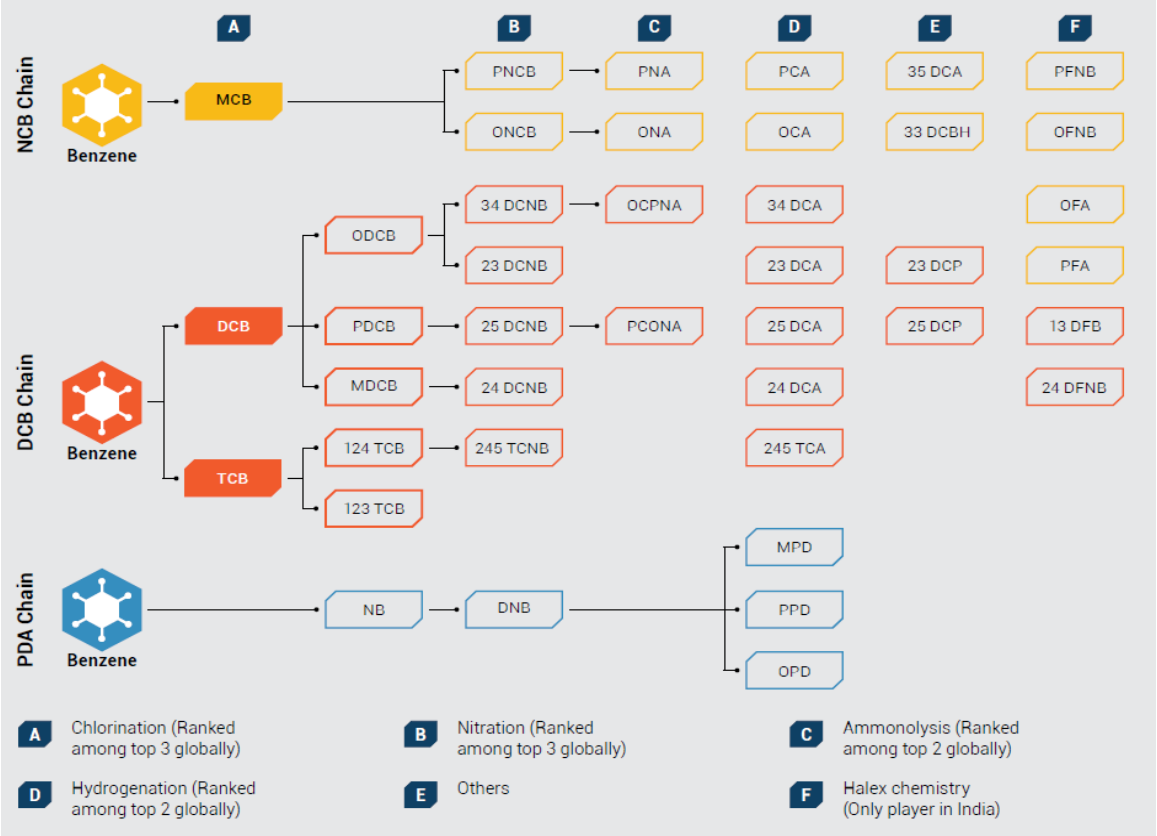
Exhibit 62: Key managerial personnel

Name	Designation	Description of role
Chandrakant Gogri	Chairman Emeritus	He is the founder of Aarti group of industries. He started the company from a small unit and took it to the path breaking enterprise it is today. He holds a Chemical Engineering degree from UDCT. His experience in the areas of projects, operations, process development and local & international marketing in the Chemical Industry is remarkable. Further, his business acumen and flair for finance has stood the test of time during the growth of Aarti Group. He is one of the main Promoters of the Company. He retired as Chairman on 16th August, 2012, and has, on request of the Board, accepted the post of Chairman Emeritus for his valued guidance and expertise. Shri Chandrakant V. Gogri had been awarded the prestigious "Distinguished Alumnus Award" from UDCT (UICT) in the year 1995 for his excellent performance as an Entrepreneur in the Chemical Industry.
Rajendra V.Gogri	Chairman & Managing Director	He has been with the company since its inception and was appointed as Managing Director in 1993. He eventually became the Chairman & Managing Director in 2012. He holds a master's degree in Chemical Engineering from USA and is a rank holder from UDCT, Mumbai. He worked along with Shri Chandrakant V. Gogri to help the Company achieve its present stature. In addition to his technical qualification, he has expertise in handling financial and commercial matters as well. He had been awarded the prestigious "Distinguished Alumnus Award" from UDCT in the year 1995 for his excellent performance as an entrepreneur in Chemical Industry.
Rashesh C. Gogri	Vice Chairman & MD	He has been appointed as the Vice Chairman & Managing Director of the Company in 2012. He was the Whole time Director of the Company since June, 1997. He holds a Production Engineering degree from Mumbai University. He has played the key role in the growth of various strategic business units in chemical, pharma and personal care segments of the company.
Parimal H. Desai	Whole Time Director	A Chemical Engineer from UDCT, Mumbai. He has more than 34 years of experience in development and project implementation in the chemical industry. He is a Whole-time Director of the company since September, 1984.
Manoj M. Chheda	Whole Time Director	He is a Whole-time Director of the Company since November, 1993. He is a commerce graduate from Mumbai University by qualification. He has an experience of over 25 years in purchase and marketing of chemicals.
Hetal Gogri Gala	Whole Time Director	She is a Whole-time Director of the company since November, 2001. She holds a bachelor's degree in Electronics engineering from Mumbai university and has done MEP from IIM Ahmedabad. She has rich experience in Purchase & Supply Chain Management. She manages various strategic business units.
Renil R. Gogri	Whole Time Director	Mr. Renil R. Gogri is a B.Tech (Mech) from IIT, Mumbai. He has been appointed as a Whole - Time Director of the Company from 16th August 2012. He handles the portfolios of systems developments/improvements in operations, adoption of IT advancements into operations and project execution and other production related activities of the company.
Kirit R. Mehta	Whole Time Director	He is a Whole-time Director of the company since September, 2000. He is a commerce graduate by qualification. He has over 32 years of experience in the industry.

Source: Company, Nirmal Bang Institutional Equities Research

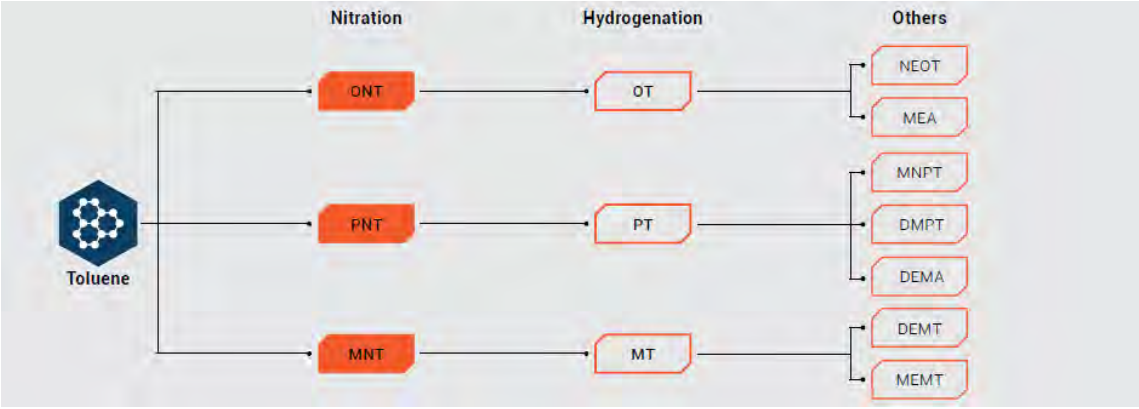
Annexure

Exhibit 63: Return ratios



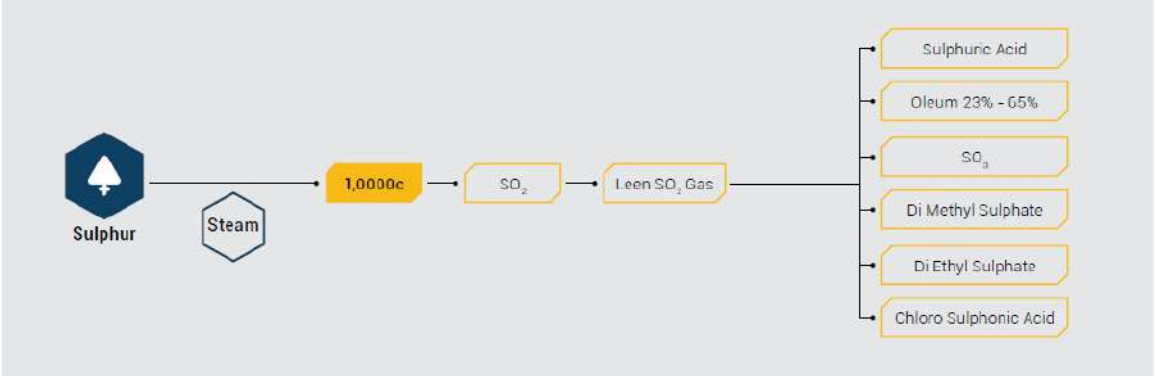
Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 64: Return ratios



Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 65: Return ratios



Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 66: Strong clientele across various end-user industries is the key strength

Source: Company, Nirmal Bang Institutional Equities Research

Financials (Consolidated)

Exhibit 67: Income statement

Y/E March (Rsm)	FY19	FY20	FY21E	FY22E	FY23E
Net Sales	**41,676**	**41,863**	**42,198**	**50,987**	**67,105**
Growth YoY%	*9.5*	*0.4*	*0.8*	*20.8*	*31.6*
COGS	21,566	20,563	20,657	24,741	32,461
Gross margin %	***48.3***	***50.9***	***51.0***	***51.5***	***51.6***
Staff costs	2,428	3,052	3,162	3,675	4,836
Other expenses	8,030	8,474	8,584	10,220	13,283
EBITDA	**9,651**	**9,773**	**9,795**	**12,352**	**16,525**
Growth YoY%	*38.0*	*1.3*	*0.2*	*26.1*	*33.8*
EBITDA margin %	***23.2***	***23.3***	***23.2***	***24.2***	***24.6***
Depreciation	1,627	1,852	2,253	2,767	3,183
EBIT	8,024	7,921	7,542	9,584	13,343
Interest	1,825	1,248	1,132	1,100	1,053
Other income	21	88	168	213	196
PBT (bei)	6,220	6,762	6,578	8,697	12,486
PBT	6,220	6,762	6,578	8,697	12,486
ETR	18.9	17.5	17.8	17.8	17.8
PAT	4,917	5,361	5,303	7,044	10,163
Adj PAT	**4,917**	**5,361**	**5,410**	**7,151**	**10,270**
Growth YoY%	***47.7***	***9.0***	***0.9***	***32.2***	***43.6***

Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 68: Cash flow

Y/E March (Rsm)	FY19	FY20	FY21E	FY22E	FY23E
PBT	**6,220**	**6,762**	**6,578**	**8,697**	**12,486**
Depreciation	1,627	1,852	2,253	2,767	3,183
Interest	1,825	1,248	1,132	1,100	1,053
Other adjustments	-11	-105	-168	-213	-196
Change in Working capital	-992	2,902	-1,151	-2,343	-4,736
Tax paid	-1,307	-1,638	-1,169	-1,546	-2,216
Operating cash flow	**7,362**	**11,021**	**7,475**	**8,462**	**9,573**
Capex	-7,936	-11,533	-7,747	-8,000	-8,000
Free cash flow	**-574**	**-512**	**-272**	**462**	**1,573**
Other investing activities	-34	292	977	860	714
Investing cash flow	**-7,970**	**-11,241**	**-6,770**	**-7,140**	**-7,286**
Issuance of share capital	7,414	-	-	-	-
Movement of Debt	3,181	-3,032	1,449	1,310	678
Dividend paid (incl DDT)	7,414	-	-	-	-
Other financing activities	-2,265	-2,318	-2,663	-2,358	-2,296
Financing cash flow	**8,329**	**-5,349**	**-1,215**	**-1,048**	**-1,618**
Net change in cash flow	**7,721**	**-5,569**	**-510**	**274**	**670**
Opening C&CE	321	8,042	2,473	1,963	2,238
Closing C&CE	8,042	2,473	1,963	2,238	2,907

Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 69: Balance sheet

Y/E March (Rsm)	FY19	FY20	FY21E	FY22E	FY23E
Share capital	436	871	871	871	871
Reserves	25,872	28,917	32,794	37,926	45,278
Net worth	**27,147**	**30,734**	**34,612**	**39,744**	**47,096**
Long term debt	8,148	5,808	6,642	7,306	7,306
Short term debt	12,908	12,297	12,912	13,557	14,235
Total debt	**21,056**	**18,105**	**19,554**	**20,863**	**21,541**
Other non-current liabilities	3,963	7,614	7,614	8,375	10,050
Total Equity & Liabilities	**52,166**	**56,453**	**61,780**	**68,983**	**78,688**
Gross block	33,618	38,679	50,679	58,679	66,679
Accumulated depreciation	12,151	14,003	16,257	19,024	22,207
Net Block	**21,467**	**24,676**	**34,422**	**39,655**	**44,472**
CWIP	7,946	14,176	9,924	9,924	9,924
Intangible and others	-	4	4	4	4
Other non-current assets	3,064	4,045	3,236	2,589	2,071
Investments	331	370	370	370	370
Trade receivables	7,760	7,534	7,709	9,314	12,259
Inventories	7,718	8,357	8,102	9,789	12,884
Cash & Cash equivalents	8,042	2,473	1,963	2,238	2,907
Other current assets	2,251	1,685	1,348	1,078	970
Total current assets	**25,771**	**20,049**	**19,121**	**22,419**	**29,020**
Trade payables	2,793	3,452	1,541	1,845	2,421
Other current liabilities	3,620	3,415	3,757	4,133	4,753
Total current liabilities	**6,413**	**6,867**	**5,298**	**5,978**	**7,174**
Total Assets	**52,166**	**56,453**	**61,780**	**68,983**	**78,688**

Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 70: Key ratios

Y/E March (Rsm)	FY19	FY20	FY21E	FY22E	FY23E
Per share (Rs)					
Adj EPS	28.2	30.8	31.0	41.0	58.9
Book value	151.0	171.0	193.2	222.7	264.9
Valuation (x)					
EV/EBITDA	15.4	15.3	19.2	15.3	11.4
P/E	27.6	24.9	31.5	23.8	16.6
P/BV	5.2	4.5	5.1	4.4	3.7
Return ratios (%)					
RoCE	19.5	16.6	14.9	17.0	21.0
RoE	23.4	19.1	17.1	19.7	24.2
Profitability ratios (%)					
Gross margin	48.3	50.9	51.0	51.5	51.6
EBITDA margin	23.2	23.3	23.2	24.2	24.6
PAT margin	11.8	12.8	12.8	14.0	15.3
Liquidity ratios (%)					
Current ratio	1.3	1.0	1.1	1.1	1.4
Quick ratio	0.9	0.6	0.6	0.6	0.8
Solvency ratio (%)					
Debt to Equity ratio	0.8	0.6	0.6	0.5	0.5
Turnover ratios					
Fixed asset turnover ratio (x)	1.2	1.1	0.8	0.9	1.0
Debtor days	63	67	67	67	67
Inventory days	67	70	70	70	70
Creditor days	28	27	27	27	27
Net Working capital days	101	110	110	110	110

Source: Company, Nirmal Bang Institutional Equities Research

Vinati Organics

16 October 2020

Reuters: VNTI.BO; Bloomberg: VO IN

Initiating Coverage

Getting greener and bigger

Vinati Organics Limited (VO) is a chemical company focusing on manufacturing specialty chemicals and organic intermediaries. It is known for its impeccable product selection history by achieving highest synergy benefits from existing products, extensive focus on green chemistry and strong earnings trajectory. 2-Acrylamido 2-Methylapropane Sulfonic Acid (ATBS, 65% global share), Isobutyl Benzene (IBB, 65% global share) and Iso Butylene (IB, 70% domestic share) are its key products. But, VO's thrust on R&D has enabled it to expand its portfolio significantly. We expect new products to contribute ~50% to overall revenue in FY23E compared to ~25% in FY20. Most of these are IB derivates and we believe that there is a huge import substitution play there. VO, with its debt-free balance sheet and strong cash flow generation ability is in a position to expand capacity and fulfill the entire domestic demand in select cases. VO's products have high entry barriers. Also, in products where substitutes are available, VO has an edge over its peers, especially Chinese ones as the company's purity standards exceed global requirements. This ensures consistent revenue visibility and we expect VO to keep gaining market share in key segments, led by its consistent capacity addition. As far as raw materials are concerned, its dependence on China is nil; in fact, ~10% of VO's revenue comes from China. All of its raw materials are linked to crude oil prices and hence absolute revenue is susceptible to crude oil fluctuations. However, formula-based pricing enables the company to protect its margins even during tough times - precisely why earnings growth over the last 10 years (~24% CAGR) has been significantly ahead of revenue growth (~16% CAGR). In the near term, we expect ATBS demand to be muted due to ~30% salience in oil & gas sector, but other products and new projects (Butyl Phenol and other IB derivatives) would more than make up for that loss over the next couple of years. We are building in ~17% revenue CAGR and ~16% EBITDA CAGR over FY20-23. Lower EBITDA CAGR factors in declining ATBS share (short term phenomenon).

Initiate coverage with TP of Rs1,250: We initiate coverage on VO with an Accumulate rating and TP of Rs1,250, valuing it at ~30x PE on Sept'22E earnings. VO's last 5-year and 2-year average PE multiples are ~24x and ~30x, respectively. Currently, the stock is trading at ~40x 1-year forward EPS. We believe that the company deserves a premium to 5-year average PE multiple considering the accelerated innovation, rising share of new products and future growth opportunities. However, we believe that currently the stock is fairly valued and hence do not see a major upside from these levels. Announcement of further expansion plans like in Para Amino Phenol (PAP) during FY21 can result in earnings upgrade.

Y/E March (Rsmn)	FY19	FY20	FY21E	FY22E	FY23E
Net Sales	11,279	10,289	10,648	13,694	17,248
Growth YoY%	*54.6%*	*-8.8%*	*3.5%*	*28.6%*	*26.0%*
Gross margin %	*53.4%*	*58.3%*	*58.0%*	*55.0%*	*55.0%*
EBITDA	4,246	4,149	4,238	5,067	6,416
EBITDA margin %	*37.6%*	*40.3%*	*39.8%*	*37.0%*	*37.2%*
Adj PAT	2,825	3,338	3,053	3,712	4,711
Growth YoY%	*96.3%*	*18.2%*	*-8.5%*	*21.6%*	*26.9%*
RoCE (%)	*42.6%*	*32.7%*	*27.3%*	*28.0%*	*30.1%*
RoE (%)	*32.3%*	*31.1%*	*25.0%*	*26.3%*	*28.4%*
P/E *(x)*	29.9	23.9	42.1	34.6	27.3
EV/EBITDA *(x)*	19.7	18.5	29.4	24.4	19.0
P/BV *(x)*	8.0	6.2	8.7	7.3	6.0

Source: Company, Nirmal Bang Institutional Equities Research

ACCUMULATE

Sector: Chemicals

CMP: Rs1,253

Target Price: Rs1,250

Upside: Nil

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Research Analyst
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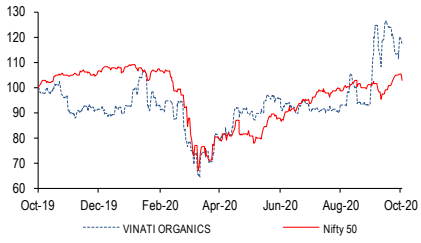
Key Data

Current Shares O/S (mn)	102.8
Mkt Cap (Rsbn/US$bn)	129.1/1.8
52 Wk H / L (Rs)	1,419/651
Daily Vol. (3M NSE Avg.)	242,821

Share holding (%)	1QFY20	2QFY20	3QFY20
Promoters	74.1	74.1	74.1
Public	25.9	25.9	26.0
Non-Institutions	-	-	-

One Year Indexed Stock Performance



Price Performance (%)

	1 M	6 M	1 Yr
Vinati Organics	5.2	45.7	17.6
Nifty Index	1.4	30.9	2.2

Source: Bloomberg

Valuation - we initiate coverage with TP of Rs1,250

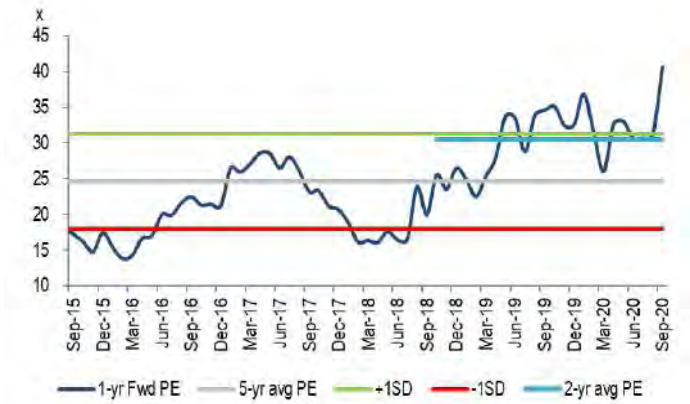
VO's last 5-year and 2-year average PE multiples are ~24x and ~30x, respectively. Currently, the stock is trading at ~40x 1-year forward EPS. We believe that the company deserves a premium to 5-year average PE multiple as over the last 5 years, VO has grown both in terms of size and overall profitability besides venturing into new products (apart from the 3 core products). We believe that VO's debt-free balance sheet and ability to generate cash flows consistently will help it to garner higher growth in the coming years through expansion. We are structurally positive on this company, but from a short-term point of view pick-up in ATBS and ramp-up of new projects will take time, considering VO's exposure to the oil & gas sector and other industries where the recovery is expected to take time. Also, lower input prices will affect realisations for almost its entire portfolio. Hence, we believe that assigning a premium to last 2-year's average PE multiple would not be prudent from next 2-3 years' perspective. Therfore, we initiate coverage on VO with an Accumulate rating and TP of Rs1,250, valuing it at ~30x PE on Sept'22E earnings.

Exhibit 1: We initiate coverage on VO with TP of Rs1,250

Particulars	
Sept'22 Consolidated EPS	50
Target PE	25
Target price	**1,250**

Source: Nirmal Bang Institutional Equities Research

Exhibit 2: 1-year forward PE



Source: Bloomberg, Nirmal Bang Institutional Equities Research

Exhibit 3: 1-year forward EV/EBITDA

Source: Bloomberg, Nirmal Bang Institutional Equities Research

Product profile - new products to significantly contribute to future growth

VO focusses on manufacturing specialty chemicals and organic intermediaries. It is known for its impeccable product selection history by achieving highest synergy benefits from existing products, extensive focus on green chemistry and strong earnings trajectory. ATBS, IBB and IB are the key products for the company, but over the years VO has developed various downstream derivatives with total products numbering more than 20 as on FY20. In ATBS and IBB, VO is the global market leader, with ~65% share in each whereas in IB it claims to have domestic leadership with ~70% market share. VO has recently commissioned Butyl Phenol project and has also announced further capex for new products, which can together contribute ~Rs7.5bn at peak utilisation, which is equivalent to ~75% of FY20 reveune. There exists import substitution opportunity for various chemicals (e.g. Para Amino Phenol), which can be considered in the coming years based on demand outlook. We expect new products to contribute meaningfully to VO's topline in the coming years (~50% revenue share as per our estimate vis-à-vis 25% in FY20 as per our estimates).

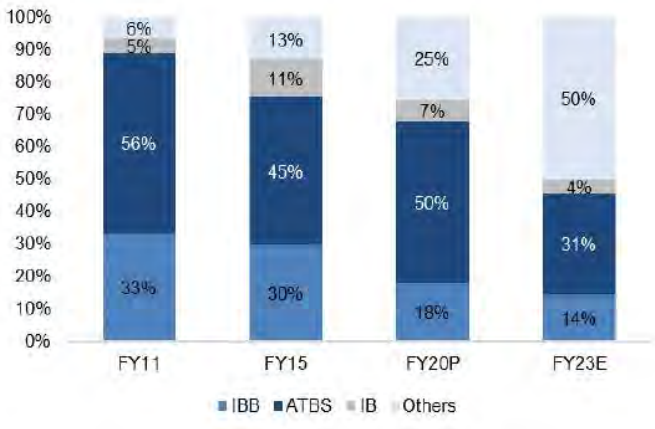
Exhibit 4: Product grid

Particulars	ATBS	IB	IBB	Butyl Phenol	New PTBBA project	Others
Revenue share (FY11)	56%	5%	33%	Nil	Nil	6%
Revenue share (FY20)	50%	7%	18%	Nil	Nil	25%
Revenue share (FY23E)	31%	4%	14%	10%	10%	29%
Revenue CAGR FY10-20	17%	18%	4%	Nil	Nil	42%
Revenue CAGR FY20-23E	1%	4%	10%	53%	80%	8%
Revenue CAGR FY20-30E	7%	8%	7%	18%	20%	21%
Domestic revenue share	10%	100%	30%	100%	NA	NA
Exports revenue share	90%	0%	70%	0%	NA	NA
Installed capacity TPA (FY10)	12,000	12,000	16,000	Nil	NA	NA
Installed capacity TPA (FY20)	40,000	30,000	25,000	37,000	NA	NA
EBITDA margin	High	Moderate	Moderate	Moderate	High	High
Future capex intensity	Moderate	Moderate	Moderate	High	High	High
Competitive positioning	65% Global market share	70% Domestic market share	65% Global market share	Very few/no manufacturers	NA	Only Indian manufacturer for many products
Applications	Water treatment Construction Textile & adhesives Paint & paper coatings	Pharmaceuticals	Pharmaceuticals Perfume industry	Perfume industry Inks & resins Plastics & lubricants	Agrochemicals Dyes Plastic additives	
Key clients	BASF, Nalco, Clariant, Dow	NA	BASF, Shasun	NA	NA	NA
Mfg Location	Mahad	Mahad	Lote	Lote	Mahad	Mahad/Lote
R&D Partner	NCL, Pune	Saipem, Italy	Institut Francais du Petrol	Own	Own	Own
Purity level	0.5% variation vs 3% tolerance	99.85% purity standard	99.8% purity standard	NA	NA	NA

Source: Company, Nirmal Bang Institutional Equities Research

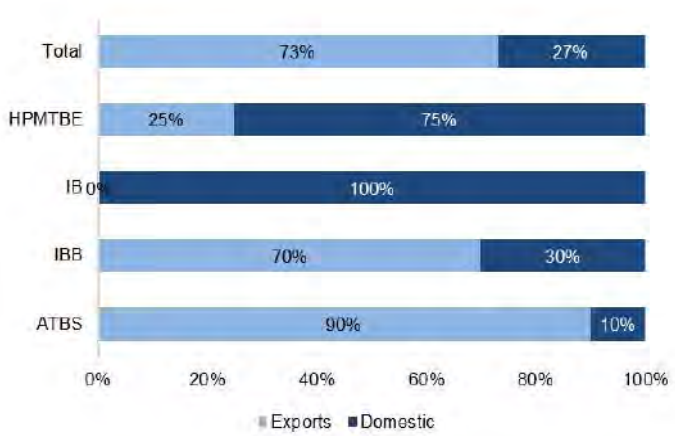
Note- In FY20-23E revenue CAGR, Butyl Phenol CAGR is for the period FY21-23E wheres new PTBBA project, growth number is just for FY23. This is based on expected commissioning of these projects.

Exhibit 5: Revenue break-up - new products' share expected to grow significantly



Source: Nirmal Bang Institutional Equities Research

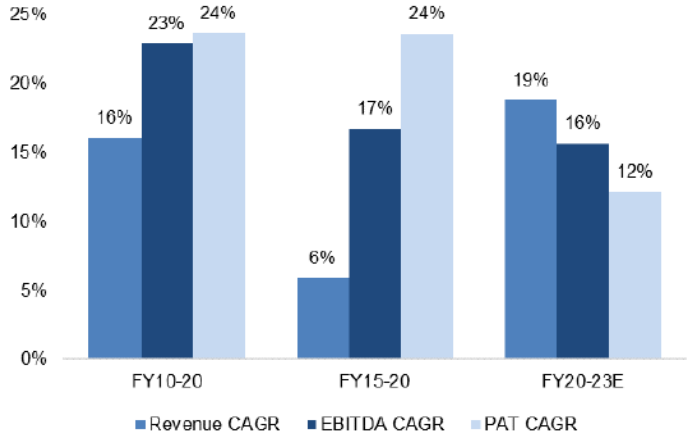
Exhibit 6: Revenue break-up as on FY19 (Domestic vs Exports)



Source: Company, Nirmal Bang Institutional Equities Research

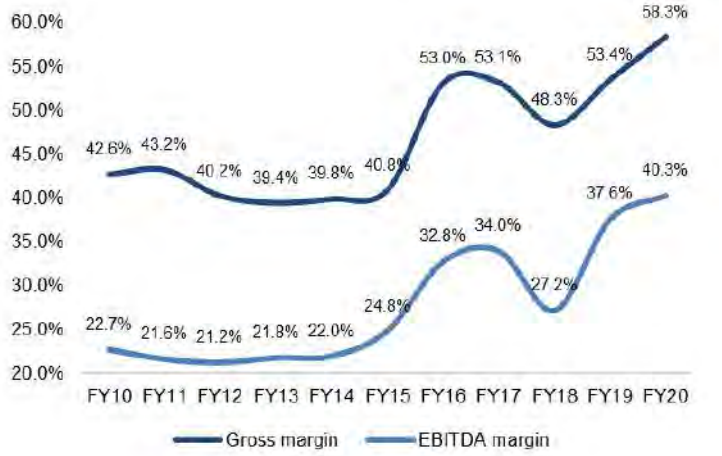
Story of last decade in charts

Exhibit 7: Despite raw material volatility, earnings growth has been robust over the last decade



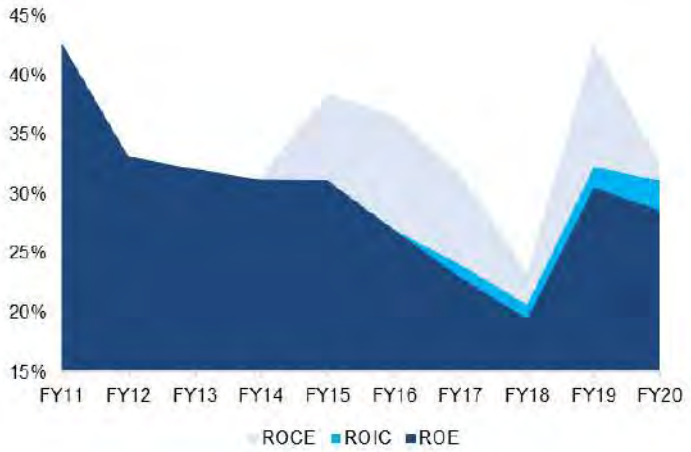
Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 8: Formula based pricing hedges VO against raw material fluctuations



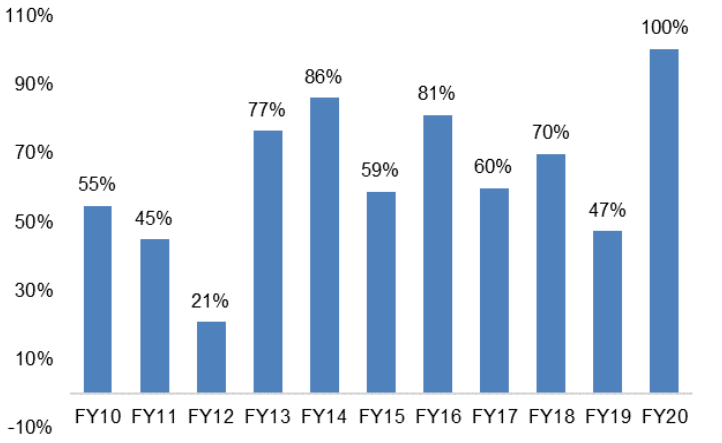
Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 9: Solid return ratios profile



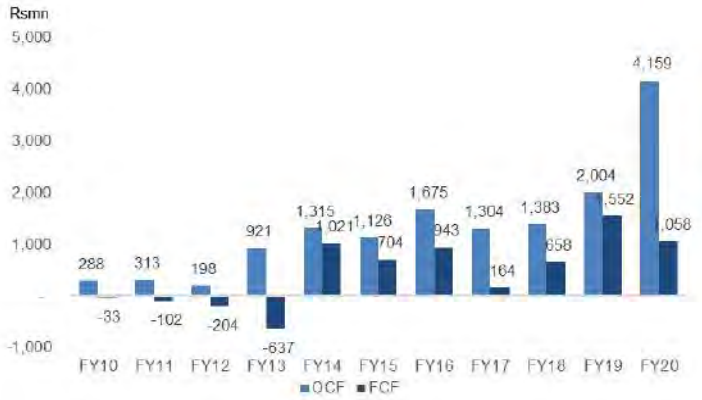
Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 10: Strong EBITDA to OCF conversion



Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 11: Consistent free cash flow generation over the years



Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 12: FCF/OCF ratio

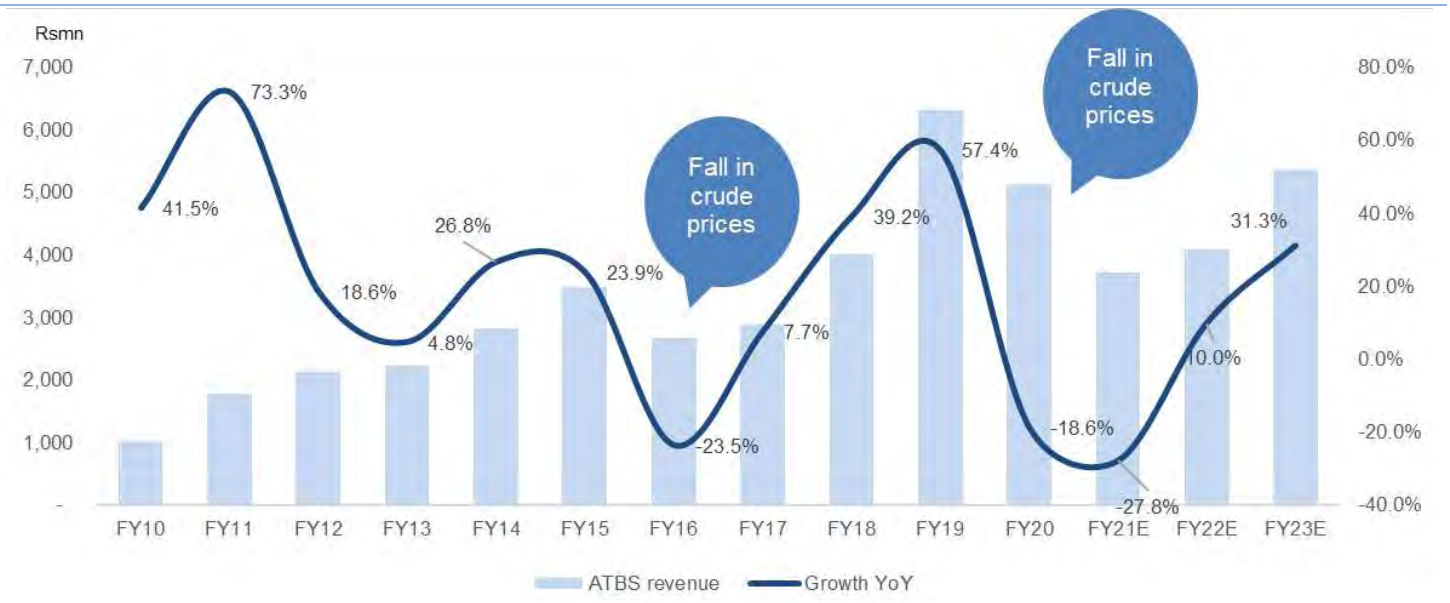
Source: Company, Nirmal Bang Institutional Equities Research

ATBS outlook is not positive for FY21; long term story remains intact

VO is the global market leader in ATBS with ~65% market share. Exit of global player Lubrizol couple of years back has benefitted VO immensely with the company gaining ~20% incremental share. Commercially, ATBS is manufactured by the Ritter reaction of acrylonitrile and isobutylene, using a mix of sulphuric acid and water. Key end-user industries for ATBS are enhanced oil recovery (EOR), water chemicals, personal care chemicals, textiles, adhesives and paints & coatings etc. EOR has ~30% salience in overall demand. Short-term outlook for EOR is weak and hence we expect ATBS revenue to be subdued in FY21. Also, majority of the raw materials are crude oil linked, which has fallen quite substantially over the last few months, bringing down realisations as well. However, as per the management, performance of other industries like water chemicals, personal care chemicals etc is stable.

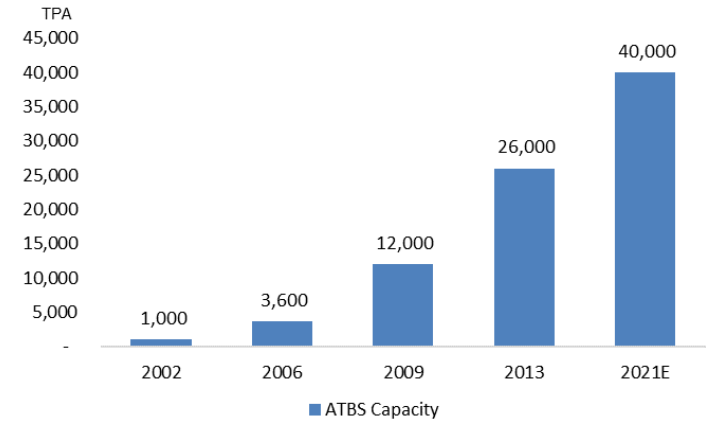
Growth in ATBS can accelerate from FY22 onwards once the situation normalises and new capacity of ~14,000 tonnes (~54% of existing capacity) starts generating revenue. In ATBS, the management has consistently added capacity in order to gain market share at the global level. This incremental capacity will be completely absorbed in FY24 in our view. Since ATBS is a high-margin segment, capacity addition in this space is positive for long term outlook. Asia Pacific is the largest market for ATBS followed by North America and Europe. Key clients for ATBS are global majors like BASF, Dow Chemicals, Nalco etc. Also, globally, VO is the only backward integrated player in ATBS as it manufactures IB in-house. We highlight that there are a few Japanese, Turkey and US-based players in ATBS but VO is by far the largest in terms of capacity. Also, as none of these players are planning to increase their capacity, VO will gain further market share in our view over the next 3-4 years.

Exhibit 13: ATBS revenue growth - we are building in ~1% CAGR over FY20-23E on account of exposure to EOR and lower input prices; however long-term outlook remains strong



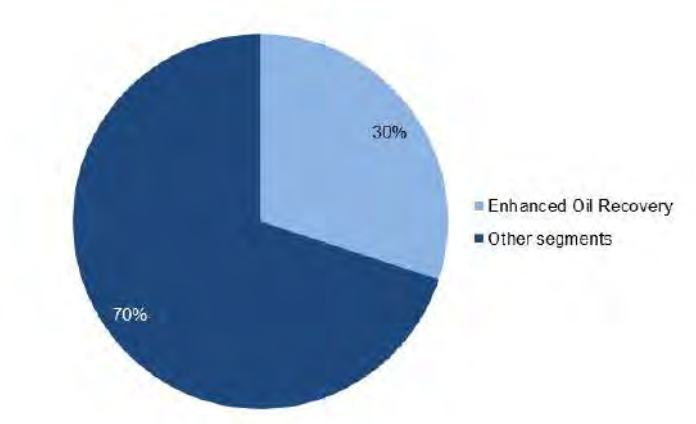
Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 14: ATBS capacity - consistent capacity additions have enabled VO to gain global market share



Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 15: ~30% of demand from ATBS comes from enhanced oil recovery segment which is under pressure



Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 16: Global market share in ATBS - VO could garner entire market share after the exit of Lubrizol

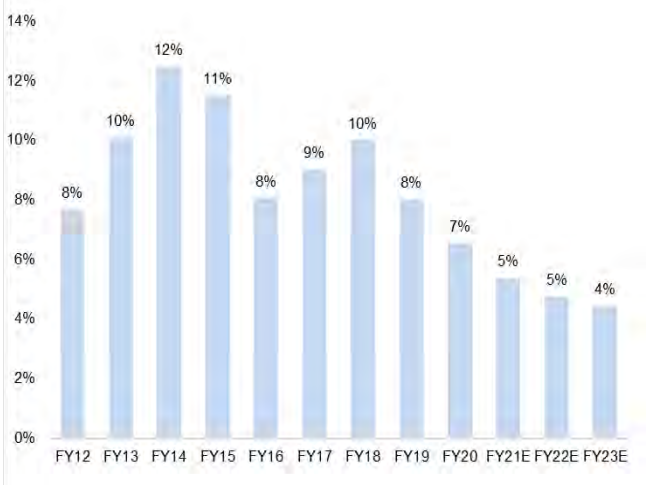
Source: Company, Nirmal Bang Institutional Equities Research

Isobutylene (IB) is the key raw material for ATBS. VO is the domestic market leader with ~70% market share. It produces IB from MTBE, which is also purified and sold as HPMTBE. VO has 30,000 tonnes capacity in IB after expansion. ~40% of this capacity would be utilized for ATBS as feedstock. Another ~40% would be utilized for Butyl Phenol capacity, which is expected to ramp up in a couple of years. Balance is sold to companies like UPL, Meghmani Organics etc. We believe that growth of IB would be largely linked to growth of ATBS and Butyl Phenol capacity. Considering the near-term weakness in ATBS, we are building in ~4% revenue CAGR for IB. IB is a low-margin product, but VO has consistently worked towards inventing IB derivatives for varied end-user industries and these products command better realizations. We expect IB derivatives (like Butyl Phenol) to grow substantially going forward. VO is the only backward integrated players for ATBS and is leveraging its in-house IB capacity in order to expand its portfolio and improve realizations. We expect IB's revenue share to fall from ~10% to 4% over the next 3 years due to growth of other segments.

Exhibit 17: IB revenue CAGR - we are building in ~4% CAGR over FY20-23E

Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 18: IB revenue share will go down with addition of new products

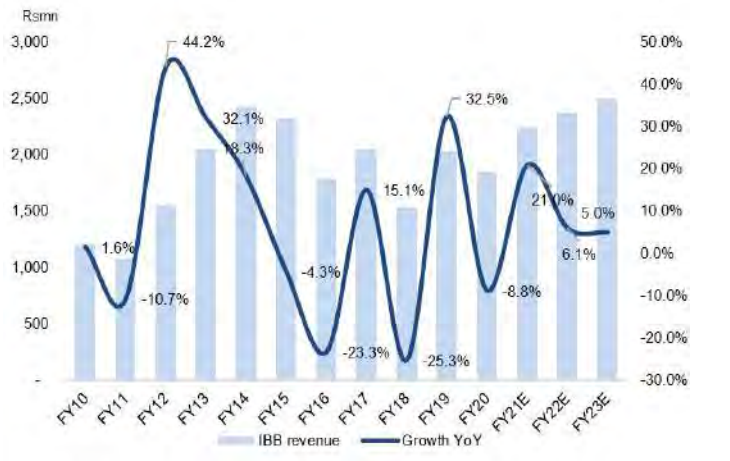


Source: Company, Nirmal Bang Institutional Equities Research

IBB - VO is the global leader with ~65% market share

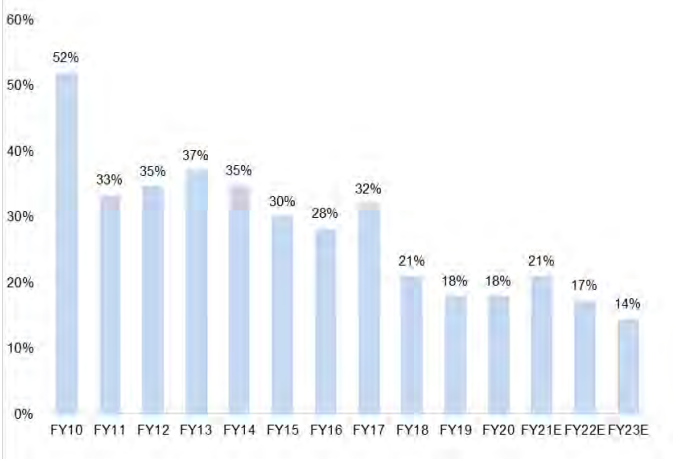
Major end-use of IBB is Ibuprofen and the other industry in which it is used is perfumery. But, perfumery's contribution in IBB's demand is insignificant. VO leads the raw material supply globally for IBB and has ~65% global market share. IBB accounted for ~18% of total revenue in FY20. Similar to ATBS, VO has consistently added capacity in IBB to maintain its global market share. Ibuprofen requires 99.5% IBB purity. VO matches the purity level and has achieved 99.7% purity. 1QFY21 saw robust growth in IBB due to panic buying across the globe, but this will normalise over the next few quarters. We are building in ~10% revenue CAGR over FY20-23E from IBB. The company was planning to forward integrate in IBB to manufacture IBAP for the specific client. But, the client backed out later on. We expect VO to win such contracts for downstream derivatives, which could improve overall realisation and volume for the IBB segment.

Exhibit 19: IBB revenue CAGR - we are building in ~10% CAGR over FY20-23E



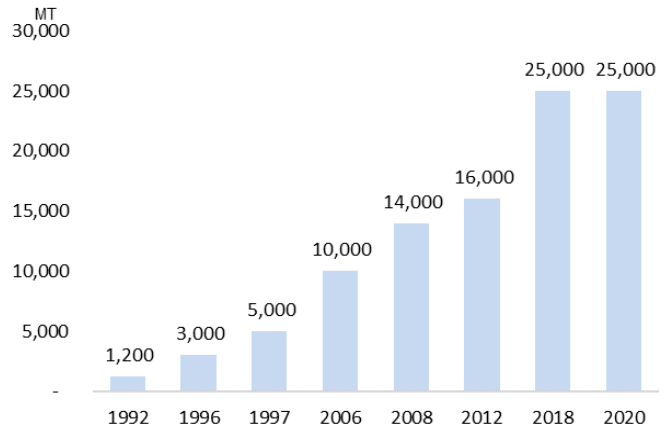
Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 20: IBB revenue share will go down with addition of new products



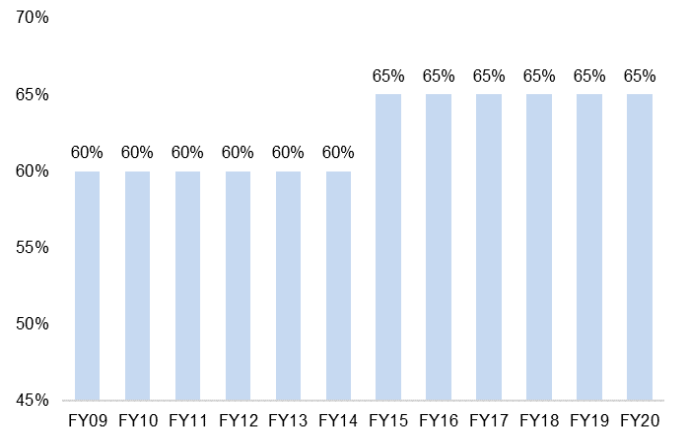
Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 21: IBB capacity expansion trend



Source: Company, Nirmal Bang Institutional Equities Research

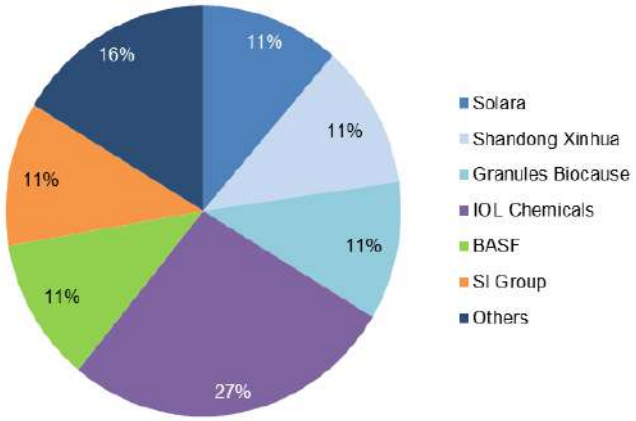
Exhibit 22: VO enjoys ~65% global market share in IBB



Source: Company, Nirmal Bang Institutional Equities Research

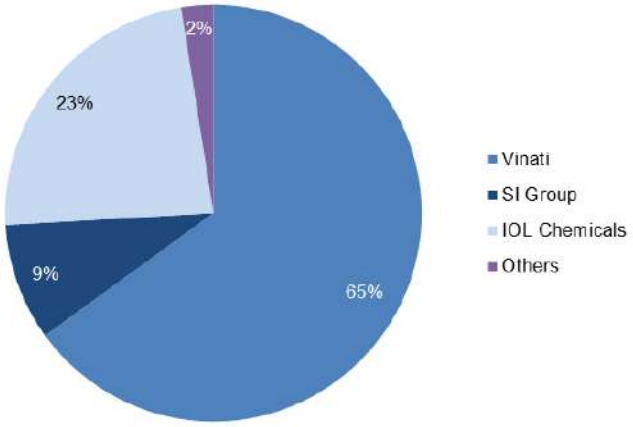
IBB is the major raw material for manufacturing Ibuprofen and accounts for around 25% of the raw material cost, with sodium dichromate accounting for 17% of cost and aluminium chloride accounting for 16%. Major players in the IBB market are VO, IOL Chemicals and SI Group. The global market for Ibuprofen is currently estimated at 44,000 MT, as per our estimates. Sustainable growth rate for this market is ~4-5%. But, FY21 would see higher growth, led by panic buying during the Covid-19 pandemic and overall increase in usage. Ibuprofen has second priority after Paracetamol to get rid of fever, body pain etc. The top 6 players, namely, Shasun (now Solara), Shandong Xinhua, Granules Biocause, IOL Chemicals, BASF and SI Group hold almost 80-85% of the Ibuprofen supply in the market. IOL Chemicals has the highest installed capacity. As per industry reports, top consumers of Ibuprofen include Pfizer, BASF, Johnson & Johnson, Bayer, Pharmed, Dr. Reddy's, Kentam and Ortho McNeil Pharmaceuticals, with the majority of Ibuprofen consumers operating at a global level or based in the US or in India. BASF's new Ibuprofen capacity was expected to be commissioned in 2021; similarly SI Group was planning to increase its Ibuprofen capacity by ~25% as per new reports. Capacity additions at the global level will drive demand for IBB as well.

Exhibit 23: Ibuprofen global capacity at 44,000 TPA as per our estimates



Source: Press Reports, Nirmal Bang Institutional Equities Research

Exhibit 24: IBB capacity- VO and IOL are the key players



Source: Press Reports, Nirmal Bang Institutional Equities Research

IB derivatives - import substitution play

With increase in IB capacity, VO has strategically increased capacity of IB derivates like Para Tertiary Butyl Toluene (PTBT) and Para Tertiary Butyl Benzoic Acid (PTBBA). Recently commissioned product Butyl Phenol is also IB derivative. Previously, IB was imported from China. VO has been able to drive growth of IB in India by setting up capacities. IB derivatives are aimed at import substitution. The company has recently announced capex of Rs1.5bn to expand PTBBA capacity. We expect similar activity to continue as VO will play aggressively to garner higher share in import substitution and the global 'Plus One' theme in our view. We expect IB derivatives and others segment to grow at ~49% CAGR over FY20-23. Also, addition of Para Amino Phenol can accelerate growth even further.

Exhibit 25: IB derivatives and other segments - we expect ~49% CAGR

Source: Nirmal Bang Institutional Equities Research

PTBT and PTBBA were IB derivatives and were imported in India. VO put up IB capacity in 2017. These products have applications in personal care, perfumery and polymer additives. Similarly, TB-Amines i.e. tertiary butyl phenol (used in rubber and pharmaceuticals) started generating revenue from FY18. Similarly, custom synthesis function was also started to target US and Japanese clients. Capex for all these projects taken together was Rs1.5bn and potential revenue at peak was estimated at Rs2bn.

Recently, VO announced capex of Rs1.5bn for expanding PTBBA capacity and launching 4 new products, which are intermediates used in the Agrochemicals industry. This entire capacity will be aimed at exports. The plant is expected to commission by the end of FY21 and peak revenue potential is ~Rs2.4bn. We expect this capacity to achieve peak utilisation in FY24/25. We expect similar announcement going forward by leveraging its expertise in innovation and process development.

Similarly, VO commissioned **Butyl Phenol** plant during 2QFY20. Due to technical reasons, the ramp-up was delayed, but the management expects ~Rs1.5-2bn revenue from FY21 with peak annual revenue potential of Rs.4bn. Capex for the same was ~Rs2.4bn. There are 4 products under this project, namely Para-Tertiary Butyl Phenol (PTBP), Ortho-Tertiary Butyl Phenol (OTBP), 2,4-Di Tertiary Butyl Phenol (2,4-DTBP), 2,6-Di Tertiary Butyl Phenol (2,6-DTBP) and key end-user industries are Perfumery, Antioxidants, Ink and Resins. Currently, major imports of these products are being done from Korea, Singapore, Switzerland, China and Russia. There is a huge import substitution opportunity in this space as currently the demand is in excess of 30,000 TPA. VO's 37,000 TPA capacity can meet the entire domestic demand in our view and excess could be utilized for exports. We expect Butyl Phenol to reach optimum utilisation in FY24.

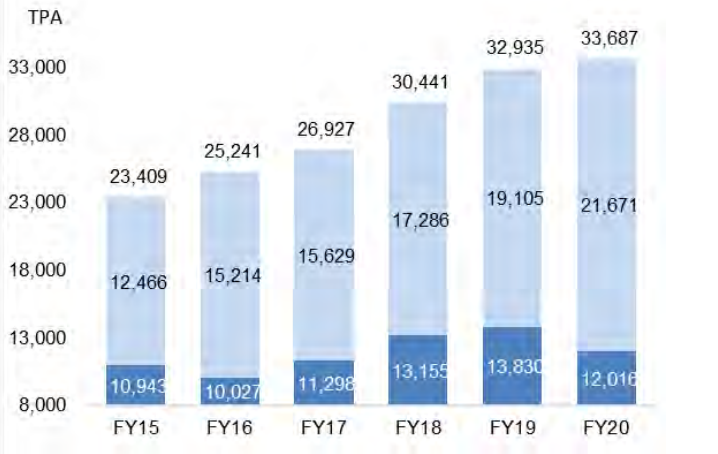
Butyl Phenols are intermediates used as building blocks for products in various industries like perfumery (~40% salience), inks & resins, plastic and lubricants. In India, currently there are no manufacturers for Butyl Phenols. Previously, companies like Herdillia (now SI Group), Balmer Lawrie and Naik Naware Chemical Pvt Ltd tried to manufacture these products. However, due to lack of scale and IB supply constraints, they couldn't manufacture products economically.

The estimated capacity of Butyl Phenol globally is close to 400,000 TPA. But, a large quantity out of this is captively consumed. Key players in the Butyl Phenol space include SI Group, BASF, Songwon, Oxiris, Chemtura/Addivant, Eutec, Kaoching, Tasco and DIC.

Exhibit 26: Butyl Phenol revenue growth - we expect peak utilisation by FY24

Source: Company, Nirmal Bang Institutional Equities Research

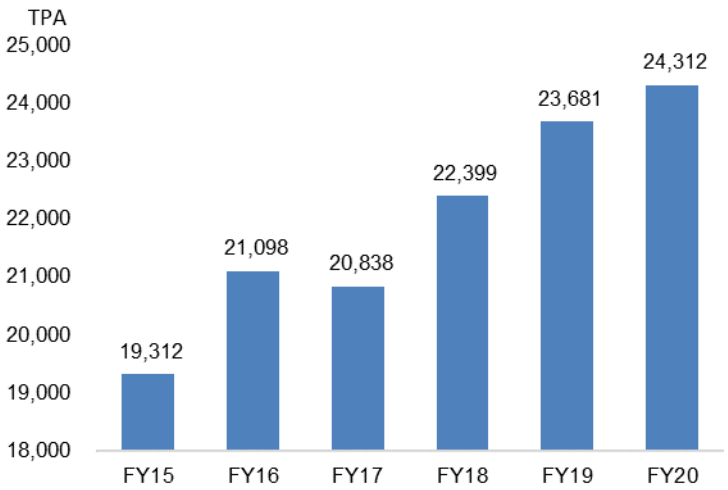
Exhibit 27: Butyl Phenol India imports - VO's capacity can replace entire imports



Source: Company, Nirmal Bang Institutional Equities Research

VO was planning to set up **Para Amino Phenol (PAP)** capacity earlier, but the management dropped the plan as the pilot plant couldn't match the quality standards of their own expectations. We understand that VO has been striving to develop a threshold purity and quality of PAP for the last 15 years. PAP is the key raw material for Paracetamol. Paracetamol is one of the most widely used analgesic (pain reliever) and antipyretic (anti-fever) drugs. More than 80% of PAP is used worldwide to manufacture Paracetamol while 7% is used as a rubber antioxidant and 5% in dyes. But, the company is reconsidering the opportunity as PAP has been included in the list of products under Production Linked Incentives (PLI) scheme by the government. Similar to Butyl Phenol, it's a huge import substitution play. Imports of PAP are ~24,000 TPA at present. Earlier, the plan was for 30,000 TPA capacity with a capex of Rs5bn. Potential revenue at peak capacity was ~Rs6bn. While there are conventional methods available to manufacture PAP, VO has decided to manufacture PAP using a single step process (catalytic hydrogenation of Nitrobenzene). The process proposed by VO is a greener and cost-efficient option, giving it an edge over the Chinese competitors. China is the largest manufacturer and consumer of PAP, with a capacity of more than 1,00,000 TPA. As there is no formal announcement yet, we are building (or not building?) PAP in our numbers.

Exhibit 28: Para Amino Phenol India imports - huge import substitution opportunity

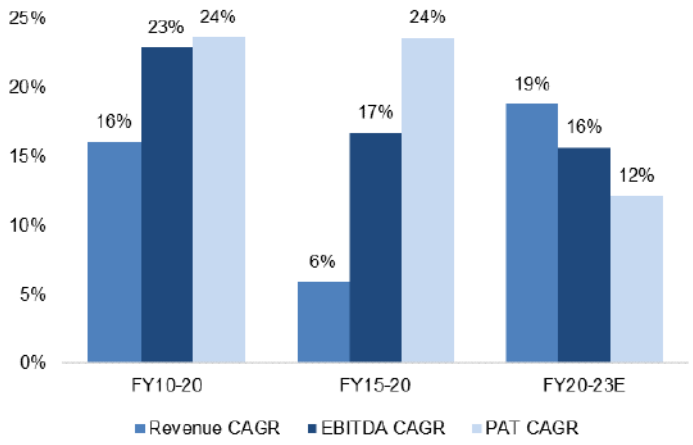


Source: Import Exports Bank of India, Nirmal Bang Institutional Equities Research

Financials - we are building in ~19% revenue growth

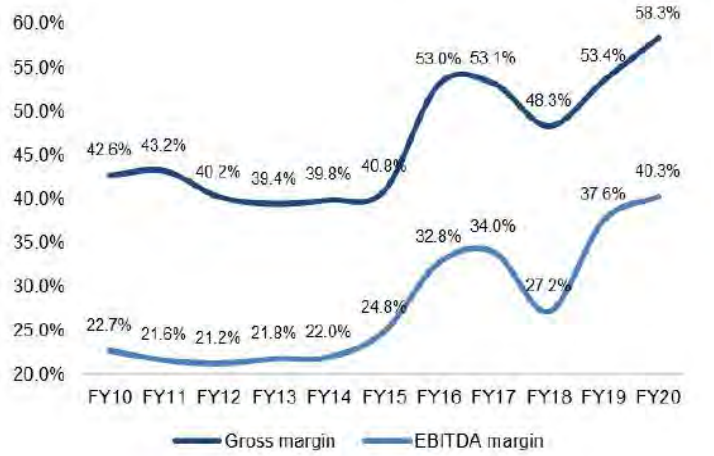
Over the last 10 years, VO has delivered Revenue/EBITDA/PAT CAGR of ~16%/23%/24%. We believe that FY21 will be a challenging year for VO, both in terms of revenue and profitability. As ATBS, which is the key high-margin product in its portfolio, is under pressure, profitability is expected to take a short term hit. But, over the next 3-year period, we are building in strong double-digit growth in both revenue and profitability. Profit CAGR would be lower in our estimates on account of reduced salience of ATBS, addition of Butyl Phenol (which has moderate margin profile) and increase in depreciation (led by expansion plans). However, over the period, profitability growth will exceed revenue growth similar to the trend witnessed in the past. Formula-based pricing has helped VO over the years to navigate through volatility in crude oil. All key raw materials (Toluene, MTBE, Acrylonitrile, Propylene etc) are linked to crude oil and hence absolute revenue growth is susceptible to such fluctuations whereas profit/kg remains intact, which leads to higher EBITDA margin (% terms) during declining crude oil prices.

Exhibit 29: Despite raw material volatility, earnings growth has been robust over the last decade



Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 30: Formula based pricing hedges VO against raw material fluctuations



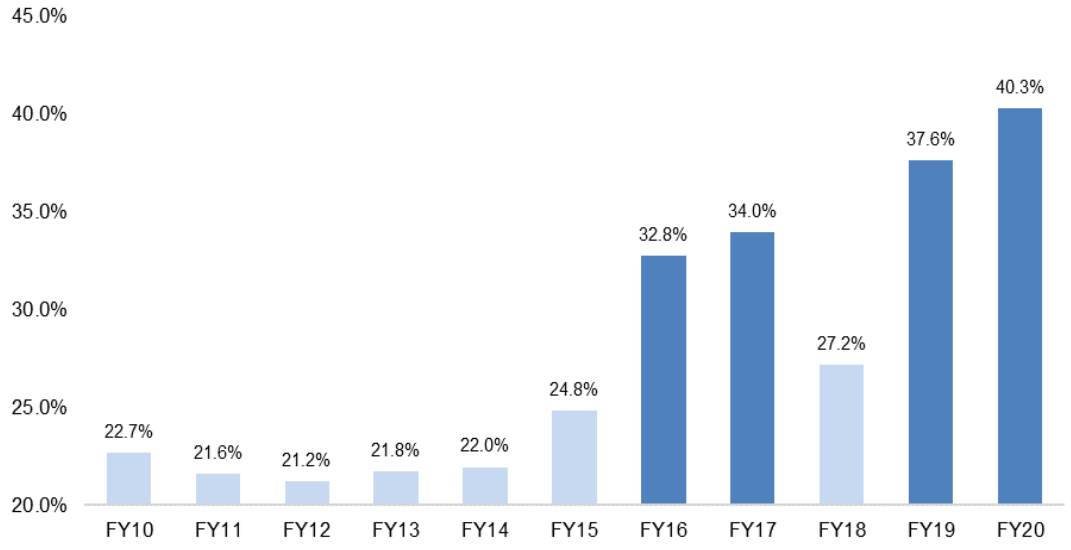
Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 31: Significant growth in EBITDA despite fluctuations in crude oil prices over the years

Particulars	FY12	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
Brent crude movement	29%	-4%	-2%	-21%	-41%	-4%	17%	20%	-17%
EBITDA growth	36%	27%	27%	25%	8%	5%	-9%	114%	-2%

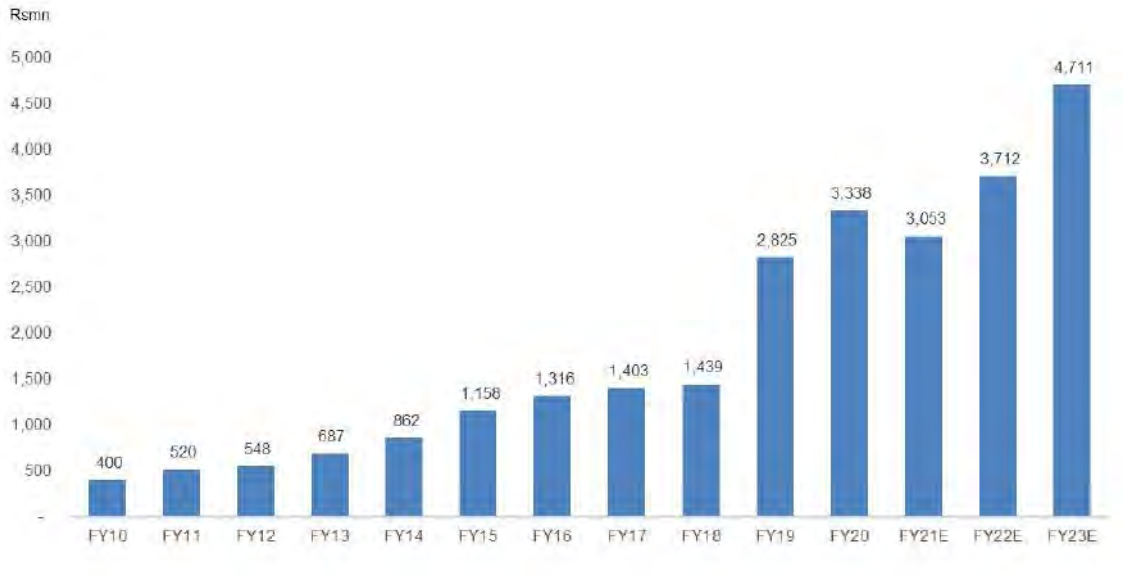
Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 32: EBITDA margin appear higher in years of crude declines, as per formula based pricing



Source: Company, Nirmal Bang Institutional Equities Research

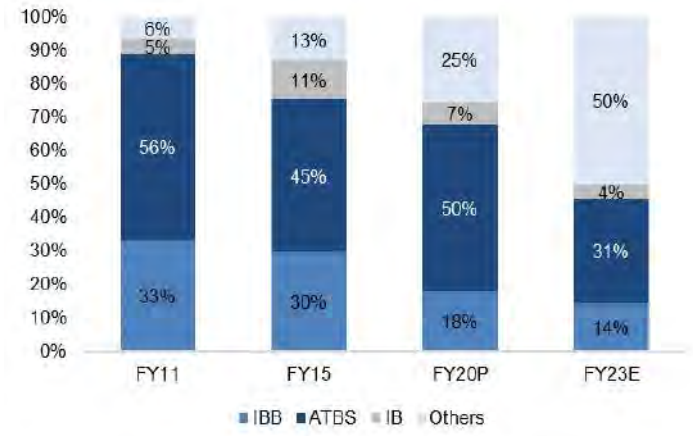
Exhibit 33: Robust earnings growth at ~24% CAGR over FY10-20



Source: Company, Nirmal Bang Institutional Equities Research

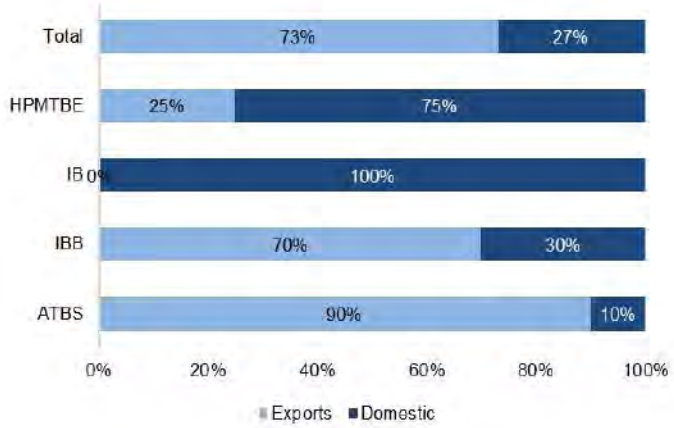
We expect revenue share of ATBS to fall in the near term and IB derivatives will gain significant share, led by capacity expansion and import substitution opportunity. We expect revenue share of new products to rise from ~25% in FY20 to ~50% in FY23E. VO's overall export share was ~74% in FY20 and we expect it go up further. ATBS and IBB are export centric segments whereas most of IB demand is for captive use and remaining for the domestic market.

Exhibit 34: Revenue break-up- new products' share expected to grow significantly



Source: Nirmal Bang Institutional Equities Research

Exhibit 35: Revenue break-up (Domestic vs Exports)



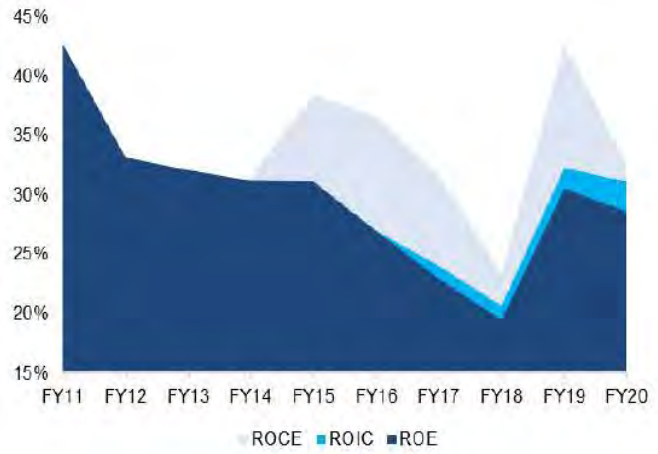
Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 36: Exports share rising with higher focus on new products

Source: Company, Nirmal Bang Institutional Equities Research

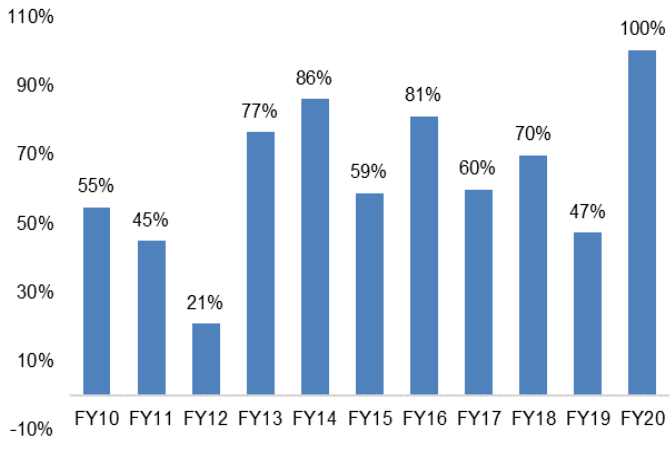
VO enjoys significantly higher return ratios compared to many other chemical companies. We believe that its focus on cost optimization and disproportionate focus on value-added products with quality standards above global requirements enable the company to maintain such high return ratios. Debt-free balance sheet and excellent cash flow conversion also add to the overall performance. It has consistently generated free cash flows over the last 6-7 years and most of the capex has been funded through internal accruals. VO's working capital days have been stable in the range of 80-90 days over the last 10 years. Also, cash & cash equivalents (C&CE) formed ~19% of total assets of the company in FY20.

Exhibit 37: Solid return ratios profile



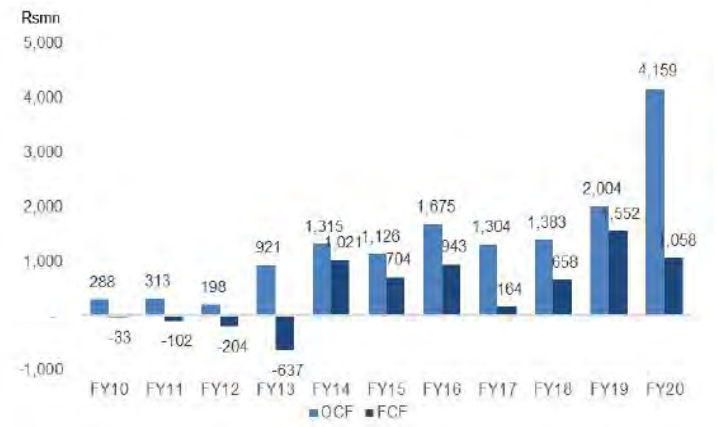
Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 38: Strong EBITDA to OCF conversion



Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 39: Consistent free cash flow generation over the years

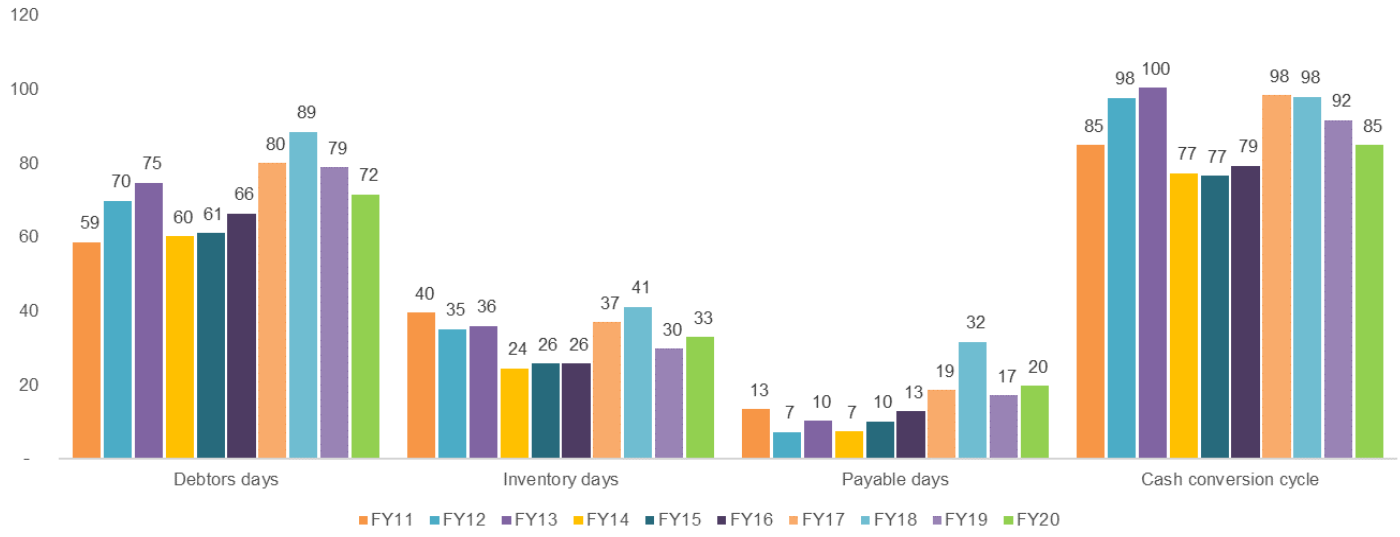


Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 40: FCF/OCF ratio

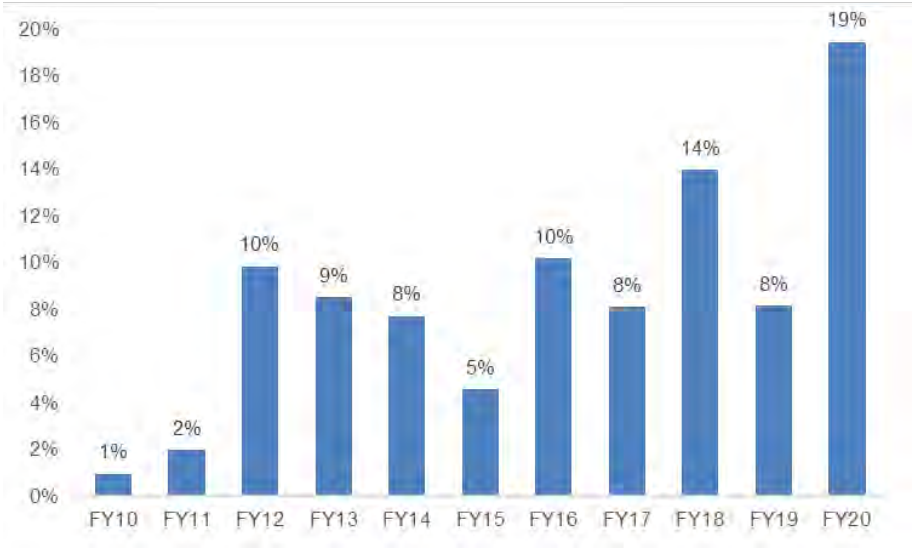
Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 41: Working capital days in the range of 80-90 days over the last 10 years



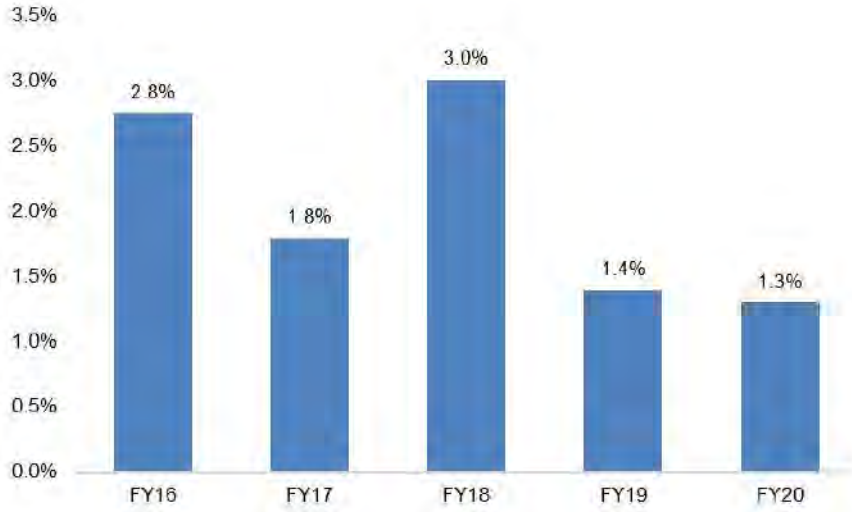
Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 42: C&CE as % total assets at ~19% is positive



Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 43: Managerial remuneration as % PAT below ~2%



Source: Company, Nirmal Bang Institutional Equities Research

Financial summary

Y/E March (Rsmn)	FY19	FY20	FY21E	FY22E	FY23E
Net Sales	11,279	10,289	10,648	13,694	17,248
Growth YoY%	*54.6%*	*-8.8%*	*3.5%*	*28.6%*	*26.0%*
Gross margin %	*53.4%*	*58.3%*	*58.0%*	*55.0%*	*55.0%*
EBITDA	4,246	4,149	4,238	5,067	6,416
EBITDA margin %	*37.6%*	*40.3%*	*39.8%*	*37.0%*	*37.2%*
Adj PAT	2,825	3,338	3,053	3,712	4,711
Growth YoY%	*96.3%*	*18.2%*	*-8.5%*	*21.6%*	*26.9%*
RoCE	*42.6%*	*32.7%*	*27.3%*	*28.0%*	*30.1%*
RoE	*32.3%*	*31.1%*	*25.0%*	*26.3%*	*28.4%*
P/E	29.9	23.9	42.1	34.6	27.3
EV/EBITDA	19.7	18.5	29.4	24.4	19.0
P/BV	8.0	6.2	8.7	7.3	6.0

Source: Company, Nirmal Bang Institutional Equities Research

Variance with consensus

Particulars	NBIE estimates			Consensus estimates			Variance (%)		
	FY21E	FY22E	FY23E	FY21E	FY22E	FY23E	FY21E	FY22E	FY23E
Revenue	10,648	13,694	17,248	11,356	14,443	17,101	-6.2%	-5.2%	0.9%
EBITDA	4,238	5,067	6,416	4,455	5,344	6,356	-4.9%	-5.2%	0.9%
EBITDA margin	39.8%	37.0%	37.2%	39.2%	37.0%	37.2%	57bps	bps	3bps
APAT	3,053	3,712	4,711	3,327	4,027	4,814	-8.2%	-7.8%	-2.1%

Source: Bloomberg, Nirmal Bang Institutional Equities Research

Valuation - we initiate coverage with TP of Rs1,250

VO's last 5-year and 2-year average PE multiples are ~24x and ~30x, respectively. Currently, the stock is trading at ~40x 1-year forward EPS. We believe that the company deserves a premium to 5-year average PE multiple as over the last 5 years, VO has grown both in terms of size and overall profitability besides venturing into new products (apart from the 3 core products). We believe that VO's debt-free balance sheet and ability to consistently generate cash flows will help it to garner higher growth in the coming years through expansion. We are structurally positive on this company, but from a short-term point of view, pick-up in ATBS and ramp-up of new projects will take time considering its exposure to the oil & gas sector and other industries where the recovery is expected to take time. Also, lower input prices will affect realisations for almost the entire product portfolio. Hence, we believe that assigning a premium to last 2-year's average PE multiple would not be prudent from next 2-3 years' perspective. Therfore, we initiate coverage on VO with an Accumulate rating and TP of Rs1,250, valuing it at ~30x PE on Sept'22E earnings.

Exhibit 44: 1-year forward PE

Source: Bloomberg, Nirmal Bang Institutional Equities Research

Exhibit 45: 1-year forward EV/EBITDA

Source: Bloomberg, Nirmal Bang Institutional Equities Research

Exhibit 46: Peer valuation

Company Name	FY20-23E CAGR (%)			EBITDA margin (%)			ROE (%)				P/E (x)			P/B (x)			EV/EBITDA (x)		
	Revenue	EBITDA	PAT	FY20	FY23E	Change	FY20	FY21E	FY22E	FY23E	FY21E	FY22E	FY23E	FY21E	FY22E	FY23E	FY21E	FY22E	FY23E
Indian companies																			
UPL Ltd	9.2	11.9	24.9	20.8	22.4	158bps	15.0	15.4	16.5	17.8	13.4	11.1	9.5	1.9	1.6	1.5	7.6	6.4	5.3
Coromandel International Ltd	7.7	11.4	15.6	12.3	13.6	132bps	25.1	26.4	24.1	22.7	16.4	15.0	13.9	4.0	3.4	2.9	11.0	10.0	9.1
PI Industries Ltd	22.6	25.3	28.2	21.2	22.7	145bps	19.5	19.7	20.5	20.0	44.8	34.5	29.1	6.7	5.8	4.9	32.9	26.1	21.4
Rallis India Ltd	11.6	17.3	17.3	12.8	14.9	207bps	14.6	15.3	16.3	17.1	22.9	19.0	15.8	3.3	2.9	2.5	14.9	12.4	10.5
Bayer CropScience Ltd/India	13.7	21.3	21.8	18.3	22.3	395bps	21.7	24.0	23.6	22.7	37.7	32.8	29.1	8.7	7.2	6.1	27.8	23.9	20.6
BASF India Ltd	11.9	18.8	-284.6	3.0	3.6	59bps	-1.8	5.1	10.1	11.5	38.9	25.0	21.1	4.2	3.7	3.3	19.7	16.0	Na
Navin Fluorine International L	**26.1**	**30.3**	**31.4**	**24.8**	**27.4**	**257bps**	**14.6**	**16.0**	**17.9**	**21.3**	**41.3**	**32.9**	**24.0**	**6.3**	**5.6**	**4.7**	**31.5**	**25.7**	**16.4**
SRF Ltd	**13.8**	**22.0**	**25.9**	**20.2**	**24.9**	**470bps**	**15.2**	**16.4**	**17.3**	**17.1**	**26.9**	**20.9**	**18.3**	**3.9**	**3.4**	**2.9**	**14.8**	**12.6**	**10.3**
Aarti Industries Ltd	**17.0**	**19.1**	**24.2**	**23.3**	**24.6**	**128bps**	**19.1**	**17.1**	**19.7**	**24.2**	**31.5**	**23.8**	**16.6**	**5.1**	**4.4**	**3.7**	**19.2**	**15.3**	**11.4**
Vinati Organics Ltd	**18.8**	**15.6**	**12.2**	**40.3**	**37.2**	**-312bps**	**28.6**	**22.1**	**22.9**	**24.2**	**42.7**	**35.1**	**27.7**	**8.8**	**7.4**	**6.1**	**29.9**	**24.8**	**19.3**
Atul Ltd	5.3	7.6	7.3	22.1	23.6	149bps	20.9	16.9	17.3	17.5	30.6	25.3	22.0	4.9	4.3	3.6	21.0	17.2	15.3
Sudarshan Chemical Industries	11.5	16.2	12.4	15.1	17.2	201bps	22.2	17.5	20.5	22.3	28.5	21.6	17.5	4.7	4.0	3.5	14.3	11.7	9.6
Global companies																			
DuPont de Nemours Inc	0.6	0.0	0.3	26.1	25.7	-42bps	6.4	5.8	6.8	7.5	19.5	17.1	15.0	1.1	1.1	1.0	12.0	10.8	9.9
BASF SE	0.6	2.7	0.5	13.5	14.4	87bps	11.2	3.1	7.1	8.8	21.8	14.9	12.4	1.3	1.3	1.2	9.1	7.7	7.0
Chemours Co/The	-0.4	3.5	5.0	18.3	20.5	220bps	44.8	37.6	44.2	44.5	14.6	10.2	8.1	5.4	4.6	3.9	8.3	6.9	5.8
Solvay SA	-1.4	-2.3	-3.8	22.4	21.8	-62bps	7.6	2.8	7.4	9.3	13.6	12.2	10.1	1.0	1.0	1.0	5.5	5.4	4.8
FMC Corp	4.9	7.6	9.7	26.4	28.5	207bps	27.3	30.4	30.4	30.2	16.8	14.9	13.3	4.7	4.4	4.0	13.1	11.9	11.1
China Petroleum & Chemical Cor	-1.8	-3.0	-4.1	6.8	6.6	-25bps	7.7	2.5	5.0	6.3	31.6	12.9	9.7	0.6	0.6	0.6	4.0	3.0	2.5
Exxon Mobil Corp	-4.9	1.2	3.4	13.9	16.7	285bps	5.3	-1.0	3.0	7.0	-123.7	24.9	12.3	0.8	0.9	0.9	10.8	7.2	5.5

Source: Bloomberg, Nirmal Bang Institutional Equities Research

Exhibit 47: Share price movement for key chemicals companies

Company Name	0.5yr absolute	1yr absolute	1.5yr CAGR	2yr CAGR	3yr CAGR	4yr CAGR	5yr CAGR	10yr CAGR	15yr CAGR
Nifty 50	33	4	1	6	5	9	8	7	11
Sensex 30	33	5	3	8	8	10	8	7	11
Average of Indian chemical companies	36	57	34	32	21	20	25	27	26
MSCI World Chemical Index	35	12	7	8	3	8	8	6	7
Indian chemical companies									
UPL	48	-11	-11	10	-1	3	10	15	15
Coromandel	36	77	38	37	14	28	30	8	25
PI Industries	44	54	57	61	39	26	24	45	47
Rallis India	31	59	42	20	5	4	5	7	19
Bayer Cropscience India	49	70	21	14	15	6	8	18	23
BASF India	28	55	3	-8	-5	4	7	8	13
Navin Fluorine	**45**	**178**	**102**	**80**	**41**	**44**	**51**	**42**	**25**
SRF	**32**	**68**	**47**	**58**	**37**	**24**	**28**	**28**	**19**
Aarti Industries	**8**	**30**	**15**	**25**	**30**	**29**	**31**	**40**	**25**
Vinati Organics	**51**	**22**	**34**	**42**	**39**	**44**	**43**	**42**	**51**
Atul	42	50	43	35	36	26	30	43	30
Sudarshan Chemicals	17	30	20	14	7	6	33	22	23
Global chemical companies									
Du Pont Nemours Inc	65	-10	-20	-16	-17	-6	-3	3	-0
BASF SE	21	-18	-18	-12	-16	-9	-6	0	4
Chemours	139	56	-31	-21	-26	11	27	na	na
Solvay SA	12	-23	-22	-15	-16	-8	-4	-0	-1
Sinopec	-13	-22	-23	-22	-12	-6	-5	-6	2
Exxonmobil Chemical	-16	-51	-44	-35	-25	-21	-16	-6	-4

Source: Bloomberg, Nirmal Bang Institutional Equities Research

Exhibit 48: Product profile

Speciality Monomers

Speciality Monomers act like building blocks, useful in designing unique polymer structures. They contain a low to high range of molecular weight and are low in volatility.

Product	Applications
• 2-Acrylamido 2-Methylapropane Sulphonic Acid (ATBS)	• Construction, Water treatment, textile, adhesives and paint & paper coating
• Sodium Salt of 2-Acrylamido-2 -Methylpropane Sulphonic Acid (NAATBS)	• Construction, Water treatment, textile, adhesives and paint & paper coating
• N-Tertiary Butyl Acrylamide (TBA)	• Personal care, paper, metal
• N-Tertiary Octyl Acrylamide (TOA)	• Adhesives, personal care, antiscalants

Speciality Aromatics

These colourless liquids with a characteristic smell are important chemical precursors which can be converted into many of the intermediates and polymers needed to produce an extensive range of everyday products.

Product	Applications
• Iso Butyl Benzene (IBB)	• Pharmaceutical
• Normal Butylbenzene (NBB)	• Speciality solvent
• C 10 Aromatic Solvent	• Paint & coatings, agrochemicals

Other Speciality Products

Specialty chemicals, also known as performance chemicals, are used as ingredients in finished products and to improve manufacturing processes. Products and services in the specialty chemicals industry require intensive knowledge and ongoing innovation

Product	Applications
• IsoButylene (IB)	• Pharmaceutical
• Methanol	• Speciality solvent
• High Purity- Methyl Tertiary Butyl Ether (HP-MTBE)	• Paint & coatings, agrochemicals
• Hexene	• Tyre Industry, Gasoline
• Tertiary-Butylamine	• Rubber, Crop protection
• Para Tertiary Butyl Benzoic Acid (PTBBA)	• Personal Care
• Methyl 4-Tertiary Butyl Benzoate (PTBMB)	• PVC stabilisers, Alkyd resins

Miscellaneous Polymers

Polymers are the most rapidly growing sector of the materials industry. From being low cost substitutes for natural products, polymers now progressively find its uses in a wide variety of applications and caters to various industries.

Product	Applications
• Vinflow HT	• Construction, ceramics, oil drilling, mining, leather and paper
• Vinplast 245 (Acrylic Super Plasticizer)	• Construction, ceramics, oil drilling, mining, leather and paper

Source: Company, Nirmal Bang Institutional Equities Research

Company background

VO, established in 1989 by Mr. Vinod Saraf, is a specialty chemicals company producing aromatics, monomers, polymers and other specialty products. The company manufactures IBB, ATBS and IB. Apart from these three products, the company also manufactures other major products like High Purity – Methyl Tertiary Butyl Ether (MTBE), Diacetone Acrylamide (DAAM), N-Tertiary Butyl Acrylamide (TBA), N-Tertiary Octyl Acrylamide (TOA), Butyl Phenol and other IB derivates. VO is the global market leader in ATBS and IBB with ~65% market share in each whereas in IB, it claims domestic leadership with ~70% market share. Extreme thrust on R&D and process improvement is the key driver of growth as quality of some of its key products beat global purity norms. Also, ongoing adoption of greener processes has enabled VO to grow rapidly as the concerns about environment awareness are rising and adoption of environment friendly processes is the only sustainable way of doing business. It has 2 manufacturing facilities in Maharashtra (Mahad and Lote). Also, over the years, VO has been able to do technology tie-ups with renowned institutes within country and even outside India in order to improve process efficiency and overall costs without compromising on the quality.

Exhibit 49: Manufacturing footprint

FACILITY	PLANT 1	PLANT 2
Location	Mahad – Raigad, Maharashtra	Lote – Ratnagiri, Maharashtra
Distance from nearest port (JNPT)	140 km	210 km
Year of establishment	1989	2002
Products Made	IBB and NBB	ATBS, NaATBS, TBA, IB, HP MTBE, DAAM
Certification	ISO 9001:2008; ISO 14001:2004 and OHSAS 18001:2007	ISO 9001:2008; ISO 14001:2004 and OHSAS 18001:2007
Cutting-edge technology	InstitutFrancais du Petrole (IFP) France	National Chemical Laboratories (NCL), Pune (for ATBS) and SaipemSpA, Italy (for IB)

Source:Company, Nirmal Bang Institutional Equities Research

Exhibit 50: Technology tie-ups

Products	Name of the institute	Technology acquisition
IBB	IFP, France	1989
ATBS	NCL, Pune	2000
IB	Saipem SPA, Italy	2009
PTBT, PTBBA	IICT, Hyderabad	2016

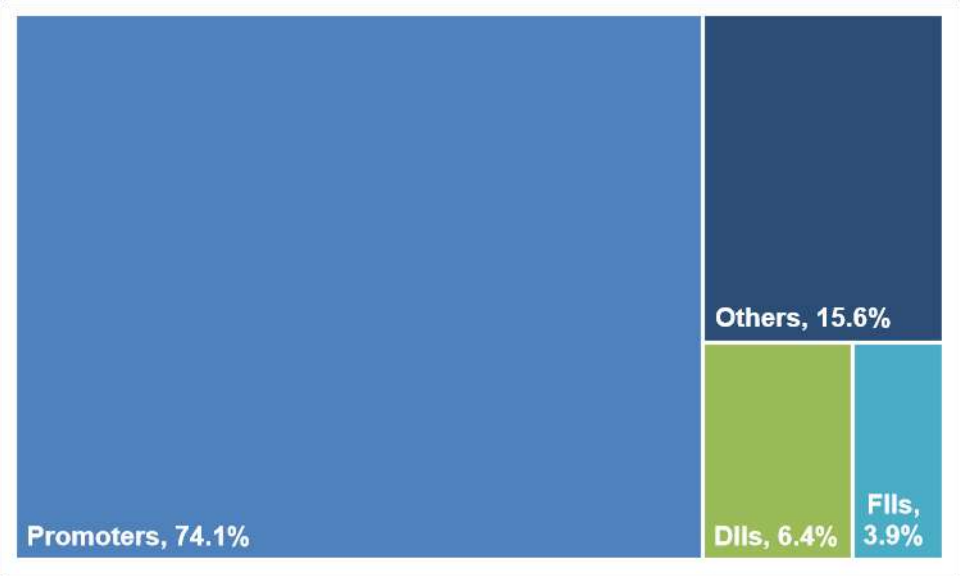
Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 51: Promoter profile

Name	Designation	Decription
Vinod Saraf	Promoter, Executive Chairman	He is the founder of the company. He is a management graduate from BITS, Pilani. His nearly two decades of experience includes Bhilwara Group, Modern Syntes (I) Ltd, Grasim Ind. As a VP of Chemical division, he was responsible for the identification of chemicals/petrochemical projects, technical tie-up and feasibility studies. He was involved in the implementation of the gas based sponge iron project for Grasim and subsequently worked as MD (Finance & Admin) in MRPL Ltd.
Vinati Saraf Muthreja	Promoter, MD & CEO	She joined the company in 2006. she graduated from the University of Pennsylvania with Bachelors in Economics (Finance) from Wharton School. She has also done Bachelor in Applied science, Biotech and Pharmaceutical development. Her role is important in securing long term contracts with MNC clients and streamlining finance and production process. Previously she worked as a consultant for Mercer Oliver Wyman (New York).
Viral Saraf Mittal	Promoter, Director CSR	She joined the company in 2009. she graduated from the University of Pennsylvania with Bachelors in Economics (Finance) from Wharton School. Previously she worked as an analyst at Citi Private Bank in New York.
Sunil Saraf	Promoter, Non-Independent Director	He is a Commerce Graduate from the Rajasthan University.

Source: Company, Bloomberg, Nirmal Bang Institutional Equities Research

Exhibit 52: Shareholding pattern as on Sep'20



Source:Company, Nirmal Bang Institutional Equities Research

Exhibit 53: Top public shareholders

Particulars	% holding
Mirae MF	2.88
Invesco MF	1.22

Source: BSE, Nirmal Bang Institutional Equities Research

Financials (Consolidated)

Exhibit 54: Income statement

Y/E March (Rsm)	FY19	FY20	FY21E	FY22E	FY23E
Net Sales	**11,279**	**10,289**	**10,648**	**13,694**	**17,248**
Growth YoY%	*54.6*	*-8.8*	*3.5*	*28.6*	*26.0*
COGS	5,251	4,287	4,472	6,162	7,762
Gross margin %	***53.4***	***58.3***	***58.0***	***55.0***	***55.0***
Staff costs	542	643	660	849	1,069
Other expenses	1,240	1,210	1,278	1,616	2,001
EBITDA	**4,246**	**4,149**	**4,238**	**5,067**	**6,416**
Growth YoY%	*114.2*	*-2.3*	*2.2*	*19.6*	*26.6*
EBITDA margin %	***37.6***	***40.3***	***39.8***	***37.0***	***37.2***
Depreciation	274	332	459	516	566
EBIT	3,972	3,817	3,779	4,551	5,850
Interest	22	20	20	20	20
Other income	302	450	322	430	465
PBT (bei)	4,252	4,247	4,080	4,960	6,296
PBT	4,252	4,247	4,080	4,960	6,296
ETR	33.6	29.0	25.2	25.2	25.2
PAT	2,825	3,338	3,053	3,712	4,711
Adj PAT	**2,825**	**3,338**	**3,053**	**3,712**	**4,711**
Growth YoY%	***96.3***	***18.2***	***-8.5***	***21.6***	***26.9***

Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 55: Cash flow

Y/E March (Rsm)	FY19	FY20	FY21E	FY22E	FY23E
PBT	**4,252**	**4,247**	**4,080**	**4,960**	**6,296**
Depreciation	274	332	459	516	566
Interest	9	11	20	20	20
Other adjustments	-132	-236	-322	-430	-465
Change in Working capital	-1,138	811	-383	-1,071	-1,345
Tax paid	-1,262	-1,005	-1,027	-1,249	-1,585
Operating cash flow	**2,004**	**4,159**	**2,828**	**2,747**	**3,486**
Capex	-451	-3,101	-1,250	-1,000	-1,000
Free cash flow	**1,552**	**1,058**	**1,578**	**1,747**	**2,486**
Other investing activities	-1,976	1,126	-94	-721	-1,145
Investing cash flow	**-2,427**	**-1,975**	**-1,344**	**-1,721**	**-2,145**
Issuance of share capital	-	-	-	-	-
Movement of Debt	-	-	-	-	-
Dividend paid (incl DDT)	-278	-1,046	-1,001	-916	-1,114
Other financing activities	-125	-44	54	-20	-20
Financing cash flow	**-403**	**-1,091**	**-947**	**-936**	**-1,134**
Net change in cash flow	**-826**	**1,094**	**537**	**90**	**207**
Opening C&CE	1,318	492	537	1,074	1,164
Closing C&CE	492	537	1,074	1,164	1,371

Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 56: Balance sheet

Y/E March (Rsm)	FY19	FY20	FY21E	FY22E	FY23E
Share capital	103	103	103	103	103
Reserves	10,410	12,691	14,743	17,539	21,136
Net worth	**10,513**	**12,794**	**14,846**	**17,642**	**21,239**
Long term debt	-	-	-	-	-
Short term debt	37	3	3	3	3
Total debt	**37**	**3**	**3**	**3**	**3**
Other non-current liabilities	875	746	820	820	820
Total Equity & Liabilities	**11,425**	**13,543**	**15,670**	**18,465**	**22,063**
Gross block	5,472	8,565	9,815	10,815	11,815
Accumulated depreciation	727	1,057	1,517	2,032	2,598
Net Block	**4,745**	**7,508**	**8,298**	**8,782**	**9,217**
CWIP	1,912	310	310	310	310
Intangible and others	-	-	-	-	-
Other non-current assets	308	187	261	366	513
Investments	-	-	-	-	-
Trade receivables	2,440	2,018	2,088	2,686	3,383
Inventories	924	932	964	1,240	1,562
Cash & Cash equivalents	1,003	2,811	3,689	4,825	6,496
Other current assets	944	665	998	1,397	1,956
Total current assets	**5,311**	**6,426**	**7,739**	**10,147**	**13,396**
Trade payables	531	557	576	741	933
Other current liabilities	320	330	363	399	439
Total current liabilities	**851**	**887**	**939**	**1,140**	**1,372**
Total Assets	**11,425**	**13,543**	**15,670**	**18,465**	**22,063**

Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 57: Key ratios

Y/E March (Rsm)	FY19	FY20	FY21E	FY22E	FY23E
Per share (Rs)					
Adj EPS	27.5	32.5	29.7	36.1	45.8
Book value	102.3	124.5	144.4	171.6	206.6
Valuation (x)					
EV/EBITDA	19.7	18.5	29.5	24.5	19.1
P/E	29.9	23.9	42.2	34.7	27.3
P/BV	8.0	6.2	8.7	7.3	6.1
Return ratios (%)					
RoCE	42.6	32.7	27.3	28.0	30.1
RoE	32.3	31.1	25.0	26.3	28.4
Profitability ratios (%)					
Gross margin	53.4	58.3	58.0	55.0	55.0
EBITDA margin	37.6	40.3	39.8	37.0	37.2
PAT margin	24.4	31.1	27.8	26.3	26.6
Liquidity ratios (%)					
Current ratio	6.0	7.2	8.2	8.9	9.7
Quick ratio	4.9	6.2	7.2	7.8	8.6
Solvency ratio (%)					
Debt to Equity ratio	0.0	0.0	0.0	0.0	0.0
Turnover ratios					
Fixed asset turnover ratio (x)	2.4	1.4	1.3	1.6	1.9
Debtor days	79	72	72	72	72
Inventory days	30	33	33	33	33
Creditor days	17	20	20	20	20
Net Working capital days	92	85	85	85	85

Source: Company, Nirmal Bang Institutional Equities Research

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SELL < -5%

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