Initiating Coverage

UPL

Refer to important disclosures at the end of this report

On an upward path; initiate with Buy

CMP: Rs 363 as of (April 19, 2020)	TP: Rs 500 12 months	Rating: BUY	Upside: 37.7 %

Market share gains + synergy benefits = 200bps improvement in EBITDA margins over FY20-22E

- We initiate coverage on UPL with a Buy rating and a TP of Rs500 (38% upside) with OW stance in sector EAP. Market share gains, merger synergies and deleveraging should drive re-rating.
- UPL has been gaining market share over the last five years despite flat industry growth, driven by new products and geographic launches. With the acquisition of Arysta, UPL has been able to fill portfolio gaps in major geographies and is poised to gain market share.
- EBITDA margins started to improve from Q3FY20 (466bps yoy) as merger synergies kicked in. With better margins, reduction in working capital days, UPL's net debt/EBITDA should improve to 2.2x in FY22E from 3.5x in FY20E.
- UPL is trading at 5.4x/8.7x FY22E EV/EBITDA and a P/E which is 48%/47% lower than its last 5-yr 1-yr fwd avg. of 10.4x EV/EBITDA and 16.4x P/E. We value UPL at 7.0x FY22E EV/EBITDA (5-yr avg.1-yr fwd multiple – 10.4x) and arrive at our TP of Rs500.

Merger synergies to improve EBITDA margins

UPL has already been able to achieve (run-rate) Rs10.2bn of merger synergies in 9MFY20 vs. its target of Rs11.6bn in 12 months, and is ahead of schedule in this. The synergies from the merger should improve FY21/22E EBITDA margins by 160bps/200bps over FY20E. UPL's Q3FY20 EBITDA margins of 23.7% is higher than our FY21/22 assumption of 22.1%/22.5% as we remain conservative due to possible supply chain disruptions stemming from Covid-19 and the vagaries of weather which could adversely affect demand.

Earnings growth and working capital improvement remain key in reducing debt

We believe that UPL's net debt/EBITDA should reduce to 2.2x in FY22E from 3.5x in FY20E, with: 1) the improvement in working capital days; 2) 6.6% revenue growth and 200bps improvement in EBITDA margin over FY20-22E; and 3) 23% increase in FCF over FY20-22E.

EPS CAGR of 11% and ROCE improvement of 224bps over FY20-22E

We expect UPL's ROCE to improve by 224bps over the next two years to 12.8% on 11.2% EPS CAGR due to an improvement in margins as merger synergies play out. The current FY22E EV/EBITDA multiple of 5.4x offers an entry opportunity for long-term investors. Key risks are: adverse weather, regulatory risk, supply chain disruption and forex.

What is unique in this report: 1) Detailed analysis of common molecules between UPL and Arysta (page 16); and 2) merger synergy analysis with case study on Corteva (page 13).

Please see our sector model portfolio (Emkay Alpha Portfolio): Agri Input & Chemicals (Page 47)

Financial Snapshot (Consolidated)

(Rs mn)	FY18	FY19	FY20E	FY21E	FY22E
Net Sales	173,780	218,370	337,134	356,883	382,745
EBITDA	35,050	42,550	69,051	78,788	85,998
EBITDA Margin (%)	20.2	19.5	20.5	22.1	22.5
APAT	20,850	26,050	25,748	26,536	31,848
EPS (Rs)	27.3	34.1	33.7	34.7	41.6
EPS (% chg)	14.2	24.9	(1.2)	3.1	20.0
ROE (%)	25.2	21.9	17.0	15.9	16.7
P/E (x)	13.3	10.7	10.8	10.5	8.7
EV/EBITDA (x)	6.3	10.5	7.5	6.3	5.4
P/BV (x)	3.0	1.9	1.8	1.6	1.4

Source: Company, Emkay Research

Change in Estimates	
EPS Chg FY20E/FY21E (%)	-/-
Target Price change (%)	NA
Target Period (Months)	12
Previous Reco	NR

Emkay vs Consensus

EPS Estimates		
	FY20E	FY21E
Emkay	33.7	34.7
Consensus	40.9	49.9
Mean Consensus TP (12M)		Rs 621

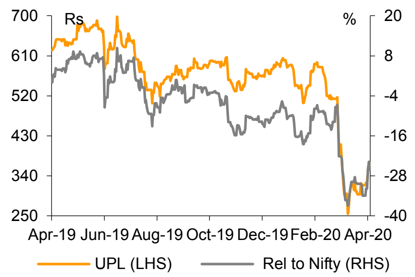
Stock Details	
Bloomberg Code	UPLL IN
Face Value (Rs)	2
Shares outstanding (mn)	764
52 Week H/L	709 / 240
M Cap (Rs bn/USD bn)	277 / 3.63
Daily Avg Volume (nos.)	4,907,271
Daily Avg Turnover (US$ mn)	29.2

Shareholding Pattern Dec '19	
Promoters	27.9%
FIIs	43.5%
DIIs	11.1%
Public and Others	17.5%

Price Performance

(%)	1M	3M	6M	12M
Absolute	4	(38)	(39)	(42)
Rel. to Nifty	-	(18)	(23)	(26)

Relative price chart



Source: Bloomberg

This report is solely produced by Emkay Global. The following person(s) are responsible for the production of the recommendation:

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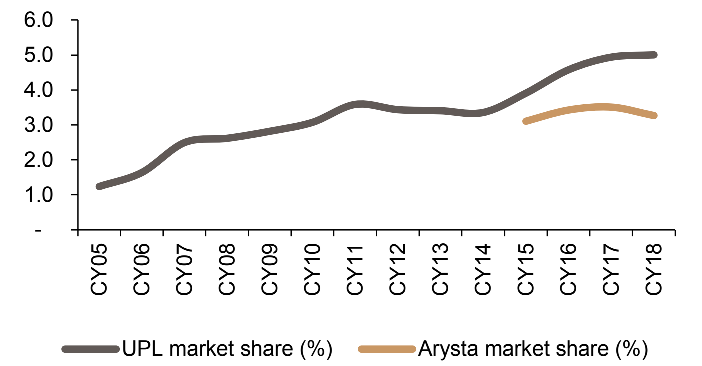
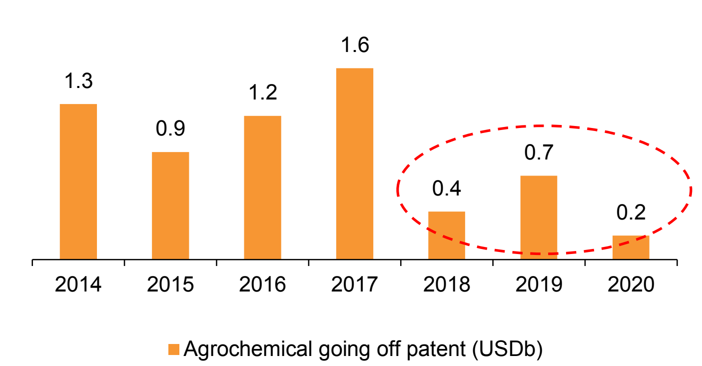
Story in Charts

Exhibit 1: Market share trend (%)



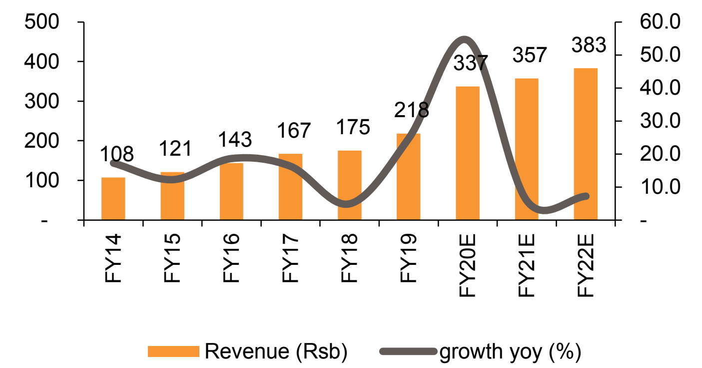
Source: Emkay Research Estimates, Industry data

Exhibit 2: USD3bn generic opportunity



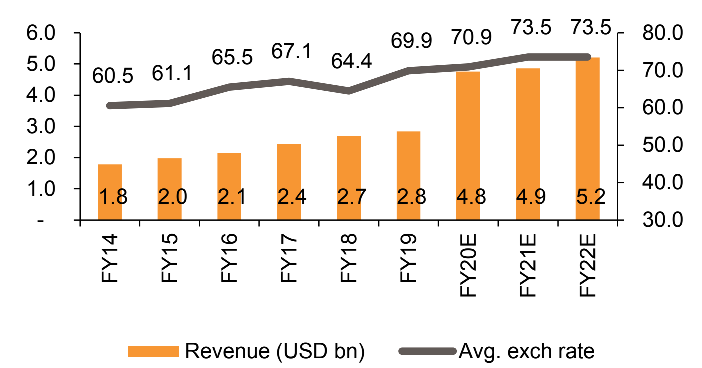
Source: FICCI & Tata Strategic & Management report

Exhibit 3: Lower growth in FY21E due to Covid-19



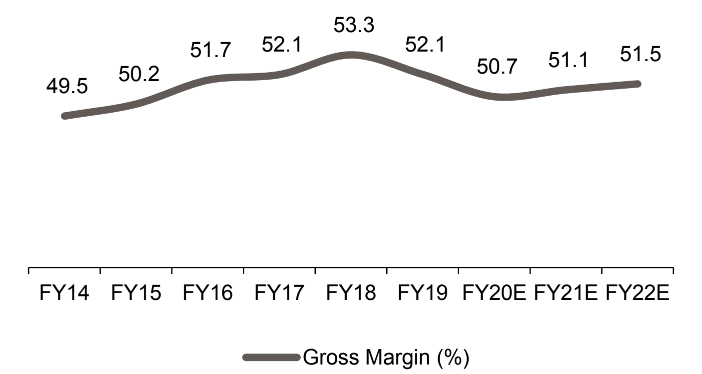
Source: Company, Emkay Research

Exhibit 4: 2%/7% USD revenue growth in FY21/22E



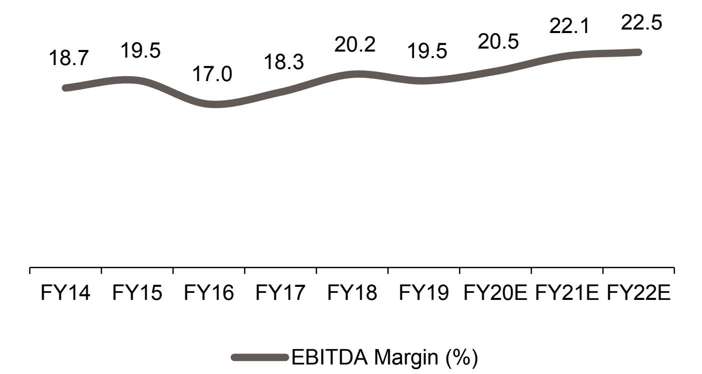
Source: Company, Emkay Research

Exhibit 5: Procurement synergies to improve gross margins



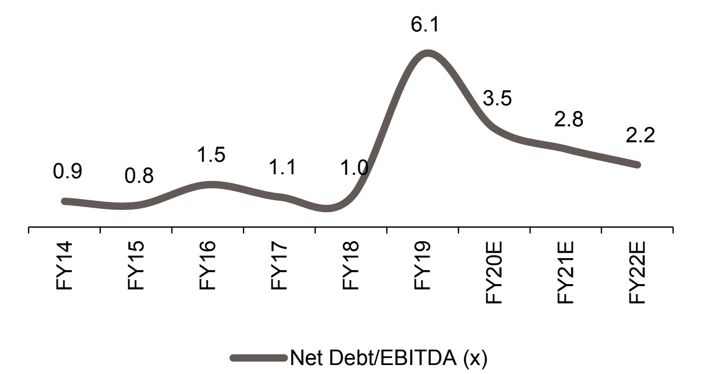
Source: Company, Emkay Research

Exhibit 6: Employee and SG&A synergies to improve EBITDA margins



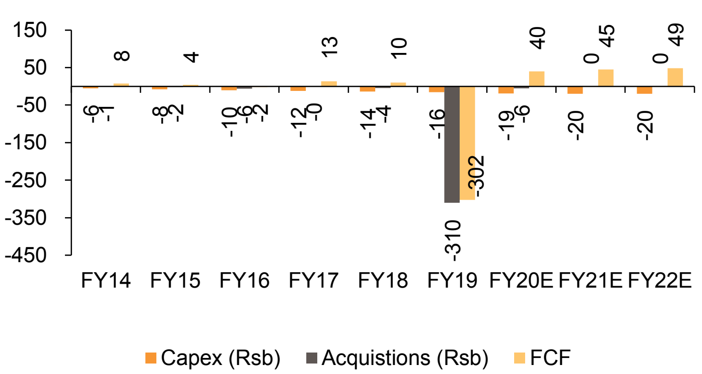
Source: Company, Emkay Research

Exhibit 7: Net debt to decline gradually



Source: Company, Emkay Research

Exhibit 8: FCF to increase 23% over FY20-22E



Source: Company, Emkay Research

Index

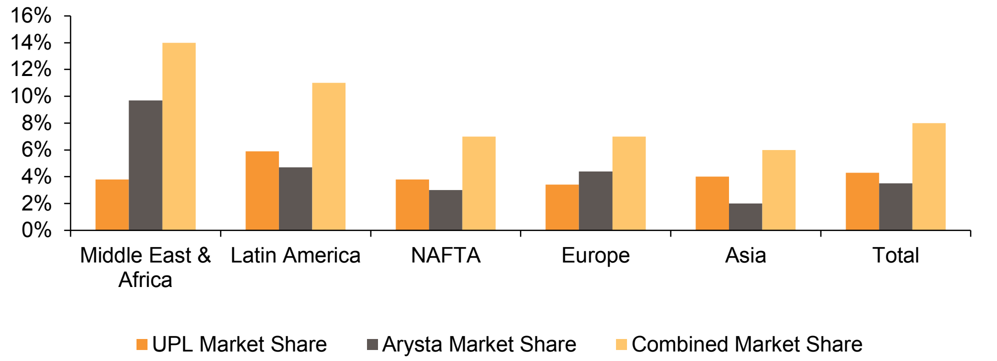
Market share gains to drive growth

~200bps improvement in market share over 2014-18

UPL's market share increased to 5% in CY18 from 3% in CY14. During this period, the industry size has remained flat at round ~USD60bn. We believe that with the pressure on commodity prices, farmers will continue to shift toward generics to manage their input costs. This offers opportunity for generic branded players such as UPL.

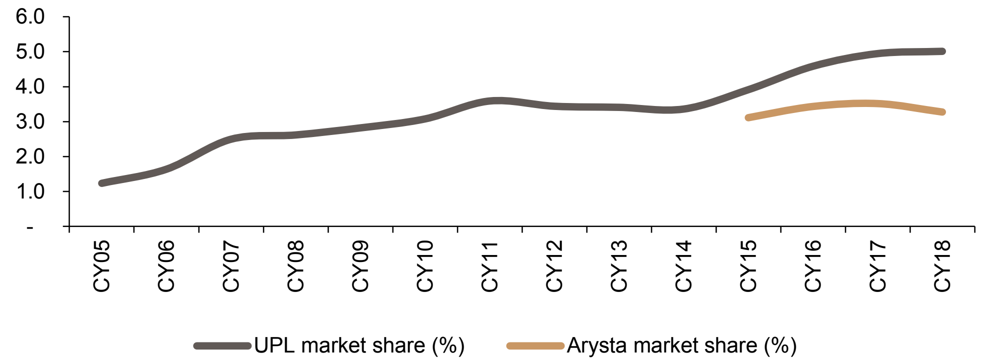
UPL has consistently increased its market share with new launches and geographic expansion. Arysta's market share has remained steady as it could not expedite registrations in new geographies (UPL's key advantage). In our view, with UPL's strong distribution reach, it will be able to cross-sell Arysta's products to its own customers as a majority of the products are complementary ones. This should help new UPL to increase reach for Arysta's products and increase market share.

Exhibit 9: UPL's geography-wise market share



Source: Emkay Research Estimates, Industry data

Exhibit 10: Market share trend (%)

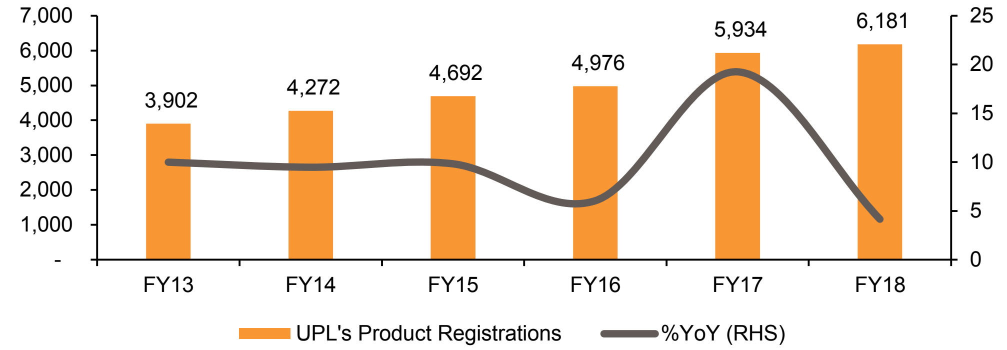


Source: Emkay Research Estimates, Industry data

UPL's market share gains driven by registrations/new launches and expansion into new geographies

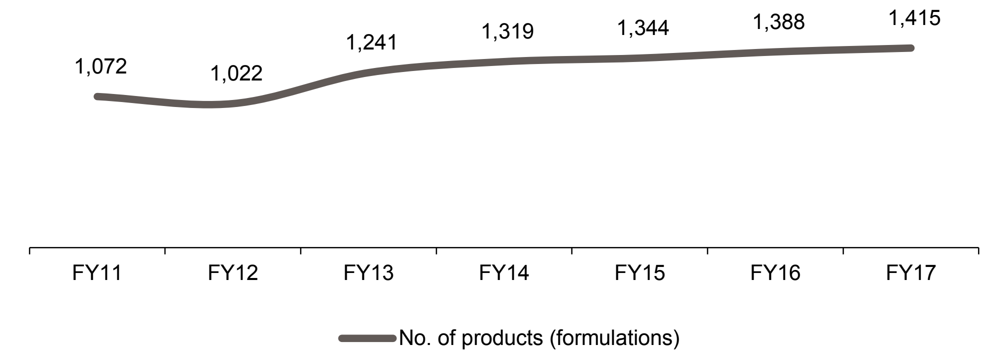
UPL has embarked on a journey to launch new products and increase registrations to fill portfolio gaps and increase its geographic reach. It has launched 849 products over FY18-19 to fill portfolio gaps while also launching new combinations (Cereals in Europe, Glufosinate Ammonium products in North America, Mancozeb and Acephate combinations in LatAm). This has laid a solid foundation for revenue growth which can be leveraged once weather challenges abate in North America and Europe. UPL's 37% revenue growth in LatAm in 9MFY20 reflects the benefits of launching new products to increase market share.

Exhibit 11: UPL's product registration driven by geographic expansion



Source: Company, Emkay Research

Exhibit 12: Continuously expanding product portfolio (formulations)



Source: Company, Emkay Research

Exhibit 13: Blitzkrieg of new product launches in FY19 to fill portfolio gaps

Region	FY18	FY19
Latin America	29	226
Europe	18	207
India	17	75
North America	16	50
ROW	27	184
Total	**107**	**742**

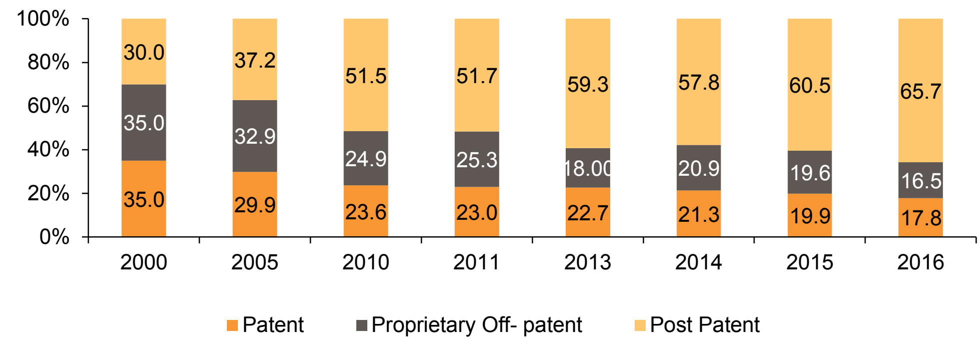
Source: Company, Emkay Research

Since UPL has reached ~85% of the market with the acquisition of Arysta, revenue growth going forward will be driven by market share gains and industry growth as UPL has already done geographic expansion.

USD3bn generic opportunity

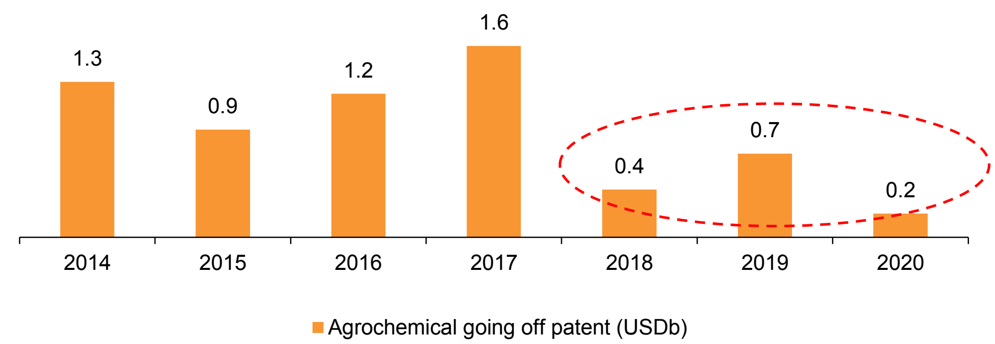
UPL's advantage is that it manufactures/sources generic molecules on a larger scale and generate cost synergies. With USD3bn molecules going off patent, UPLL can enter these molecules and generate revenues from FY20. With a reach of 85% of the geographical markets (UPLL + Arysta), UPLL can leverage its distribution strength to manufacture/procure these molecules at better rates than its competitors.

Exhibit 14: Rising share of post-patent products



Source: Company, Emkay Research; note: data available till 2016

Exhibit 15: ~USD3bn immediate opportunity as products go off patent over 2017-20



Source: FICCI & Tata Strategic & Management report

Exhibit 16: Key products going off patent over CY18-22 and their market size

Name	Patentee	Type	Global Sales (USD mn)	Expiry
Flubendiamide	Nihon Nohyaku	Insecticide	~445	2019
Pinoxaden	Syngenta	Herbicide	~400	2019
Aminopyralid	Dow AgroSciences	Herbicide	350-400	2019/2021
Spirotetramat	Bayer CropScience	Insecticide	~150	2017/2022
Tembotrione	Bayer CropScience	Herbicide	~200	2021

Source: Agro pages, Industry data

Exhibit 17: Products going off patent over CY18-22

Active Ingredient	Inventor Company	Category
Aminopyralid	Dow AgroSciences	Herbicide
Amisulbrom	Nissan Chemical Industries	Fungicide
Chlorantraniliprole	DuPont	Insecticide
Cyprosulfamide	Bayer CropScience	Safener
Fenpyrazamine	Sumitomo Chemical	Fungicide
Flubendiamide	Nihon Nohyaku	Insecticide
Flucetosulfuron	LG Chem Investment	Herbicide
Fluopicolide	Bayer CropScience	Fungicide
Isotianil	Bayer CropScience	Fungicide
Mandipropamid	Syngenta	Fungicide
Metamifop	Dongbu Hannong Chemicals	Herbicide
Metofluthrin	Sumitomo Chemical	Insecticide
Metrafenone	BASF	Fungicide
Orthosulfamuron	Isagro	Herbicide
Penflufen	Bayer CropScience	Fungicide
Pinoxaden	Syngenta	Herbicide
Pyrasulfotole	Bayer CropScience	Herbicide
Pyrifluquinazon	Nihon Nohyaku	Insecticide
Pyrimsulfan	Ihara Chemical Industry	Herbicide
Pyroxasulfone	Kumiai Chemical Industry	Herbicide
Pyroxsulam	Dow AgroSciences	Herbicide
Saflufenacil	BASF	Herbicide
Tembotrione	Bayer CropScience	Herbicide
Thiencarbazone	Bayer CropScience	Herbicide
Topramezone	BASF	Herbicide
Valifenalate	Isagro	Fungicide

Source: Agro pages, Industry data

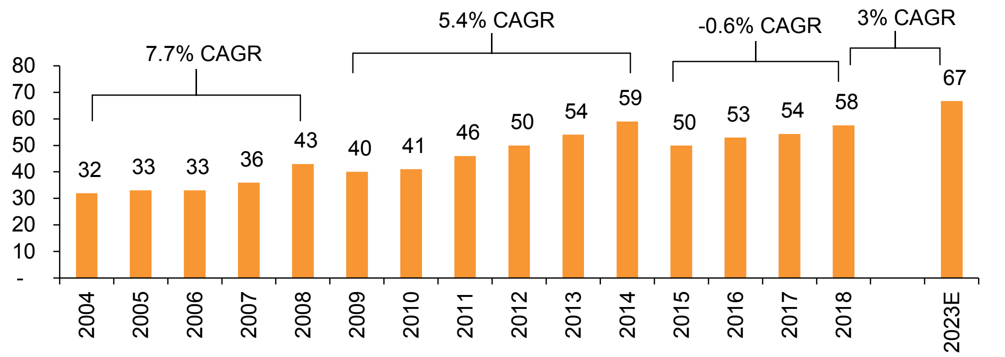
Overview of global agrochemical market

Market size of global agrochemical industry

Global crop protection market growth has been flat over the last five years due to a decline in agricultural prices. While agro-chemicals form the lion's share of the global crop protection market, the sub-segment biologicals have driven growth over the last four years.

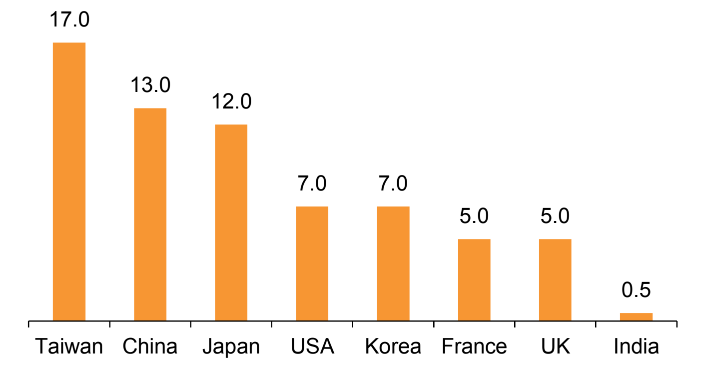
With major consolidation among innovators and peak weather vagaries (floods in the US, drought in Europe and Australia, and deficient rainfall in India) behind, the crop protection market is expected to see a CAGR of 3% over 2018-2023E.

Exhibit 18: Global crop protection market (USD bn)



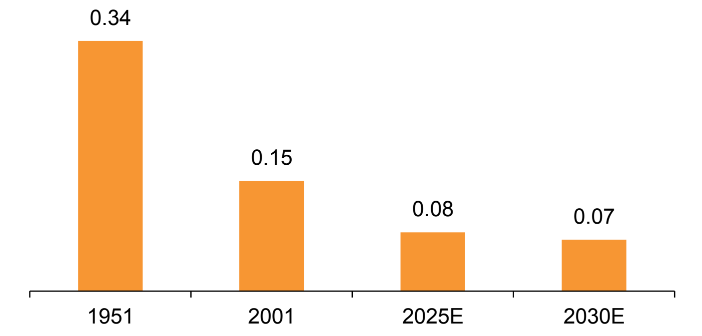
Source: Phillips McDougall

Exhibit 19: India's consumption of agro chemicals (Per kg/Hectare) is the lowest among major economies



Source: PI Industries FY19 annual report

Exhibit 20: Decline in per capita arable land (Per capita arable land/hectare)

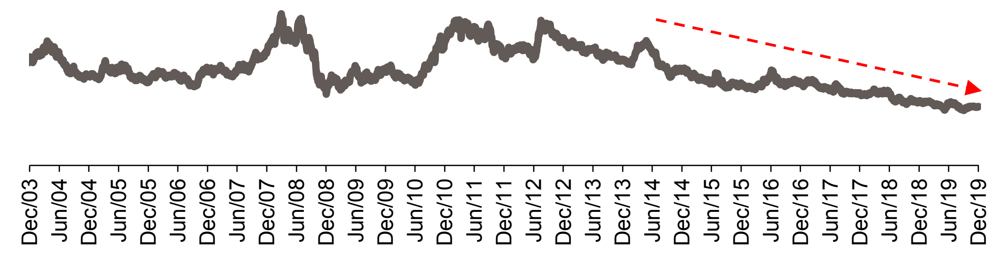


Source: PI Industries FY19 annual report

No major increase in global agriculture prices over the last 5 years

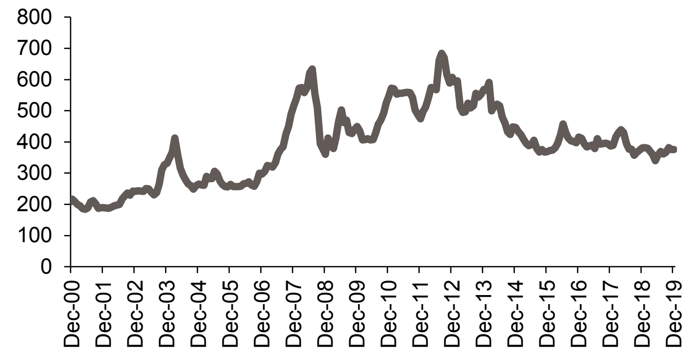
As shown, prices of major agricultural commodities have declined. This has resulted in pressure on agri-input industries such as fertilizers and the crop protection industry. Subdued agri-cultural commodity prices have resulted in a shift toward generics, helping players such as UPL to gain market share.

Exhibit 21: Bloomberg global agriculture price Index



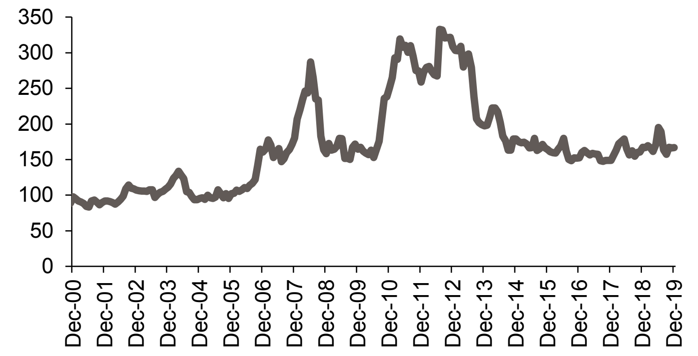
Source: Bloomberg, Emkay Research, Note: the index covers changes in futures of coffee, corn, cotton, soybeans, soybean oil, soybean meal, sugar and wheat

Exhibit 22: Soybean (USD/MT)



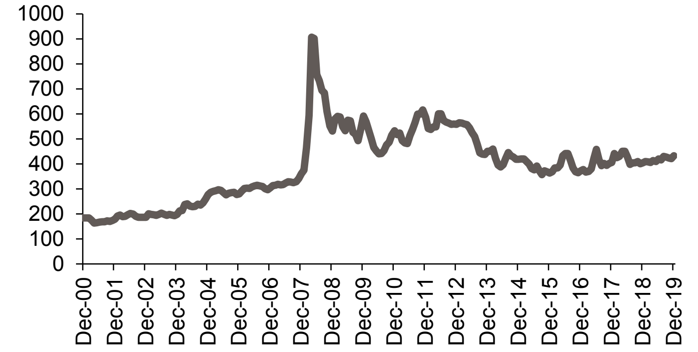
Source: USDA

Exhibit 23: Maize (USD/MT)



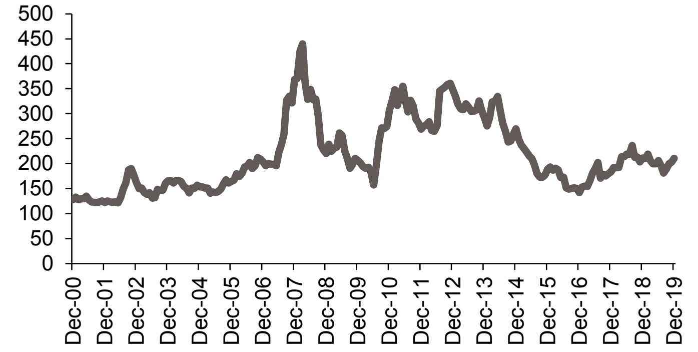
Source: USDA

Exhibit 24: Rice (USD/MT)



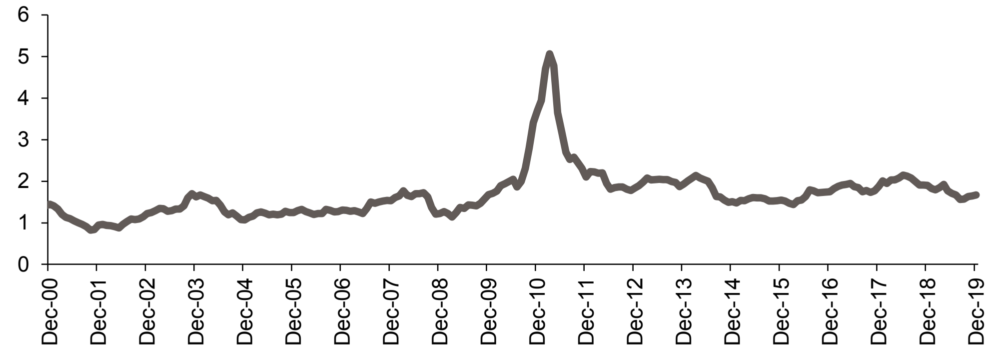
Source: USDA

Exhibit 25: Wheat (USD/MT)



Source: USDA

Exhibit 26: Cotton (USD/KG)



Source: USDA

Key crops globally

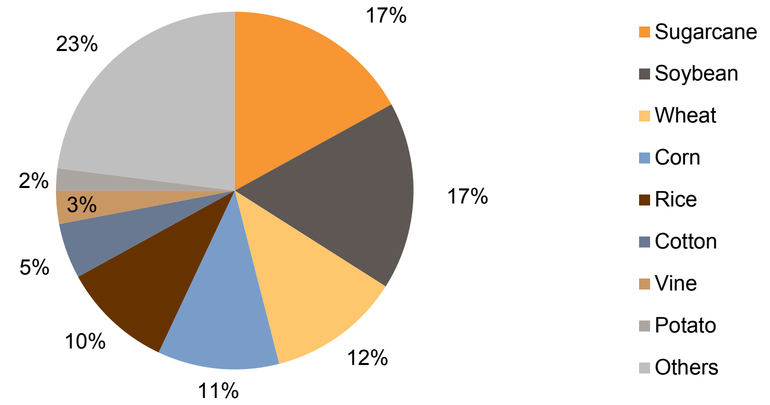
Soybean and sugarcane consume the largest amount of agrochemicals, followed by wheat and corn. Brazil is the largest agrochemical market as it grows the world's top-three agrochemical consuming crops – soybean, corn and sugarcane.

Exhibit 27: Global crop-wise agrochemical market size

Key Crops	Global market opportunity (USD bn)	Latin America	North America	Europe	India	ROW
Soybean	8.3	✓				
Rice	4.8	✓	✓		✓	✓
Wheat	6		✓	✓	✓	✓
Corn	5.7	✓	✓	✓	✓	
Cotton	2.5	✓	✓		✓	✓
Potato	1.2		✓	✓	✓	
Sugarcane	8.4	✓	✓		✓	✓
Vine	1.7	✓	✓	✓		

Source: Industry, Emkay Research

Exhibit 28: Global agrochemical mix (crop-wise %)



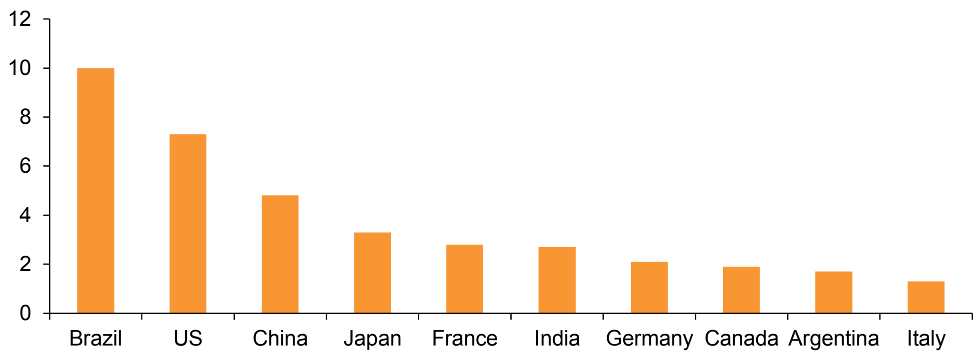
Source: Industry, Emkay Research

Exhibit 29: Indian pesticides industry prospects

USD bn	2015	2020E	CAGR FY15-FY20E
Market Size	2.3	3.1	6.2%
Exports	2.1	3.2	8.8%

Source: Industry Data

Exhibit 30: Top-ten global agrochemical markets



Source: Agro pages, Industry data

Merger synergies: market reach + cost synergies + portfolio gains

Arysta acquisition to improve market reach

Deeper and broad-based market reach

UPL is strong in ROW crops such as corn, soybean, cotton, rice, sugar beet, while Arysta's product portfolio focuses on specialty crops such as fruits and vegetables, sugarcane, cereals, sunflower and cocoa. Arysta has a strong presence in Eastern Europe (Poland/Hungary), CIS countries, South Africa, Ivory Coast, Mozambique and the Middle East. UPL and Arysta's combined market share is estimated to be ~8.5% as of CY18 which makes the combined entity the 5th largest agrochemical player across the globe. UPL has >6,500 registrations, while Arysta has >5,800 registrations across the globe. The combined registrations of >12,300 would make the merged entity one of the largest distribution networks for agro chemicals in the world.

UPL has a very small sales team in Africa compared with 100+ personnel for Arysta. Hence, this would help UPL in strengthening presence in Africa and the Middle East. In North America, Arysta is strong in Midwest, especially in corn which helps UPL as it is looking to ramp up presence in the region. Arysta is also strong in Canada's wheat crop where UPL has very negligible presence.

In Europe, UPL is weak in the cereal portfolio, which can be supported by Arysta's offerings. With access to Arysta's customer relationships, UPL can cross-sell its existing products.

Access to sugar co-operatives and dealer networks in LatAm

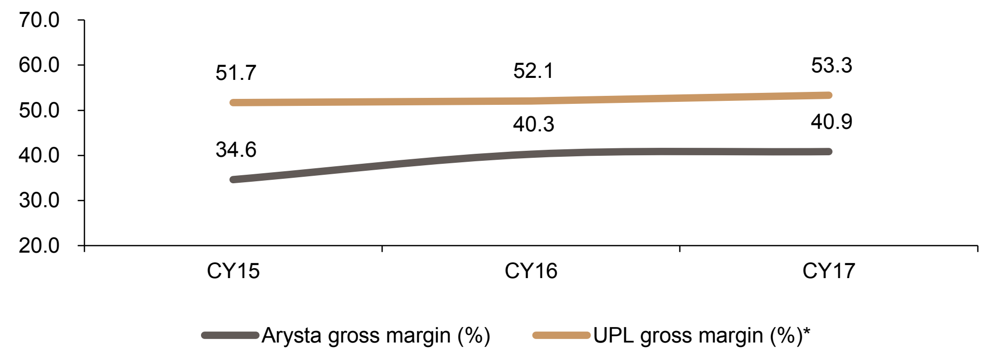
UPL/Arysta derive 33%/39% of their revenues from LatAm as of FY19/CY18. UPL has direct farmer connect in LatAm's key market of Brazil, which is driven by large farmers. Arysta is strong in specialty crops (sugarcane, fruits and vegetables) and has a presence in sugar co-operatives and dealer networks. This should provide UPL access to sugar co-operatives to drive its sugar portfolio.

Access to proprietary/patented portfolio, relationship with J Makers

Arysta derives ~18-20% (~8% bio-solutions and ~10-12% from proprietary/patented portfolio/seed treatment) of its revenues from proprietary/patented portfolio, bio-solutions and seed treatment products. UPL can benefit from the growing category of bio-solutions.

Arysta has deep relationships with Japanese innovators which has helped it gain access to proprietary molecules. Arysta's edge with Japanese innovators of proprietary molecules has the potential to contribute 40-50% of incremental sales for the company. Arysta's increase in gross margins over CY15-17 indicates rising share of bio-solutions and patented portfolio.

Exhibit 31: Improvement in Arysta's gross margin due to patented portfolio



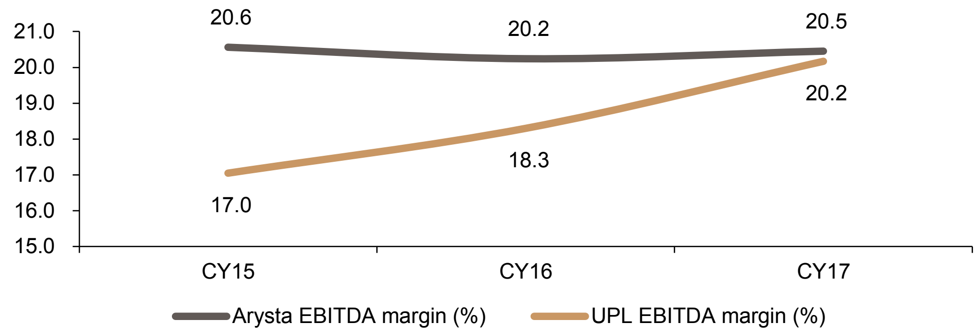
*Source: Company, Emkay Research, *UPL nos are for year ending March*

Arysta's 'asset-light approach', synergies in procurement

Arysta has an asset-light approach and outsources its manufacturing to third-parties and focuses on R&D, distribution and marketing. Arysta's EBITDA margin is similar to UPL despite outsourced manufacturing, indicating efficient procurement strategy and effective marketing.

Arysta outsources its manufacturing to India and China. UPL has already indicated that it has identified eight key molecules that will be insourced as capacity is available. We believe that this will be a gradual process given the changes in registrations required to be made in each country. We also believe that UPL could benefit from the scale as it would be able to bargain with its suppliers for third-party manufacturing for some of its tail products.

Exhibit 32: EBITDA margins similar to UPL despite asset-light approach



*Source: Company, Emkay Research, *UPL nos are for year ending March*

UPL's seed treatment to benefit from Arysta

UPL's seeds segment (Advanta) can benefit from Arysta's seed treatment segment. The seeds segment contributed ~9% of UPL's revenue and faces challenges from innovators as they offer treated seeds, reducing the need for chemicals. UPL could offer treated seeds to its customers, along with its high-yield genetic seeds from Arysta's portfolio.

Employee and SG&A cost savings a major synergy driver

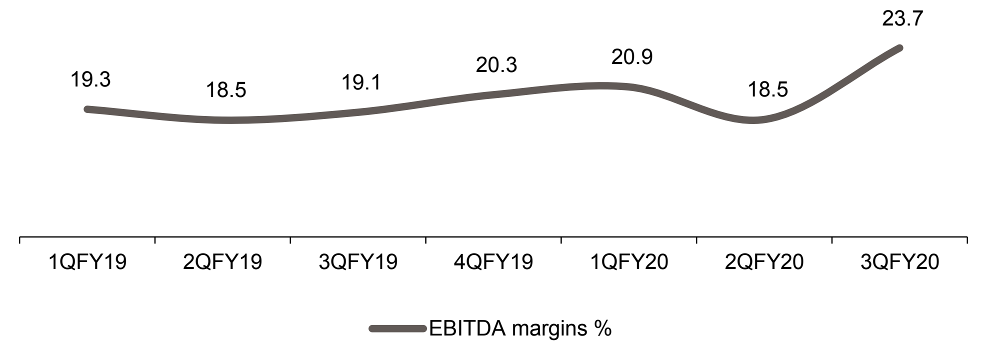
UPL's EBITDA margins should improve by 199bps over FY20-22E, driven by 80bps improvement in gross margins and 119bps improvement in SG&A expenses on the back of merger synergies and operating leverage. UPL has effected most of its Year-1 personnel synergies, which is visible in the fall in employee expenses in Q3FY20.

Exhibit 33: Synergy target tracking in line with schedule

(Rs bn)	Exit synergy target		Actioned	Accrual	
	Year 1	Year 3	Till 9MFY20	Year-1 target	9MFY20 Actual
Personnel	4.8	5.1	4.7	3.2	2.1
Non-Personnel	6.9	10.6	5.5	2.4	3.3
Total	**11.6**	**15.8**	**10.2**	**5.6**	**5.4**

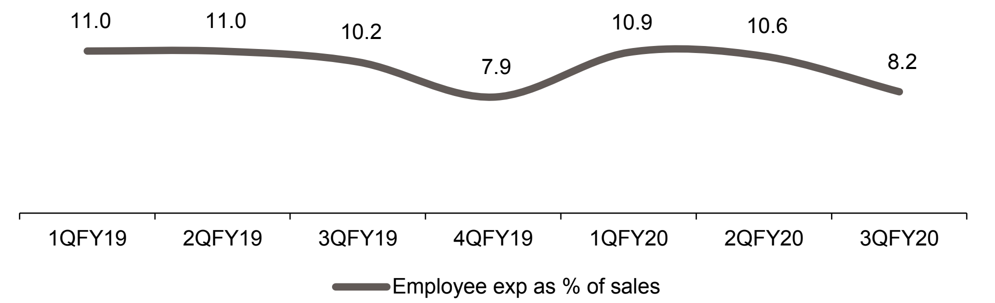
Source: UPL's Q3FY20 presentation, Emkay Research

Exhibit 34: Uptick in EBITDA margins in Q3FY20



Source: Company, Emkay Research

Exhibit 35: Employee expenses fall sharply in Q3FY20 as merger synergies kick in



Source: Company, Emkay Research

Merger synergy case study: Corteva

Analysis of merger synergies of Corteva (merger of Dow-Dupont agricultural business) suggest that employee expenses-related savings are achieved mainly in the first 12-15 months and SG&A-related cost savings play out over three years. In Year 1 of the merger, Corteva reduced office space by 54%, while headcount was reduced by 15%. It was also able to reduce seeds and production locations by 24% in Year 1. Hence, we believe that UPL's synergy guidance seems achievable.

Exhibit 36: Corteva synergy target

	Total Synergy target	Year 1 (2019)		Year 2 (2020)	Year 3 (2021)
		achieved in P&L	Exit Run rate	Target for P&L (incremental)	Target for P&L (incremental)
Corteva merger synergies in cost (USD mn)	1200	350	800	230	200

Source: Corteva, Emkay Research

Exhibit 37: Corteva reduced office space by 54% and headcount reduction by 15% in Year 1

	Synergies achieved in 2019 (Year 1)
Reduction in Headcount	15%
Reduction in seeds and productions locations	24%
Commercial offices	54%
R&D sites	34%

Source: Corteva 2019 annual report, Emkay Research

Arysta acquisition plugs portfolio gaps

UPL's and Arysta's presence across most geographies would have raised questions regarding an overlap in product portfolios. However, the merger deal was approved in seven months and without any divestment, reflecting the fact that the two companies have complementary product portfolios. This creates opportunity to cross-sell and cater end-to-end (sowing to harvesting) to the customers.

UPL is stronger in ROW crops such as corn, soybean, cotton, rice, sugar beet, while Arysta's product portfolio focuses on specialty crops such as fruits and vegetables, sugarcane, cereals, sunflower and cocoa.

Exhibit 38: Arysta's key product portfolio

Brand	Molecule	Crop
Insecticides		
Dimilin	Diflubenzuron	Potato, Maize, Sweet Corn, Mushroom
Applaud	Buprofezin	Cotton, Rice
Orthene	Acephate	Corn, Tomato, Tobacco, Cabbage, Potato, Cauliflower
Ortus	Fenpyroximate	Tea, Chilli
Akito	Beta-cypermethrin	Cotton, Potato, Maize, Citrus, Tomato
Omite	Propargite	Almonds, Walnuts, Grapes
Fungicides		
Sumiguard	Procimidone	Cotton, Lettuce, Potato, Onion,
Rancona T	Ipconazole + Thiram	Lettuce, Rice
VitaVax	Carbonix + Thiram	Corn, Maize, Cotton
Orthocide	Captan	Cotton, Potato, Onion, Maize, Tomato
Proplant	Cabbage, Cauliflower	
Herbicides		
Kroll	Cotton, Tomato	
Triclon	Triclopyr-butoxy	Grass pastures
Kennox	clethodim + haloxyfop	Cotton
Select	Clethodim	Cabbage, Onion, Potatoes, Soybeans

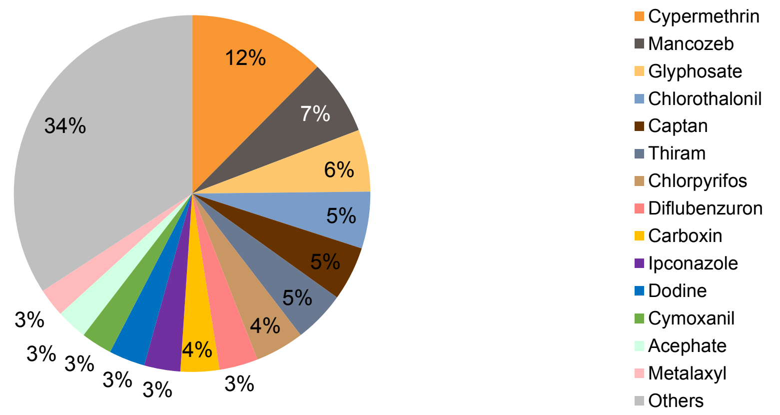
Source: Company, Emkay Research

Common molecules to aid in procurement synergies

Arysta acquisition: What's new and what overlaps?

Our analysis suggests that there are 23 unique products in the Arysta portfolio which will be offered to UPL's distribution network. Arysta has the largest number of SKUs related to Cypermethrin, Mancozeb and Glyphosate which overlap with UPL. A closer look at Arysta's key products suggests that most of the products are more focused on fruits and vegetables and other niche crops. While UPL's products face threat from genetically modified seeds (GMO) and other seed technologies, Arysta's portfolio does not face that risk.

Exhibit 39: Arysta's product portfolio (in terms of SKUs)



Source: Company, Emkay Research Estimates

Exhibit 40: Unique products in Arysta's portfolio

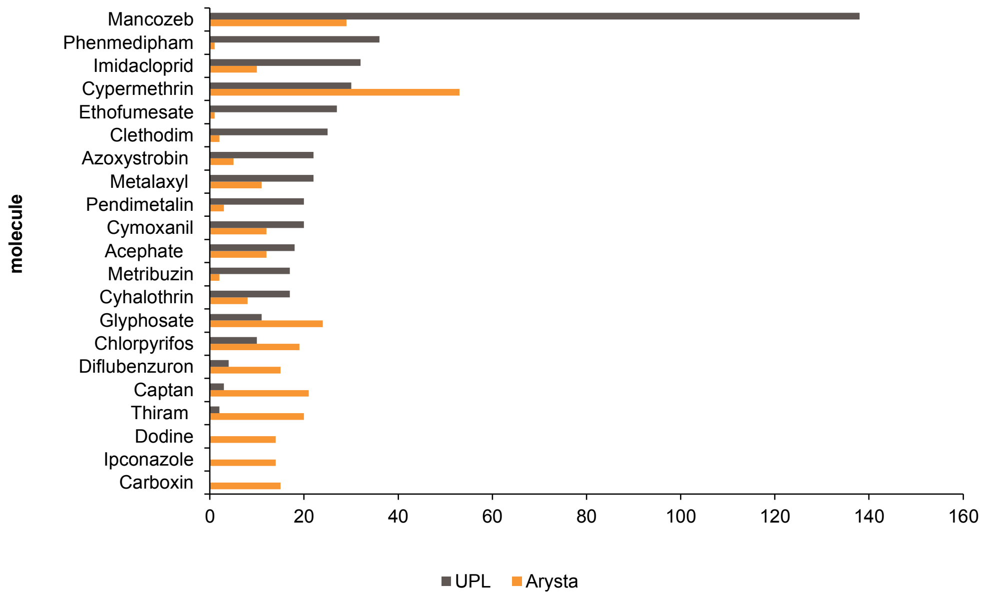
Brands	Molecule	Crops	Market size (as on 2017) (USDmn)
Insecticide			
Dantotsu, Apacs, Dantop	Clothianidin	Rice, Tomato, Cotton	~450
Folimat, O-Mat, Le-Mat	Omethoate	Cotton, Onions, Peas, Wheat	~70
Carbofuran 10 GR	Carbofuran	Maize, Potato, Sugarcane	~200
Nextstep, Omite	Propargite	Wheat, Almonds, Cherry, Grapes, Walnut,	~40
Dimilin, Micromite	Diflubenzuron	Potato, Maize, Sweet corn,	~20
Floramite, Acramite, Enviromite	Bifenazate	Strawberry, Grapes, Almonds, Tree nuts, Watermelon, Cucumber	~35
Mitac	Amitraz	Fruits, Vegetables	~30
Tokuthion	Prothiofos	Apples, Grapes, Mangoes, Wheat	~30
Evisect	Thiocyclam	Roses, Tomatoes	~10
Peropal, Caligur	Azocyclotin	Apple, Cherry, Grape	~10
Fungicide			
Maestro, Captan Ultra, Sigma, Malvin, Orthocid	Captan	Apples, Strawberries, Blueberries, Peaches, Plums,	~130
Vigold, Evito-T	Fluoxastrobin	Rice, Maize, Soybean, Potato, Wheat, Sugarcane	~260
Blason Ultra, Balear, Fungitox, Gwarant, Banko, Emerald Star, Mycostar, Mycoguard, Avoca Super, Rankonil, Success, Evito C	Chlorothalonil	Maize, Coffee, Wheat, Tomato, Cucumber	~380
Eminent Gold, Emerald Star, Domark, Mettle	Tetraconazole	Strawberry, Grapes	~115
Vitaflo, Vitavax, Anchor, Plantvax	Carboxin	Wheat, Maize, Cotton, Sweet corn	~35
Terraguard, Procure	Triflumizole	Apples, Strawberries, Blueberries, Peaches, Plums,	~30
Terrazole, Aaterra	Etridiazole	Corn, Maize, Sugarcane, Sorghum	~10
Herbicide			
Batalium, Fluroxypyr 200, Twin-Star	Fluroxypyr	Corn, Maize, Sugarcane, Sorghum	~210
Batalium, Everest, Inferno, Everest Ultra	Flucarbazone	Corn, Maize, Sugarcane, Wheat	~110
Dinamic, Amitron	Amicarbazone	Sugarcane	~80
Kroll, Pantera Plus, Pahro, Targa Super, Tefu	Quizalofop	Soybean, Rice, Cotton, Fruits	~180
Casoron	Dichlobenil	Apple, Cherry, Grape	~30
Seed Treatment			
Rancona	Ipconazole	Wheat, Barley, Oats	~33

Source: Emkay Research, Industry

Procurement synergies for common molecules

Our analysis of the portfolio suggests that UPL and Arysta have some molecules which are large for both. UPL can consolidate procurement of these molecules to achieve economies of scale in production or bargaining from third-party manufacturers. Our analysis suggests that Mancozeb, Cypermethrin, Glyphosate, Metalayxl, Cymoxanil, Acephate, Cyhalothrin, Chlorpyrifos, etc. have large SKUs in both the companies.

Exhibit 41: Major overlaps in the portfolio to aid in procurement synergies

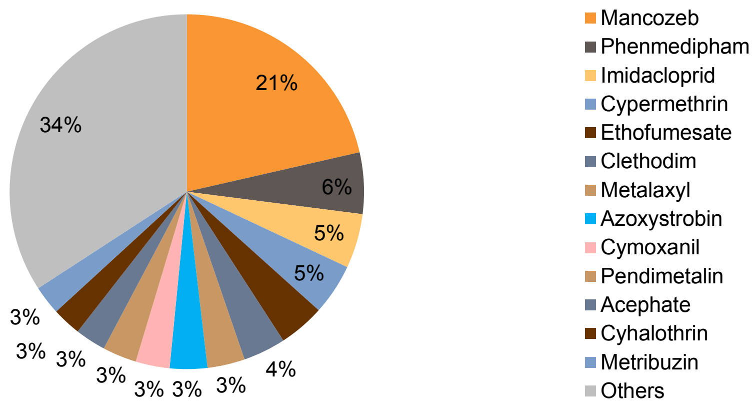


Source: Emkay Research

~21% of UPL's SKUs are mancozeb or mancozeb based formulations

Our analysis of UPL's product portfolio suggests that ~21% of its SKUs is related to mancozeb-based formulations. Mancozeb sales have been on the rise over the last few years due to the rise in the occurrence of Asian rust on soybean crops in Brazil.

Exhibit 42: UPL's (Ex-Arysta) product offerings based on key molecules

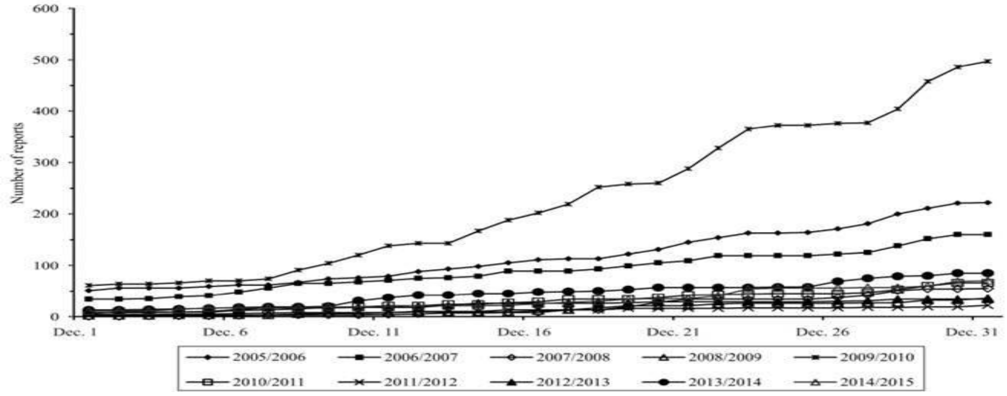


Source: Emkay Research Estimates

Mancozeb sales driven by rise of Asia Soybean Rust in Brazil

Mancozeb is a fungicide used to combat Asian Soybean Rust (ASR) in soybean crops. The increase in ASR incidences is one of the primary reasons for increase in the sales of mancozeb. Soybean production in Brazil increased 72% over 2011-16. This rise in acreage coupled with the spread of Asian rust resulted in higher demand to combat ASR. In 2013, triazoles group of fungicides (cyproconazole, difenoconazole, epoxiconazole, fluquinconazole, flutriafol, tebuconazole, tetraconazole, metconazole, and prothioconazole) started developing resistance to Asian rust. Since mancozeb is a multi-site fungicide with more toxicity, it was a natural beneficiary of the rise in resistance to triazoles and rise in soybean acreages.

Exhibit 43: Rise in reports of Asian rust in Brazil on soybean crops



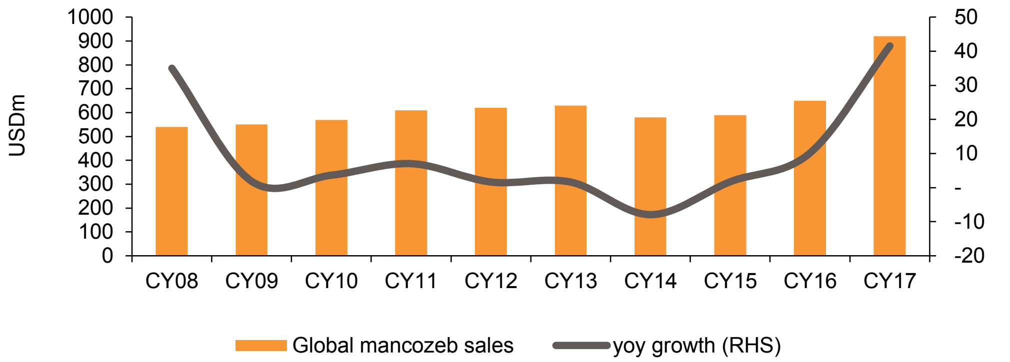
Source: Emkay Research, www.scielo.br

Exhibit 44: UPL's key product portfolio

Brand	Molecule	Crop
Insecticides		
Trinca Caps	Cyhalothrin	Cotton, Potato, Tomato, Maize
UPMYL	Metomil	Cotton, Potato, Broccoli, Cabbage, Maize, Tomato
Perito	Acephate	Cotton, Potato, Tomato, Maize
BATENT	Abamectin	Citrus, Cotton, Potato, Tomato, Maize, Corn
SUPIMPA	thiodicarb	Cotton, Corn
SPERTO	acetamiprid + bifenthrin	Soybean, Cotton, Corn
LOGIN	Diflubenzuron	
BLADE	Pyriproxyfen	Apple, Beans, Citrus
ATABRON	chlorfluazuron	Cabbage, Cotton
Bifenture® EC	BIFENTHRIN	Cotton, Peanut, Tobacco, Citrus, Soybean
GAME	lufenuron	Cotton, Potato, Tomato, Soybean
Lambda-Cy	Lambda Cyhalothrin	Rice, Soybean, Wheat, Corn, Cotton
Perm-UP	PERMETHRIN	Broccoli, Garlic, Onions, Soybean, Potatoes
ZYLO	Methoxyfenozide	Apples, Almonds, Grapes, Tomatoes, Walnuts
AZAMAX	Azadirachtin	Rice, Soybean, Tomatoes, Potatoes, Corn, Cotton
IMIDAGOLD, R.K.	Azadirachtin	Cotton, Citrus, Sugarcane, Grape
Fungicides		
UNIZEB	Mancozeb	Wheat, Potatoes, Tomatoes, Almonds
TRIZIMAN	azoxystrobin, mancozeb, cyproconazole	
Tridium		
Start-up Azoxy	Azoxystrobin	Corn, Cotton, Potato, Wheat, Peanuts
Start-up Metxl	Metalaxyl	Corn, Cotton, Peanuts, Soybeans
Start-up Tebuz	Tebuconazole	Corn, Small Grains
Start-up Manzb	Mancozeb	Corn, Cotton, Potato, Wheat, Peanuts
TINO	propiconazole	Corn, Wheat, Banana
TEBUFORT	tebuconazole	Cotton, Rice, Wheat, Soybean, Tomato
MANZATE	mancozeb	Apples, Corn, Cucumber, Lettuce, Onions
PENNCOZEB	mancozeb	Apple, Potato, Wheat
Herbicides		
GLYPHOTAL TR	Glyphosate	Cotton, Rice, Citrus, Corn, Soybean
CLORIM	ethyl chlorimuron	Cotton, Rice
2.4DEZ	806 SL 2,4-d	Rice, Corn, Soybean
TENACE	Metribuzin	Soybean, Tomato
ZAPHIR	imazethapyr	Rice, Soybean
UP STAGE	CLOMAZONE	Cotton, Rice, Soybean
MOCCASIN	S-Metolachlor	Corn, Cotton, Potato, Soybean, Tomato, Peanuts
TRIPZIN	Pendimentalin, Metribuzin	
Tricor	Metribuzin	Corn, Soybean, Potatoes, Cereals, Sugarcane
Coyote	S-METOLACHLOR + MESOTRIONE	USA
INTERLINE	Glufosinate ammonium (24.5%)	USA
Satellite	Pendimethalin	Cotton, Corn, Soybean, Sugarcane, Grapes
Motif	Mesotrione	Citrus, Corn, Sugarcane, Soybean
Broadloom	Bentazon	Beans, Peas, Peanuts, Soybeans

Source: Emkay Research

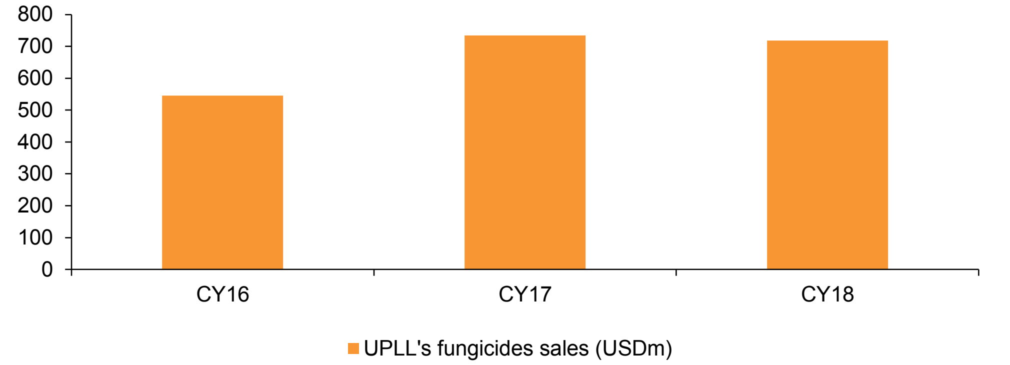
Exhibit 45: 40% growth in mancozeb sales in 2017



Source: Emkay Research, Phillips McDougall; note: data available till 2017

UPL's fungicide sales have declined in 2017 vs. growth in mancozeb volumes, indicating pricing pressure and loss of market share. Lower fungicide sales in FY19/CY18 indicates a decline in mancozeb growth. UPL has launched various mancozeb combinations to increase its product offerings and for market share gains in the molecule.

Exhibit 46: UPLL's fungicide sales declined in CY18

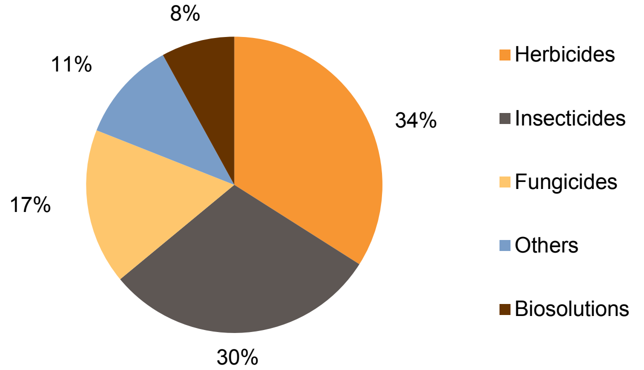


Source: Company, Emkay Research

Glyphosate resistance has opened opportunity for Glufosinate

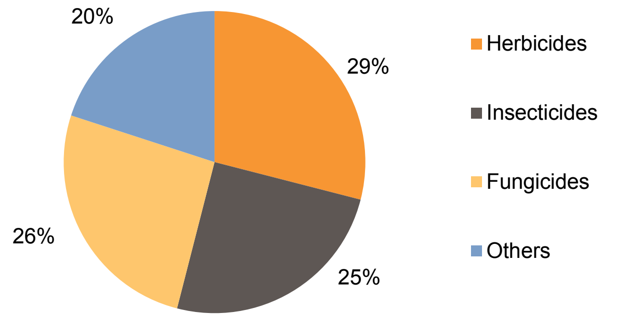
Glyphosate has been one of the key herbicides for more than two decades. However, its excessive use has resulted in glyphosate resistance weeds, especially in North America. Hence, glufosinate turned out as an option to substitute glyphosate and dicamba. Glyphosate's global market is estimated to be ~USD5bn. UPL has launched glufosinate across regions, especially in North America (Lifeline, Interline brands) to capture this shift in the herbicides market.

Exhibit 47: Arysta's (CY18) sales breakdown by product



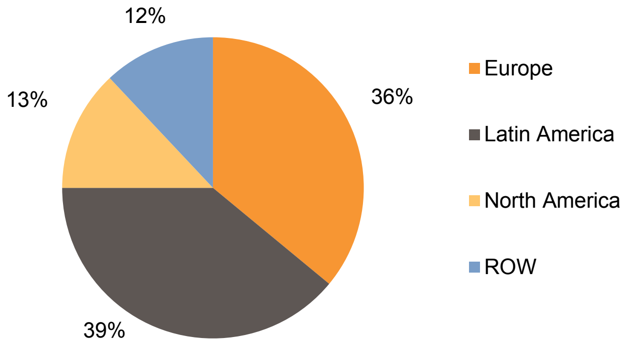
Source: Company, Emkay Research

Exhibit 48: UPL's (FY19) sales breakdown by product



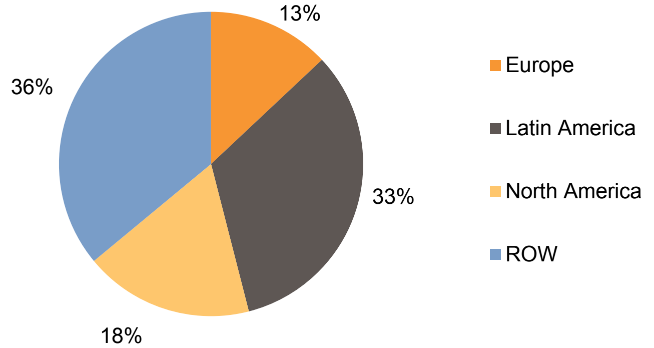
Source: Company, Emkay Research

Exhibit 49: Arysta's (CY18) sales breakdown by geography



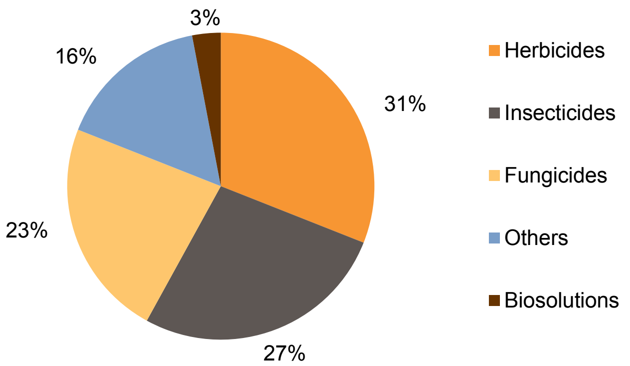
Source: Company, Emkay Research

Exhibit 50: UPL's (FY19) sales breakdown by geography



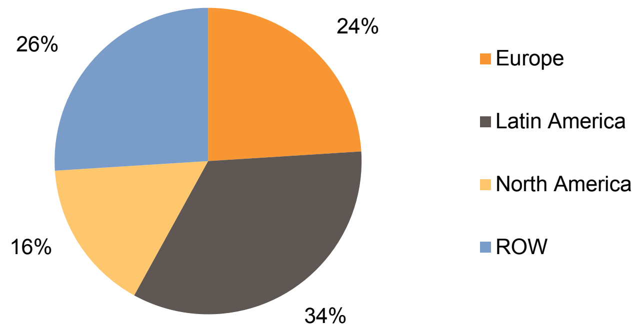
Source: Company, Emkay Research

Exhibit 51: UPL + Arysta sales breakdown by product



Source: Company, Emkay Research

Exhibit 52: UPL + Arysta sales breakdown by geography



Source: Company, Emkay Research

Covid-19: Supply chain challenges bigger than demand challenges

China supplies restored, India ramping up

The Covid-19 pandemic has thrown supply chain out of gear across the world. Major challenges have come up in the form of transportation of materials and continuing manufacturing operations. Our interaction with industry indicates that supply chain from China has been restored and customers are able to import the required raw materials. In addition, as per our channel checks, most factories in India have started operations as the government has classified them under essential services. However, factories in India are operating at lower utilization mainly due to social distancing norms.

"Supply from China have restored to a great extent and shipments have started happening from China. A lot of our material which was already in pipeline is landing at ports and is in the process of clearance from customs or is in the process of transport from" – Mr. Rahul Dhanuka, Director-Marketing, Dhanuka Agritech on a conference call on Covid-19 impact.

Demand: short blip, but getting back on track

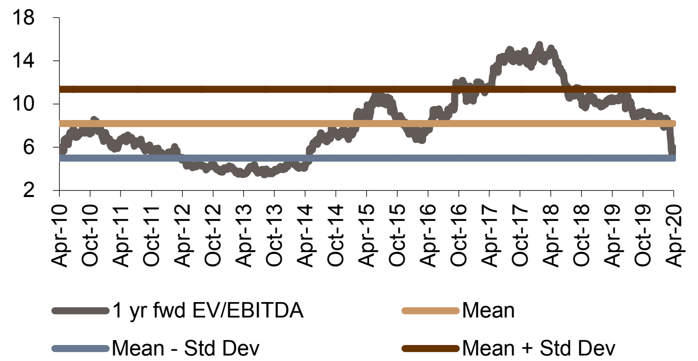
Trade channels in affected regions (US, Brazil and Europe) were initially unsure whether they will be able to sell agri inputs to the farmers amid lockdowns. Hence, they delayed purchases from manufactures until they are sure of their ability to sell. However, most governments across the globe have classified agricultural activities as essential and have made provisions for supply of agri-inputs and movement of agri produce. As a result, demand has started to recover. North America, Europe, Australia had weaker FY20, and hence, the base is favorable for growth.

Valuations: Risk-reward favorable; initiate with a Buy

We initiate coverage on UPL with a Buy rating and a TP of Rs500. UPL is trading at 5.4x FY22E EV/EBITDA vs. 5-year avg. of 10.4x one-year forward. It is currently trading near its lowest 1-year forward EV/EBITDA multiple in the last five years. We value UPL at 7.0x FY22E EV/EBITDA, which implies a 32% discount to its 5-year average EV/EBITDA multiple of 10.4x due to higher leverage. We believe that UPL could trade at its 5-year average multiple if it deleverages faster than our estimates.

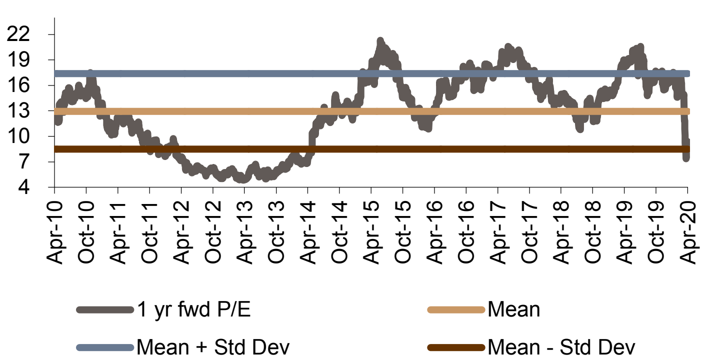
At 5.4x one-year forward EV/EBITDA, we believe that risk-reward is favorable and offers good opportunity to enter the stock. On a P/E basis, UPL is trading at 8.7x FY22E EPS, which is at a 47% discount to its 5-year average of 16.4x.

Exhibit 53: Rolling 1-yr fwd EV/EBITDA chart



Source: Company, Emkay Research, Bloomberg

Exhibit 54: Rolling 1-yr fwd P/E chart



Source: Company, Emkay Research, Bloomberg

Exhibit 55: Target price calculation

Particulars	
5-yr Avg. EV/EBITDA multiple (x)	10.4
Target EV/EBITDA multiple (x)	7.0
Target EV (Rs mn)	600,265
Less: FY21E Net Debt (Rs mn)	217,638
Target Mcap (Rs mn)	382,627
No. of Shares (nos)	765
TP (Rs)	**500**

Source: Company, Emkay Research

Exhibit 56: Peer comparison table

Company	Mcap	P/E (x)			EV/EBITDA (x)			ROE (%)		
	(USD mn)	FY20E	FY21E	FY22E	FY20E	FY21E	FY22E	FY20E	FY21E	FY22E
Corteva Inc	18,852	20.3	19.1	16.0	10.2	7.8	7.0	3.5	4.0	4.8
Bayer AG	63,577	9.3	8.5	7.5	8.2	7.2	6.4	13.1	11.0	11.8
BASF SE	45,296	11.8	14.9	11.6	7.2	7.6	6.6	11.2	5.2	7.6
FMC Corp	10,786	14.2	13.1	11.4	11.3	10.8	9.8	27.3	30.2	34.7
Nufarm Ltd/Australia	1,236	24.0	NM	22.2	8.7	7.7	6.5	5.0	0.3	3.7
Global Avg.		**15.9**	**13.9**	**13.7**	**9.1**	**8.2**	**7.2**	**12.0**	**10.1**	**12.5**
PI Industries Ltd*	2,563	39.8	29.1	23.4	27.2	19.3	15.4	19.6	22.4	22.5
Bayer CropScience Ltd/India	2,298	35.5	30.4	25.9	26.4	21.8	18.5	21.4	21.5	21.2
Sharda Cropchem Ltd	174	11.1	8.1	6.2	3.8	2.9	NA	8.8	12.2	13.1
Rallis India Ltd*	540	21.5	20.4	17.5	14.3	13.6	11.4	14.7	14.4	14.9
Dhanuka Agritech Ltd*	279	16.6	15.5	13.9	11.7	10.6	8.9	19.1	19.2	18.6
Sumitomo Chemical India Ltd	1,487	49.5	42.2	33.2	NA	NA	NA	19.8	21.0	22.9
Domestic Avg.		**29.0**	**24.3**	**20.0**	**16.7**	**13.6**	**13.6**	**17.2**	**18.4**	**18.8**
UPL*	**3,631**	**10.8**	**10.5**	**8.7**	**7.5**	**6.3**	**5.4**	**17.0**	**15.9**	**16.7**

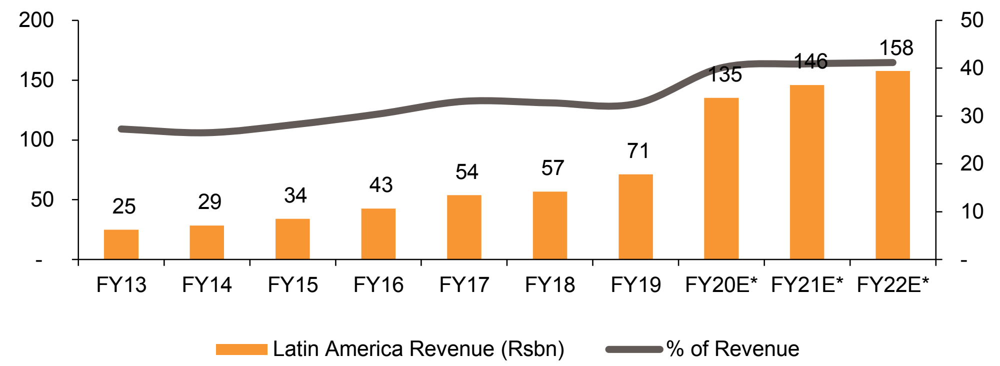
*Source: Bloomberg Estimates, *Emkay Research Estimates*

UPL's geography-wise presence: LatAm is the largest

Latin America

In Latin America, UPL has presence in soybean, oil crops, corn, cotton, coffee, sugarcane, fruits and vegetables. The key countries are Brazil, Argentina, Columbia and Mexico. UPL's Latin America revenue doubled to Rs71bn in FY19 over a period of four years. Post Arysta acquisition, UPL derives 42% (9MFY20) of its revenue from LatAm.

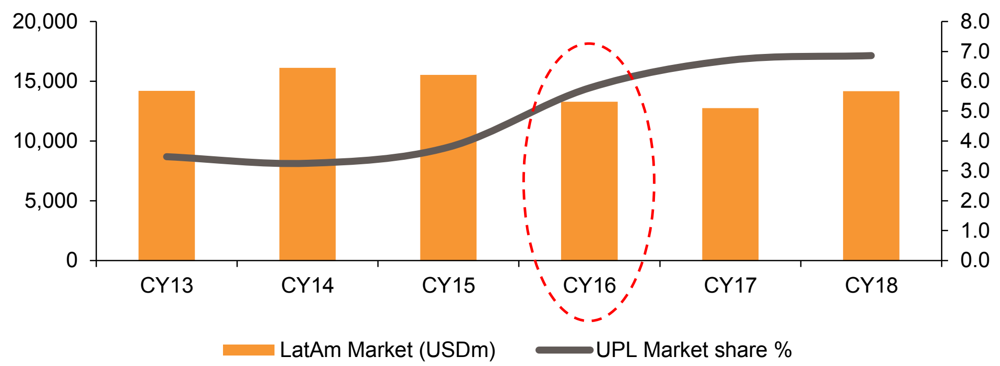
Exhibit 57: UPL's LatAm revenue (Rs bn)



*Source: Company, Emkay Research, *UPL + Arysta*

UPL had penetrated in the region by tapping the resistant weed market. The company captured the herbicides market though its key products such as Zartan, (Metsulfuron), Danado (Picloram) and Clorim (Ethyl Chlorimuron) which catered mainly to corn and soybean. Later on, UPL launched new products to capture various segments (insecticides, fungicide, and herbicide) in coffee and sugarcane. UPL's market share improved by 200bps in CY16 despite Brazil and Argentina witnessing lower crop prices, coupled with adverse weather reducing demand for agrochemicals. UPL's wide product portfolio, along with low-cost manufacturing, helped it garner market share when the market for generics gained traction in LatAm.

Exhibit 58: UPL's market share in LatAm doubled over CY15-CY18



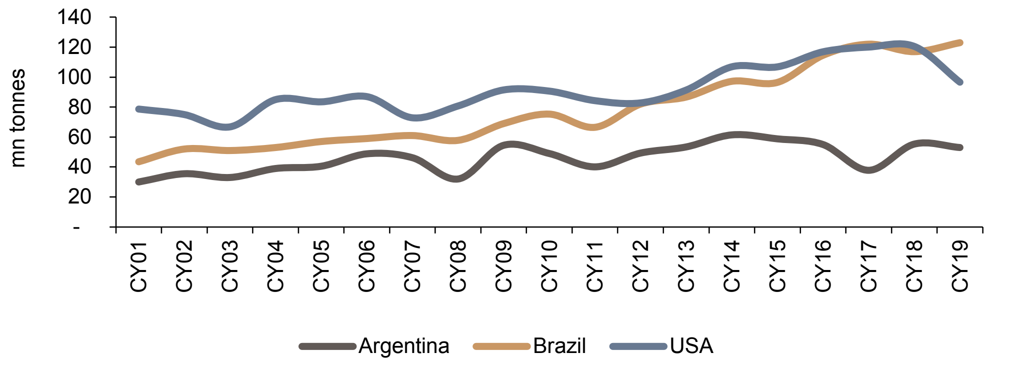
Source: Company, Emkay Research Estimates

Exhibit 59: UPL's LatAm snapshot

Revenue contribution FY19	Key Crops	Key Countries	AgChem Market size (USD bn)	UPL Sales (Rs bn)	UPL Market share (%)*	Key Brands
36%	Soybean, Rice, Corn, Cotton, Sugarcane, Vine, Coffee	Brazil, Argentina, Colombia and Mexico	14.2	71	~7%	Lancer, Lancer Gold, Imida Gold, Zartan, Danado, Clorim, Unizeb Gold, Unizeb Glory, Unizeb, Vondozeb

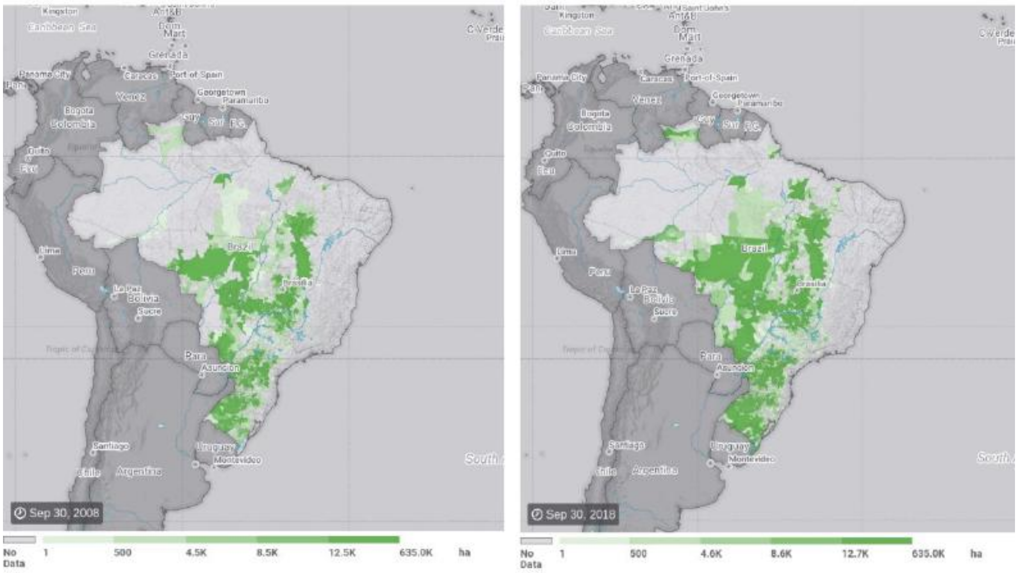
*Source: Company, *Emkay Research Estimates, Industry*

Exhibit 60: Brazil takes over USA for the first time in soybean production due to floods in USA



Source: USDA, Emkay Research

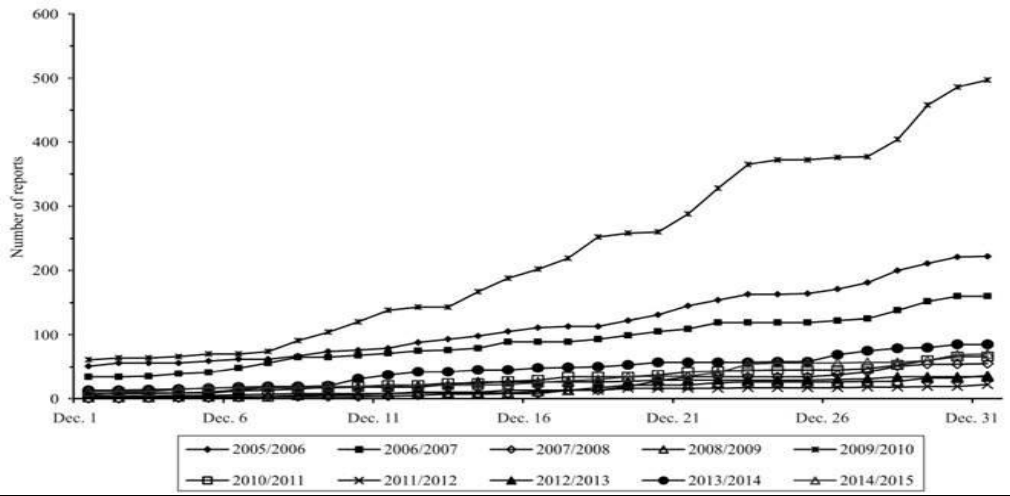
Exhibit 61: Soybean acreage doubles in Brazil from 2008 to 2018



Source: link (click here), Emkay Research

Later on, as the rise of Asian rust in soybean, along with increase in soybean acreage, increased the overall fungicide market in Brazil. The rise in Asian rust was accentuated as it developed resistance against the available molecules. Mancozeb emerged as an alternative to treat Asian rust due to: 1) different modes of action, and 2) low toxicity for mammals. UPL continuously innovated and introduced mancozeb combinations to the prevent development of resistance and improve effectiveness.

Exhibit 62: Rise in reports of Asian rust in Brazil on soybean crops

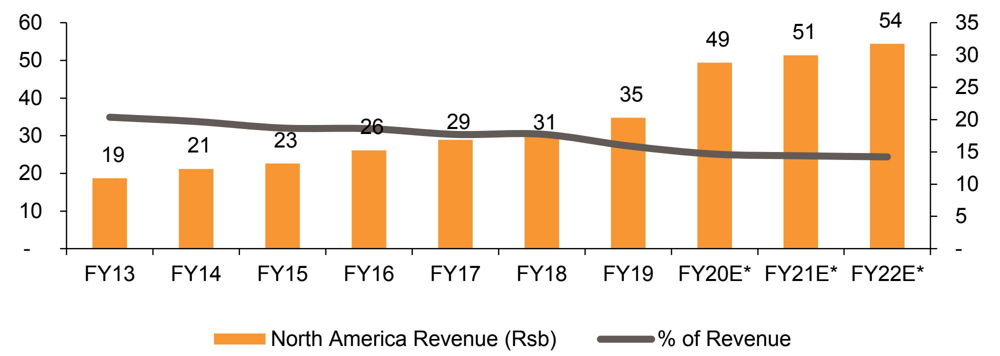


Source: Emkay Research, www.scielo.br

North America

UPL has presence in North America in corn, rice, fruits, vegetables, acquatics (agrochemicals to keep weeds away in fresh waters), horticulture and the post-harvest segment. The key countries are the US and Canada. UPL's North America revenue has grown at 10% CAGR over FY16-19 to Rs35bn. North America contributes 13% (9MFY20) of revenue for UPL.

Exhibit 63: North America revenue growth stood at 10% CAGR over FY16-19



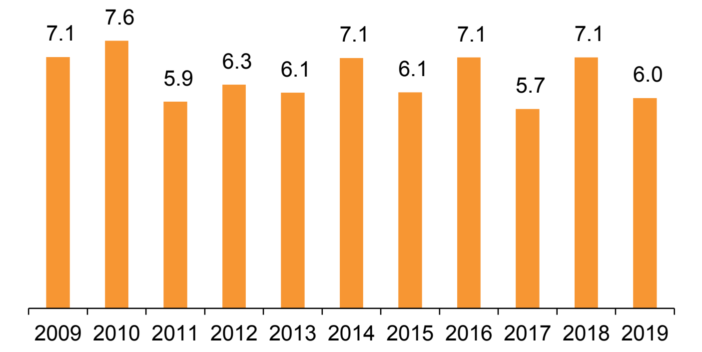
*Source: Company, Emkay Research, *UPL + Arysta*

UPL's strength is in rice, fruits and vegetables in the North American market. In 2010, UPL acquired Riceco, catering to the rice crop. Its range of products was largely based on Propanil herbicides. In 2010, UPL also acquired Manzate brand (Mancozeb) from DuPont which strengthened its fungicide portfolio across the globe, particularly in the US and LatAm.

UPL has a weak distribution in the Midwest due to low presence in crops such as corn and wheat. Arysta has higher presence in corn and wheat and has strong distribution in the Midwest. This helps UPL to complete its coverage of the North American market with strong presence in the Midwest region. The US-China Phase-1 trade deal augurs well for the Midwest farmers in the US.

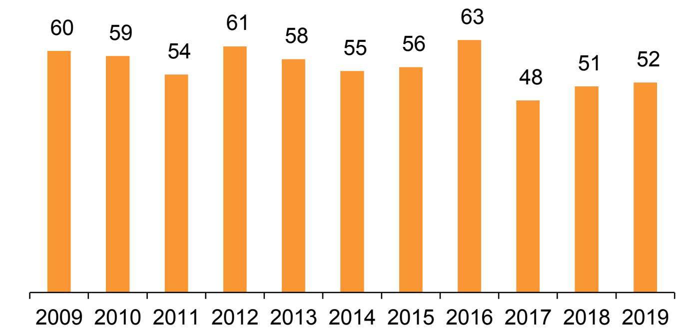
UPL's key brands in North America are: Lifeline, Interline, UltraBlazer, Satellite, Tricor, Surflan, Banter, Cuprofix, Manzate, Microthial and SuperTin.

Exhibit 64: US rice production (mn MT)



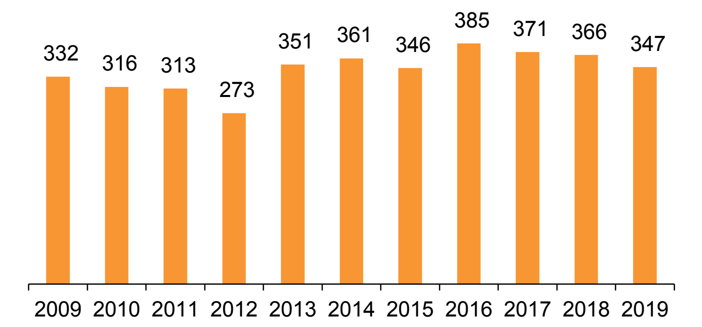
Source: USDA

Exhibit 65: US wheat production (mn MT)



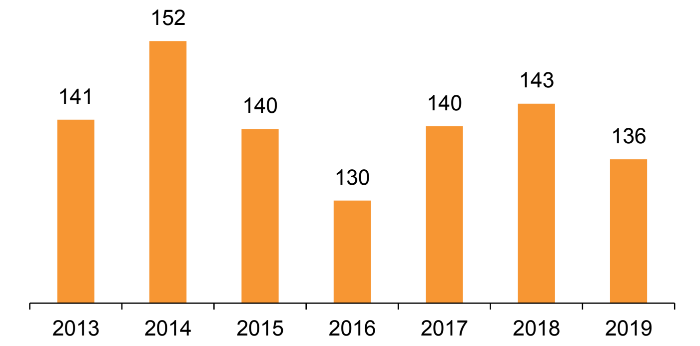
Source: USDA

Exhibit 66: US corn production (mn MT)



Source: USDA

Exhibit 67: US agricultural export (bn dollar)



Source: USDA, year ending September

Exhibit 68: UPL's North America snapshot

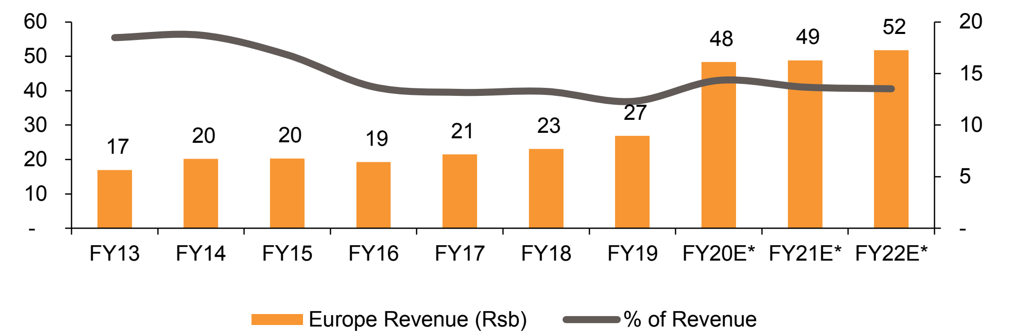
Revenue contribution FY19	Key Crops	Key Countries	AgChem Market size (USD bn)	UPL Sales (Rs bn)	UPL Market share (%)*	Key Brands
18%	Rice, Wheat, Corn, Cotton, Potato, Sugarcane, Vine, Tree nuts, Aquatics, Turfs and ornamentals, Fruits and vegetables	USA, Canada	11.6	34.8	~4%	Lifeline, Interline, UltraBlazer, Satellite, Tricor, Surflan, Banter, Cuprofix, Manzate, Microthial, Supertin, Weevilcide

*Source: Company, *Emkay Research Estimates, Industry*

Europe

Europe contributes 14% (9MFY20) of UPL's revenue. European revenues have grown at a CAGR of 8% over FY14-19. Europe has been affected by extreme wet conditions in the north and dry conditions in south over the last two years. UPL has diversified its exposure in Europe and is now present in Germany, France, Italy, Spain, the UK, the Netherlands, and Russia.

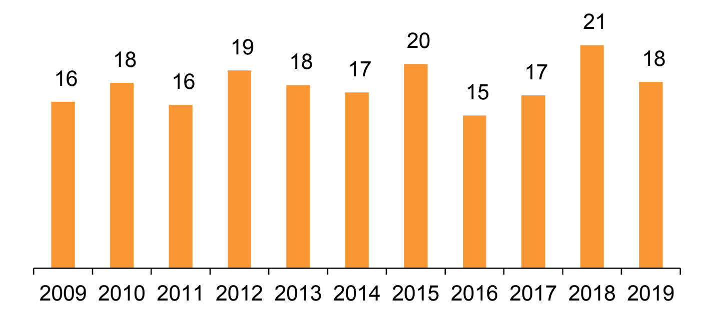
Exhibit 69: UPL's Europe revenue (Rs bn)



*Source: Company, Emkay Research, *UPL+ Arysta*

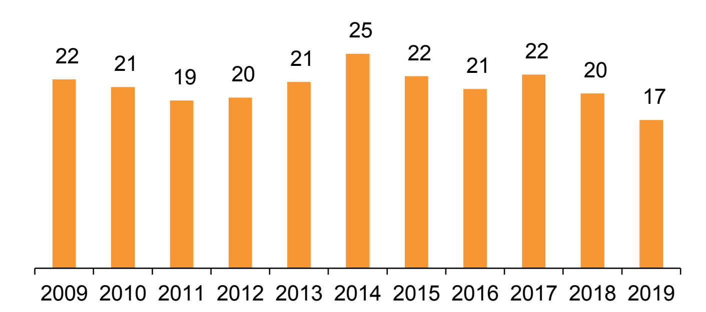
Sugar beet, oil seeds (rapeseed), and fruits & vegetables are the key crops for UPL in Europe, while it is weak in the cereal portfolio. However, UPL has increased registrations in the cereal segment to bridge portfolio gaps. The time taken for registering molecules is the highest in Europe. Each active ingredient (AI's) takes 4-5 years to get registered in all the countries across 28 nations in the European Union (EU). UPL started to register herbicides and fungicides catering to cereals in 2017. Hence, we expect that beginning 2020, these registrations shall help UPL to capture the cereal segment too. With access to Arysta's customer relationships, UPL can cross-sell its existing products.

Exhibit 70: EU sugar beet production (mn MT)



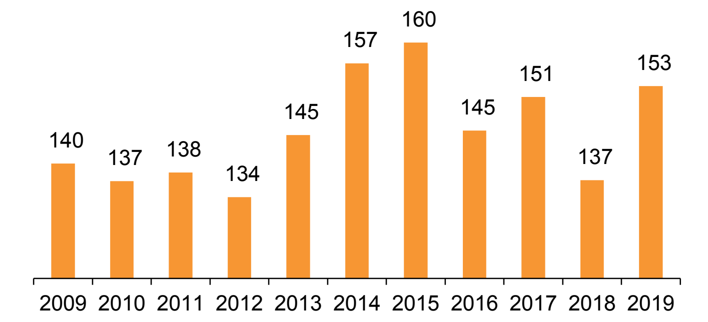
Source: USDA

Exhibit 71: EU rap oilseed production (mn MT)



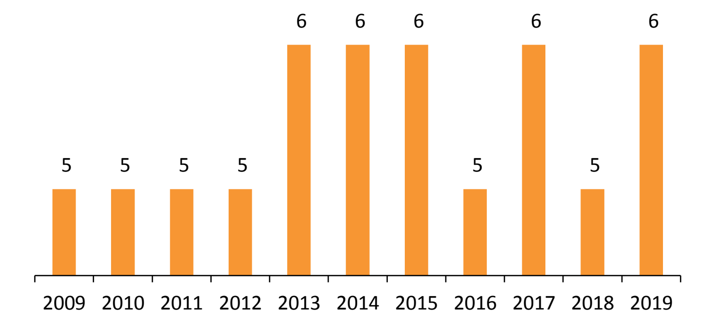
Source: USDA

Exhibit 72: EU wheat production (mn MT)



Source: USDA

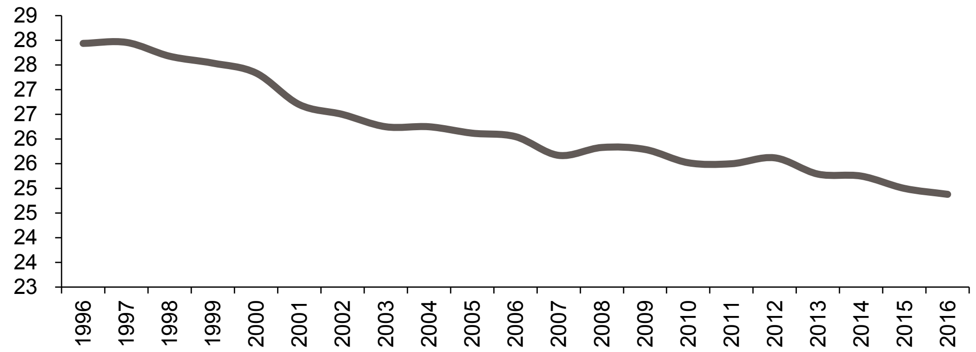
Exhibit 73: EU wheat yield (MT/HA)



Source: USDA

Europe's growth in production should be restricted by limited potential for increase in arable land and lower growth in yield improvement

Exhibit 74: EU arable land (% of land area)



Source: World Bank; note: data available till 2016

Exhibit 75: UPL's Europe snapshot

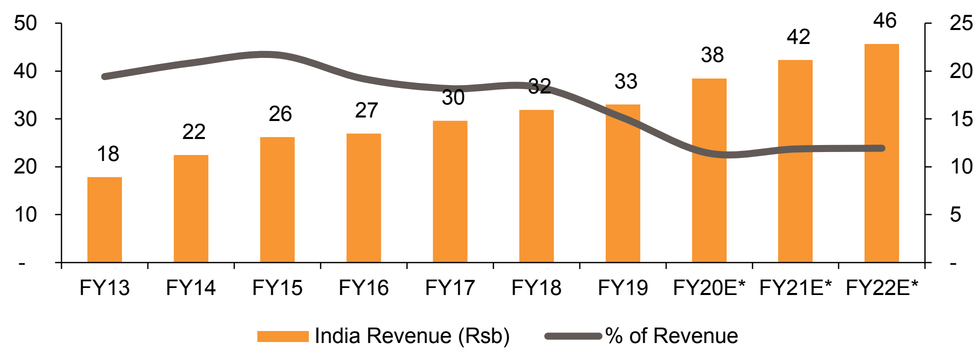
Revenue contribution FY19	Key Crops	Key Countries	Agrochemical Market size (USD bn)	UPL Sales (Rs bn)	UPL Market share (%)*	Key Brands
14%	Wheat, Corn, Potato, Vine	France, Italy, Spain, Netherlands, Germany, UK	~12	27	~3%	Devrinol, Metafol, BeetUP, Cuprofix, Microthial, Penncozeb

*Source: Company, *Emkay Research Estimates, Industry*

India

India accounts for 13% (9MFY20) of UPL's revenue and is the third-largest region for UPL post Arysta acquisition. Despite tough weather conditions over FY16-19, UPL has outperformed the market and has grown at a CAGR of 7% over FY16-19 (vs. 13.5% over FY14-17).

Exhibit 76: India is third-largest region for UPL post Arysta acquisition



*Source: Company, Emkay Research, *UPL+ Arysta*

In India, UPL is present across all the key crops, i.e. rice, cotton, fruits and vegetables. Being a tropical country, India faces a lot of pest attacks as it creates ideal conditions for fungus and insects to thrive. Insecticides contribute 54% (FY19) of the overall India crop protection industry, contrary to ~25% world average. Due to the availability of cheap labor, farmers prefer to remove weeds by hand rather than using herbicides. However, with rising rural wages, the herbicide category is growing faster than insecticides and should continue to grow as farm practices in India modernize. UPL's key products are Saathi, Iris, Patela, Lagam, Ulala, Phoskill, Lancer Gold, Atabron, Starthene, Saaf, Avancer Glow, Disect and Cuprofix.

Exhibit 77: UPL India snapshot

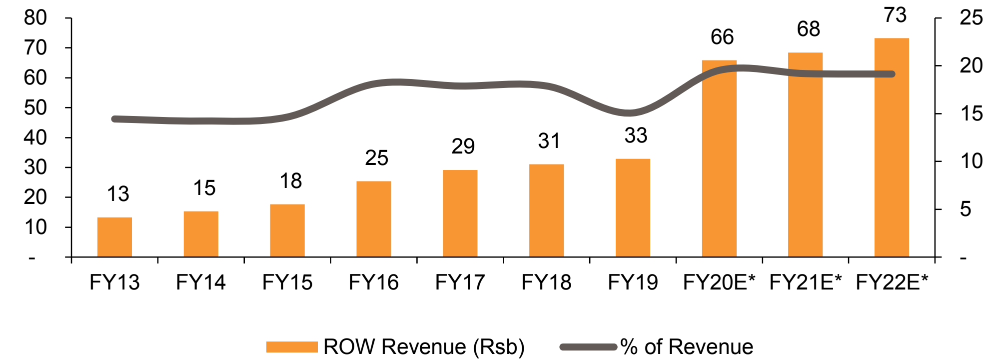
Revenue contribution FY19	Key Crops	Key Countries	Agrochemical Market size (USD bn)	UPL Sales (Rs bn)	UPL Market share (%)*	Key Brands
17%	Rice, Wheat, Corn, Cotton, Potato, Sugarcane	-	4.1	33.0	~17%	Ulala, Phoskill, Lancer Gold, Atrabon, Starthene, Saathi, Iris, Patela, Lagam, Saaf, Avancer Glow, Disect, Cuprofix, Wuxal

*Source: Company, *Emkay Research Estimates, Industry*

Rest of world (ROW) - (Australia, China, the Middle East and Africa)

ROW contributes 19% (9MFY20) to UPL's revenue and is represented by Australia, China, Turkey, Japan, etc. Historically, UPL has grown in all countries in ROW. UPL's ROW revenues have grown at a CAGR of 16.5% over FY15-19. Revenue from ROW has remained stagnant over FY17-19 due to drought and dry weather in Australia offsetting growth in Africa, China and Turkey.

Exhibit 78: Row revenue growth stagnated over FY17-19 due to dry weather in Australia



*Source: Company, Emkay Research, *UPL+Arysta*

UPL has expanded its distribution network in Australia, Japan, Turkey, Indonesia and China. UPL has presence across all major crops of the region – rice (China, Vietnam, Indonesia and Bangladesh), cotton (Turkey and Pakistan), wheat and sugarcane (Turkey and Pakistan), pulses (Africa), cereals/fruits/vegetables (Australia), and soybean & corn (China).

Exhibit 79: UPL's ROW snapshot

Revenue contribution FY19	Key Crops	Key Countries	Agrochemical Market size (USD bn)	UPL Sales (Rs bn)	UPL Market share (%)*	Key Brands
17%	Rice, Wheat, Cotton, Sugarcane, Pulses, Fruit and vegetables	Australia, Turkey, China, Japan, Africa, Indonesia, Thailand	16	32.9	~3%	Kinalux, Asulox, Penncozeb, Quickphos

*Source: Company, *Emkay Research Estimates, Industry*

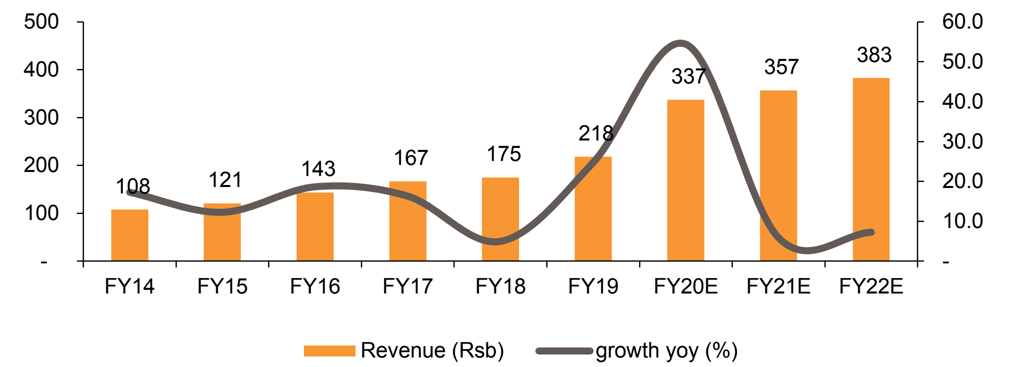
Financial forecasts: Strong FCF to help deleverage

6.6% revenue CAGR over FY20-22E

We expect UPL to deliver 6.6% revenue CAGR over FY20-22E on the back of strong growth across all geographies, except Europe. We expect LatAm (8% CAGR over FY20-22E) and India (9% CAGR over FY20-22E) to lead overall growth in FY21 and FY22. We expect North America and ROW to deliver 5-5.5% CAGR growth over FY20-22E as recent weather challenges (US and Australia) have resulted in higher channel inventory which would restrict wholesale sales in FY21. For Europe, we have modelled 3.5% revenue CAGR over FY20-22E due to the higher impact of Covid-19 in Europe.

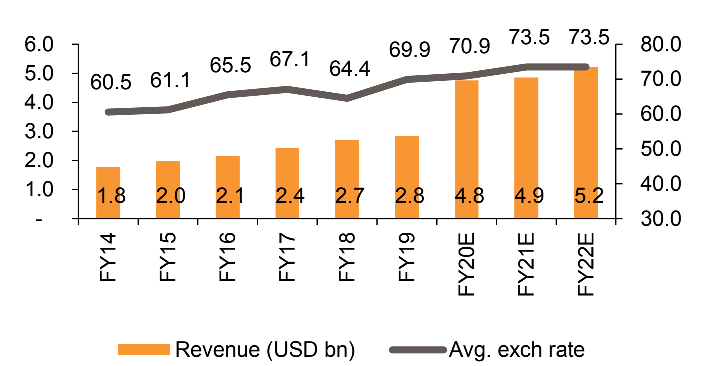
Our growth assumptions are lower than last 5-year CAGR of 15.1% as we believe that the combined entity has covered most of the geographies and incremental growth would come from market share gains, driven by filling portfolio gaps. Our overall revenue CAGR assumption of 6.6% is more than double of industry's growth expectation of 3% (*Source: Phillips McDougall*). We have modelled just 2.1% USD revenue growth in FY21E which would be lowest in last 15 years as we have factored in the impact of Covid-19.

Exhibit 80: UPL's revenue (Rs bn)



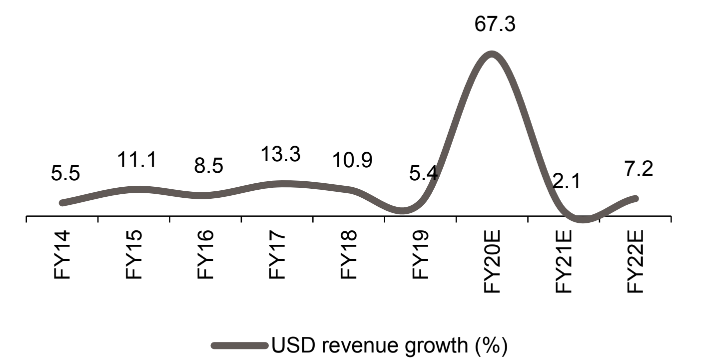
Source: Company, Emkay Research

Exhibit 81: 2%/7% USD revenue growth in FY21/22E



Source: Company, Emkay Research

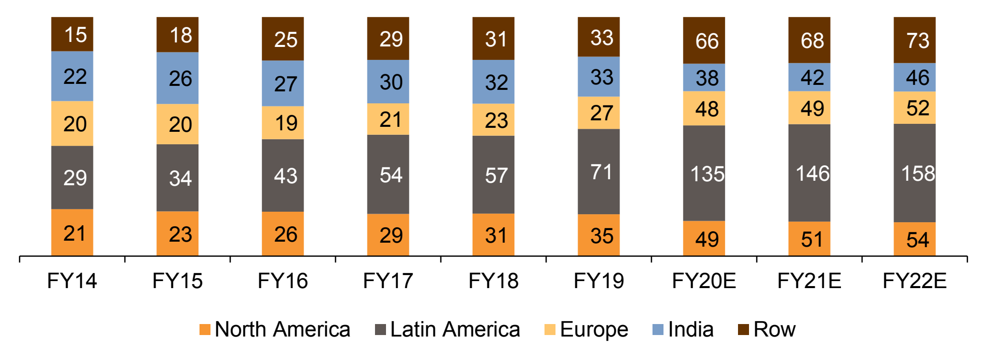
Exhibit 82: INR depreciation lowers USD growth ask



Source: Company, Emkay Research, FY20 jump due to Arysta consolidation

Post Arysta acquisition and recent weakness in North America, LatAm now constitutes >40% (9MFY20) of UPL's revenues followed by ROW (Africa, Australia, Pakistan, Indonesia, China). We expect ROW to grow at 5.5% CAGR, primarily driven by growth in Africa, Indonesia and arrest the decline in Australia.

Exhibit 83: Region-wise revenue split (%)



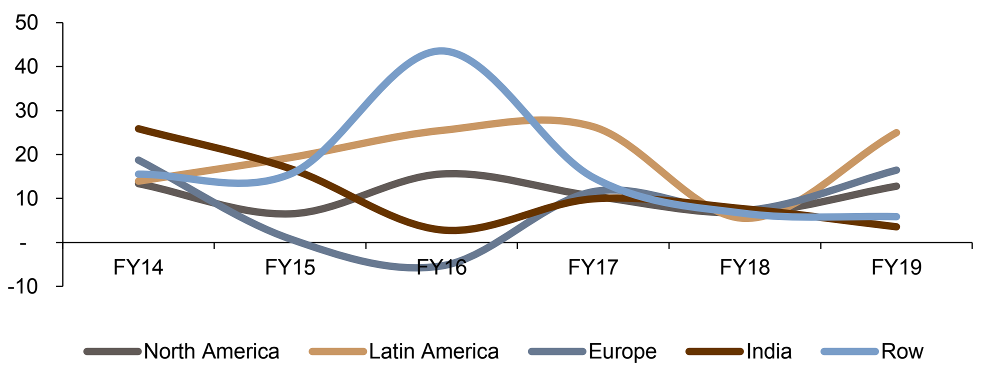
Source: Company, Emkay Research

Exhibit 84: UPL Revenue split (Rs bn)

	FY14	FY15	FY16	FY17	FY18	FY19	FY20E	FY21E	FY22E
North America	21	23	26	29	31	35	49	51	54
Latin America	29	34	43	54	57	71	135	146	158
Europe	20	20	19	21	23	27	48	49	52
India	22	26	27	30	32	33	38	42	46
ROW	15	18	25	29	31	33	66	68	73
Total	**108**	**121**	**143**	**167**	**175**	**218**	**337**	**357**	**383**

Source: Company, Emkay Research

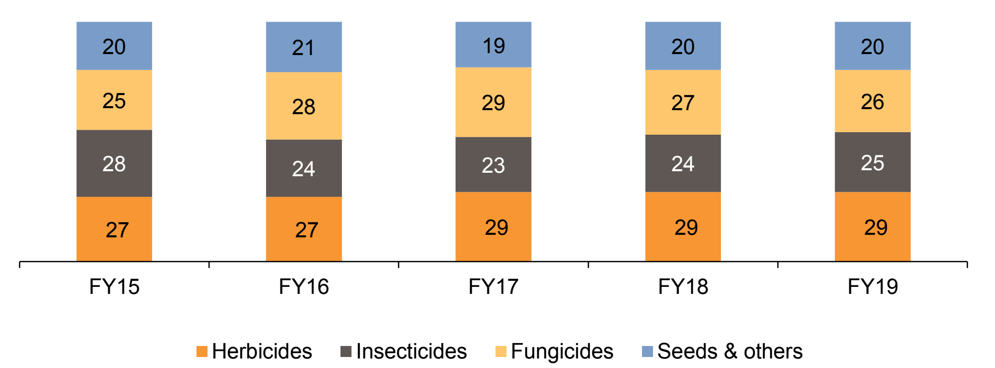
Exhibit 85: Region-wise growth (%) – LatAm is the consistent growth driver



Source: Company, Emkay Research

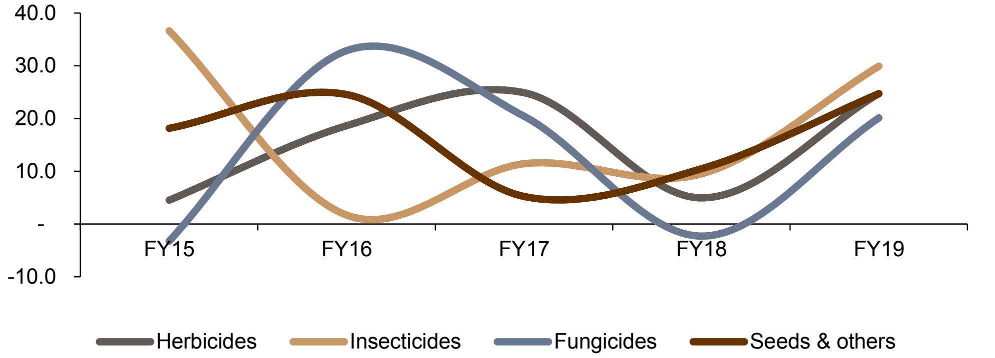
UPL's revenue is well-distributed among herbicides, insecticides and fungicides with higher tilt toward herbicides. Growth over the last five years has been broad-based – herbicides (+15%), insecticides (+17%), fungicides (+13%) and Others (+16%). In FY18, fungicide sales declined 2.3% yoy due to dry weather in Europe and India affecting fungus growth.

Exhibit 86: UPL's product-wise revenue split (%)



Source: Company, Emkay Research

Exhibit 87: Product-wise revenue growth (%)



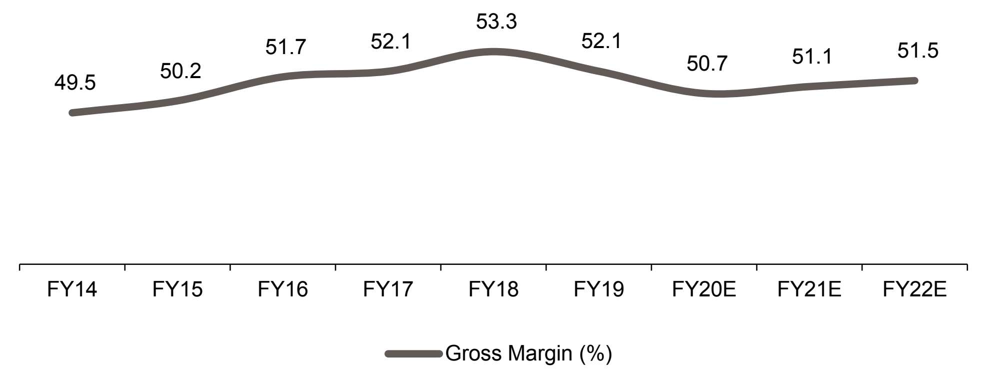
Source: Company, Emkay Research

Gross margins to improve by 80bps over FY20-22E

We expect UPL's gross margins to improve by 80bps over the next two years on the back of synergies in procurement, driven by economies of scale and insourcing of select Arysta molecules (eight announced) in UPL's manufacturing units. While procurement synergies would start from FY21, we believe that insourcing synergies would flow more in FY22 as UPL would have to apply for changes in registrations for insourced molecules.

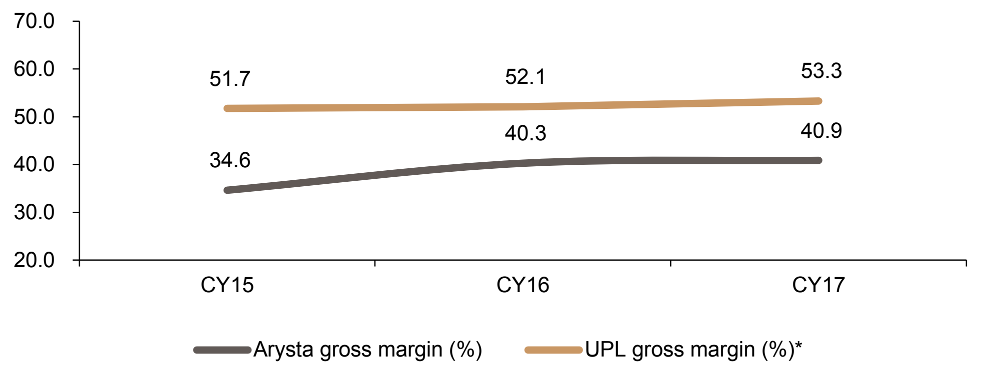
Gross margins declined in FY20 due to the Arysta acquisition. Arysta follows an asset-light model and outsources its manufacturing to third-parties.

Exhibit 88: Gross margins to improve due to procurement synergies and in-house manufacturing



Source: Company, Emkay Research

Exhibit 89: UPL and Arysta gross margin (%) profile



Source: Company, Emkay Research, Note: UPL nos are for year ending March

UPL's COGS + Subcontracting + Other manufacturing costs = Arysta's Gross margin

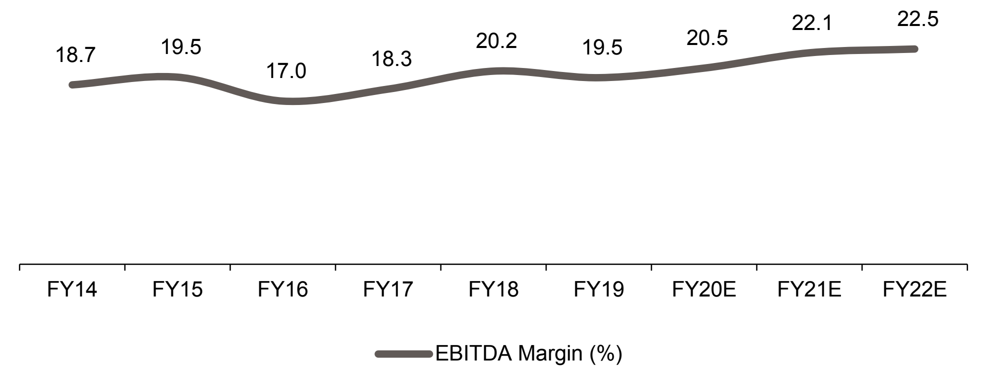
While UPL's gross margins appear higher than Arysta, EBITDA margins are similar. This is because UPL also outsources some of its manufacturing to third-parties, mainly in India. Hence, if we include subcontracting expenses and other manufacturing costs (power & fuel, transportation, effluent disposal charges, and consumption of stores), gross margins of both companies are comparable.

EBITDA margins to improve by 200bps over FY20-22E

Synergy benefits key to EBITDA margin improvement

UPL's EBITDA margins should improve by 152bps over FY20-22E, driven by 80bps improvement in gross margins and 119bps improvement in SG&A expenses on merger synergies and operating leverage. UPL has effected most of its Year 1 personnel synergies which can be visible in the fall in employee expenses in Q3FY20.

Exhibit 90: EBITDA margin to recover in FY21E as synergy benefits kick in



Source: Company, Emkay Research

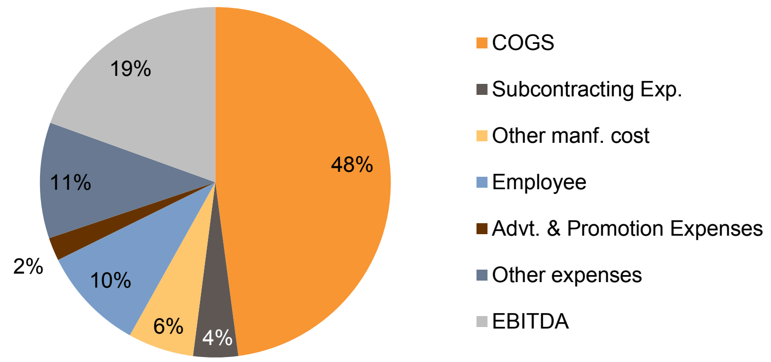
Exhibit 91: Synergy target tracking in line with schedule

(Rs bn)	Exit synergy target		Actioned	Accrual	
	Year 1	Year 3	Till 9MFY20	Year 1 target	9MFY20 Actual
Personnel	4.8	5.1	4.7	3.2	2.1
Non-Personnel	6.9	10.6	5.5	2.4	3.3
Total	**11.6**	**15.8**	**10.2**	**5.6**	**5.4**

Source: UPL's 3QFY20 presentation, Emkay Research

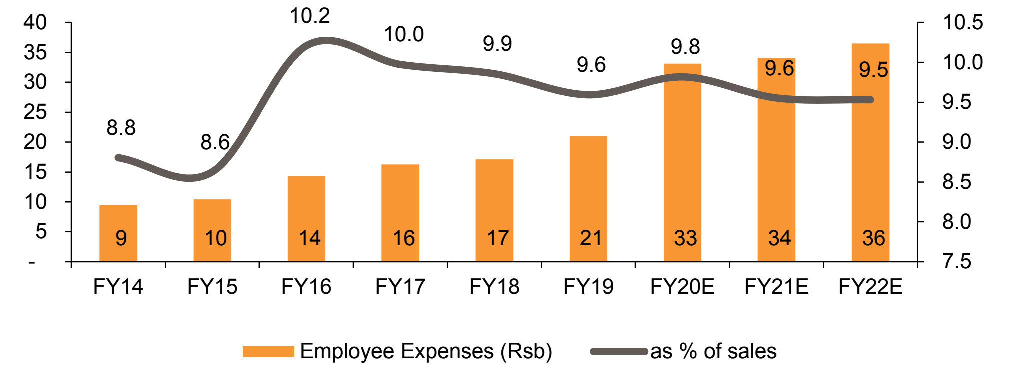
UPL's FY19 cost structure analysis suggests that while COGS form 48% of revenues, subcontracting expenses, other manufacturing cost and employee cost form the bulk of expenses. We expect employee expenses to fall as a % of sales as Arysta acquisition would lead to efficiencies in distribution by eliminating redundant and duplicate roles.

Exhibit 92: UPL's FY19 cost analysis



Source: Company, Emkay Research

Exhibit 93: Employee expenses to fall as % of sales due to merger synergies

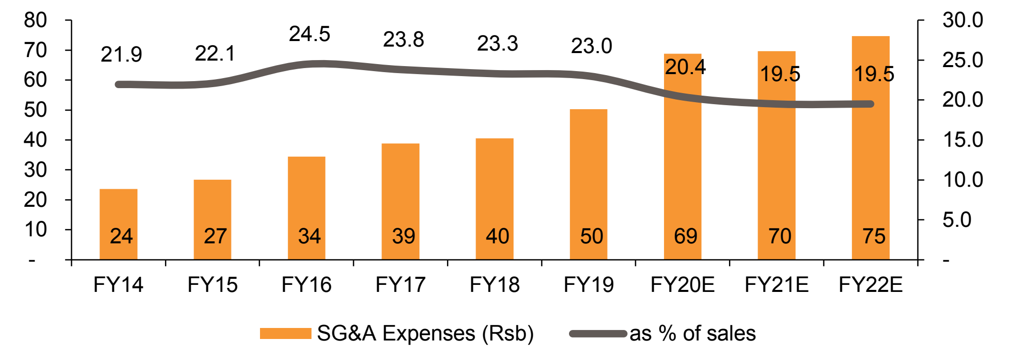


Source: Company, Emkay Research

SG&A expenses to fall due to merger synergies in R&D and fixed costs

UPL's SG&A expenses have started tapering in FY20 on the back of merger synergies actioned and the elimination of duplicate set-up cost together resulting in operating leverage.

Exhibit 94: SG&A expenses to fall due to merger synergies

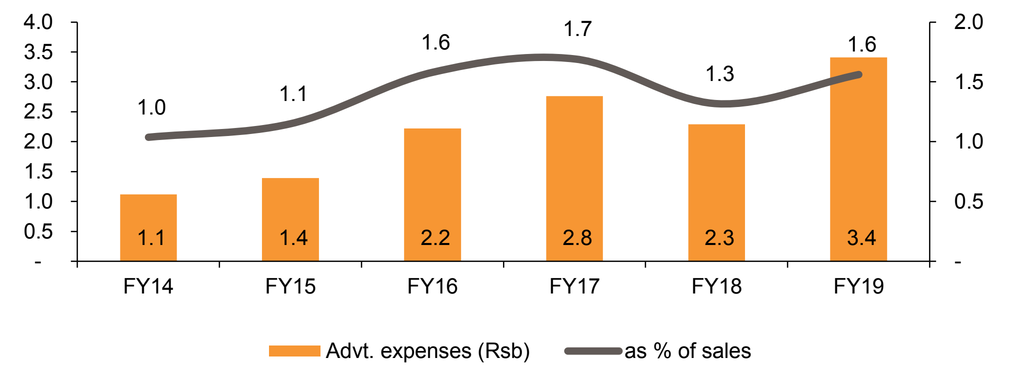


Source: Company, Emkay Research

Higher sales commissions to push sales in difficult weather environment

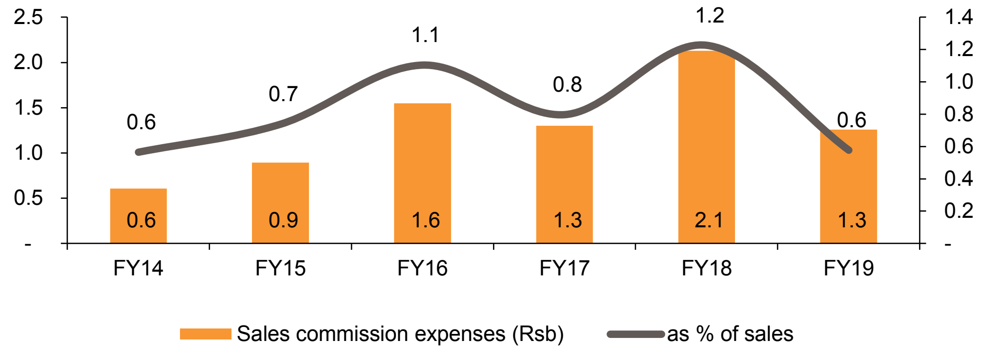
In FY18, subdued weather conditions resulted in lower demand for agri products, particularly in Europe, LatAm and Australia. Lower demand was coupled with limited new launches (107 launches in FY18 compared to 742 in FY19). Hence, UPL increased commissions for its channel partners to liquidate stock. As demand improved in FY19, particularly in LatAm, sales commissions were reduced.

Exhibit 95: Advertisement expenses declined in FY18 due to subdued demand and limited new product launches



Source: Company, Emkay Research

Exhibit 96: Sales commissions increased in FY18 as UPL incentivized channel to liquidate stocks

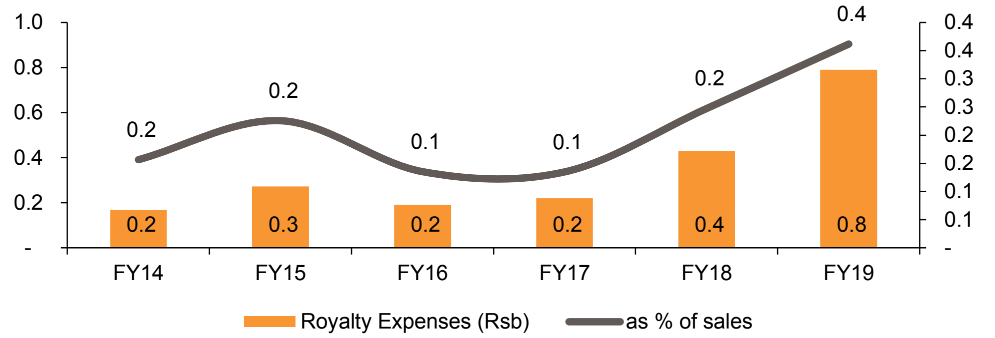


Source: Company, Emkay Research

Rising royalty expenses indicate higher share of in-licensed products

UPL's royalty expenses increased four times over FY17-19, indicating increasing share of in-licensed products in the overall sales. UPL's distribution networks offer opportunities for innovators to increase their reach through partnering with companies such as UPL.

Exhibit 97: Royalty charges jumped in FY19 indicating higher share of in-licensed products

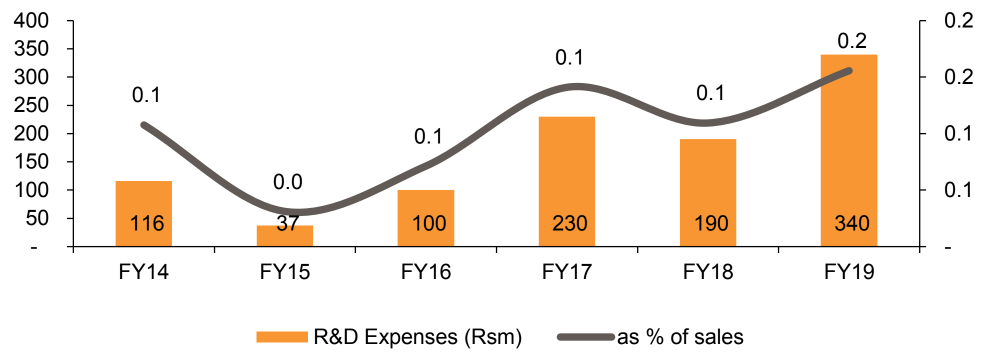


Source: Company, Emkay Research

Scope to increase R&D expenses

UPL's R&D spends have been rising but given the geographic reach and the scale of the company, it is below global standards (8-12% of revenues for innovators). We believe that as geographic expansion and new registration opportunities taper down in FY23/24, UPL will have to spend more on R&D to create a pipeline of new products.

Exhibit 98: R&D spends increasing but can do more

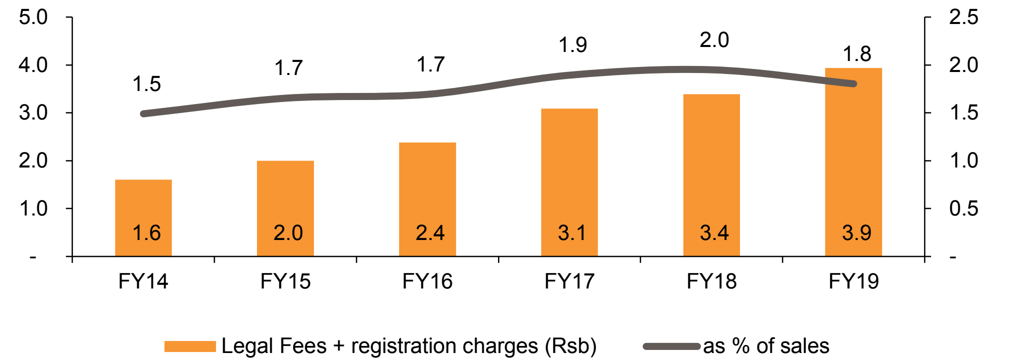


Source: Company, Emkay Research

New products and new registration driving higher legal and registration expenses

UPL's legal expenses and registration expenses have doubled over FY15-19, indicating new registrations in different geographies and new product launches. As 1) UPL will cross-sell Arysta's products to its customers and vice-versa, 2) expanding Arysta's bio products to different geographies and 3) new product pipeline from J-Makers (Arysta relationship), we expect it to continue to rise gradually in absolute terms but do not expect it to increase beyond 2% of sales.

Exhibit 99: Geographic expansion driving legal and registration expenses

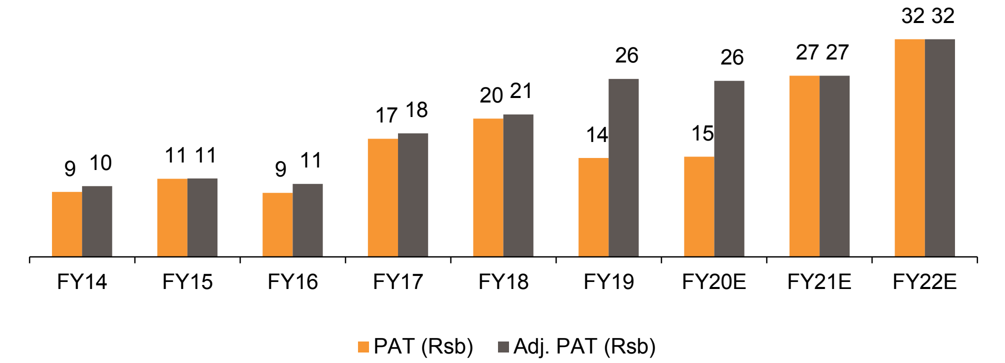


Source: Company, Emkay Research

11% Adj. PAT CAGR over FY20-22E

UPL's adjusted profit is expected to increase at 11.2% CAGR over FY20-22E on the back of 6.6% growth in revenue and 199bps improvement in EBITDA margins. UPL's reported profit to double over FY20-22E to Rs32bn as there are no material exceptional expenses (severance and integration cost due to Arysta acquisition) and the completion of purchase price allocation process for the Arysta acquisition in FY20.

Exhibit 100: Reported PAT lower in FY19/20 due to exceptional expenses and Arysta PPA impact

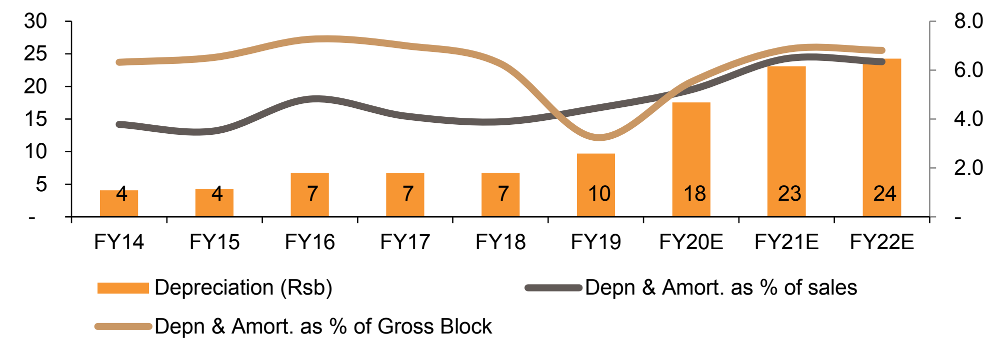


Source: Company, Emkay Research

Depreciation rate to normalize after Arysta integration

UPL's depreciation as a % of gross block decreased to 3.2% in FY19 (6.3% in FY18) due to Arysta acquisition. We expect it to normalize by the end of FY20 and to stabilize at 6.8% of gross block. We have factored in slightly higher depreciation as Arysta's gross block mainly consists of intangibles which have a lower useful life.

Exhibit 101: Depreciation cost to increase due to Arysta acquisition and new capex

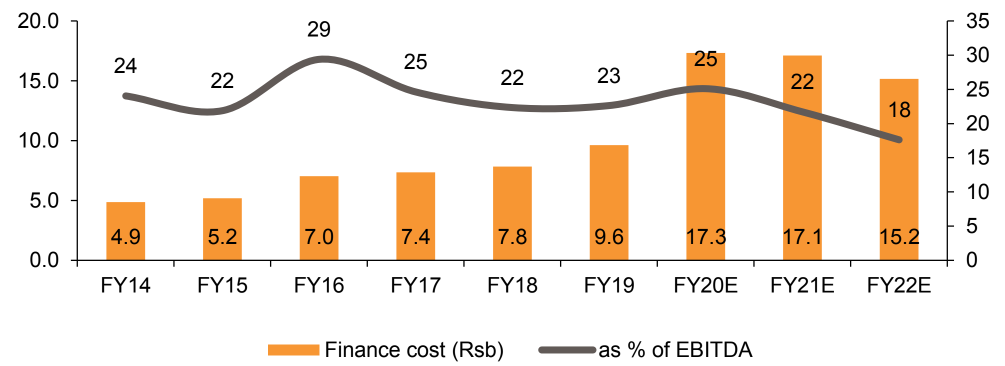


*Source: Company, Emkay Research, *UPL + Arysta*

Deleveraging to decrease finance costs

Finance costs have increased to 25% of EBITDA in FY20E. Finance costs will decrease by 13% over FY20-22E to Rs15.2bn and form 18% of FY22E EBITDA.

Exhibit 102: Finance cost to decrease as UPL deleverages its balance sheet

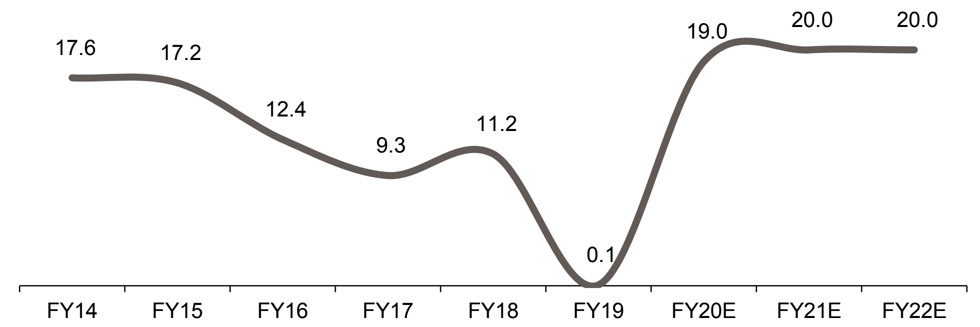


Source: Company, Emkay Research, finance cost includes hedging costs & exchange impact.

Tax rate to normalize in FY20

UPL's effective tax rate (ETR) was lower in FY19 at 0.1% due to a Rs2.7bn deferred tax reversal and a Rs1.7bn tax benefit on purchase price allocations of the Arysta acquisition. However, actual tax expense for the year stood at Rs4.4bn, indicating 16% tax rate on operations (before deferred tax and acquisition impact).

Exhibit 103: UPLL's tax rate (%)

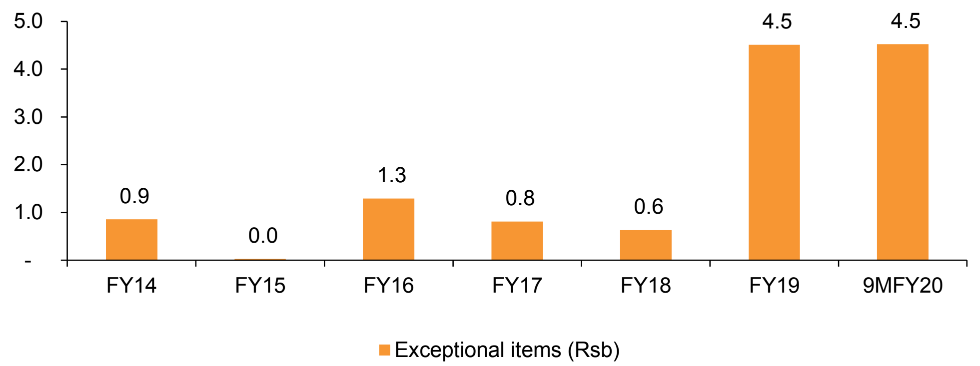


Source: Company, Emkay Research

Higher exceptional expenses in FY19-20 due to Arysta acquisition

UPL's exceptional expenses were higher in FY19/9MFY20 at Rs4.5bn each. Exceptional expenses were mainly due to the Arysta purchase price allocation impact and severance and integration cost on Arysta's merger with UPL. During 9MFY20, UPL also had to provide for USD31mn (Rs2.2bn) for losing litigation against Agrofresh in the US. With purchase price allocation complete, we do not expect any major exceptional items in FY21/22E.

Exhibit 104: UPL's exceptional expenses (Rs bn)



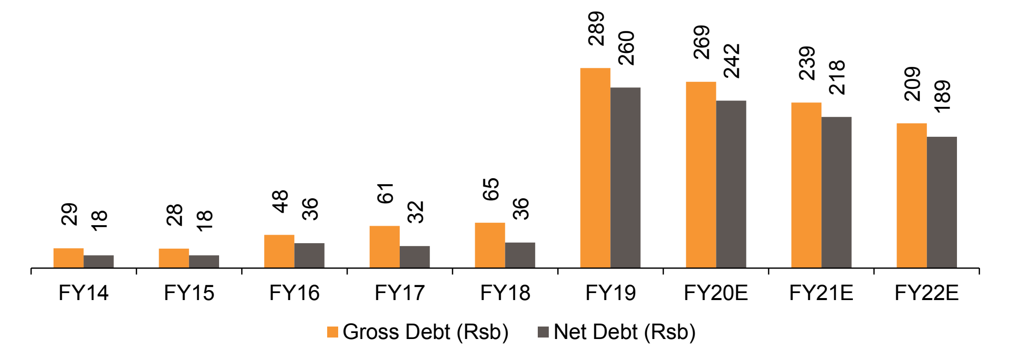
Source: Company, Emkay Research

De-leveraging needs precise earnings execution and working capital reduction

UPL's FY20E finance cost is 25% of EBITDA. This makes UPL's profit vulnerable to margin pressures and interest rates. UPL has guided for paring net debt by USD500mn in FY20E. We believe that this would be difficult without significant factoring (of receivables) considering the shift in revenue toward low margin LatAm/ROW, and subdued demand environment in North America/Europe delaying gross margin expansion.

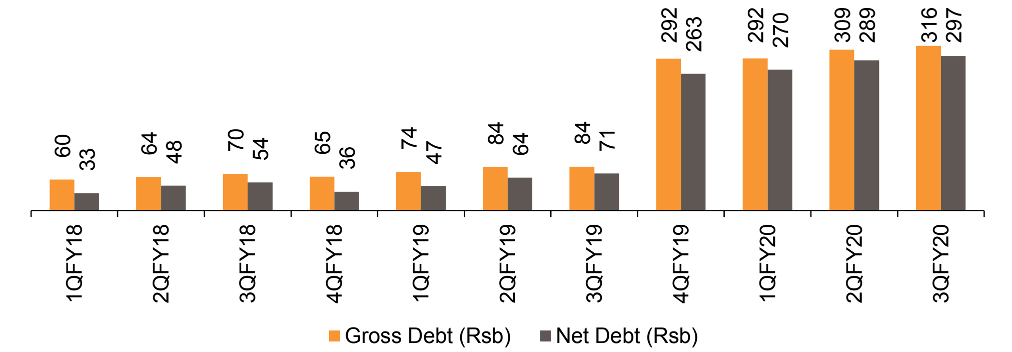
Delayed margin expansion, coupled with Arysta payouts, has increased net debt by Rs34bn (~USD472mn) in 9MFY20. UPL would have to repay USD972mn in Q4FY20 which we believe is difficult unless UPL goes for aggressive factoring in of receivables. We estimate that UPL could repay Rs54bn (USD754mn) in Q4FY20 and pare net debt by Rs19bn (USD260mn) in FY20E. We have factored in net debt reduction of Rs19bn/24bn/28bn in FY20/21/22E. In FY21, we expect Net D/E to improve to 0.8x from 1.4x in FY19 and net debt/EBITDA should improve to 2.2x in FY22E from 3.5x in FY20E.

Exhibit 105: UPL's debt to decline gradually



Source: Company, Emkay Research

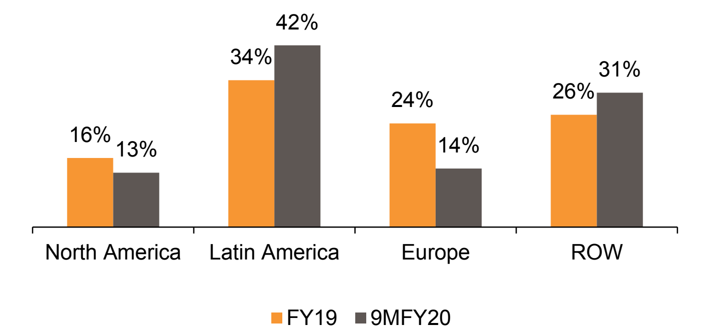
Exhibit 106: Quarterly debt movement (Rs bn)



Source: Company, Emkay Research

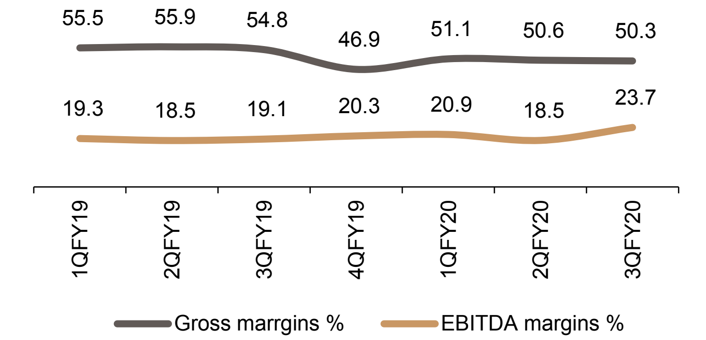
UPL's EBITDA margins have showed signs of recovery in Q3FY20 on merger synergies while we still wait for gross margins to bounce back. We believe that gross margins should improve form FY21 as UPL starts manufacturing some of Arysta's molecules in-house and procurement synergies are achieved.

Exhibit 107: Change in revenue mix in favor of LatAm & ROW



Source: Company, Emkay Research

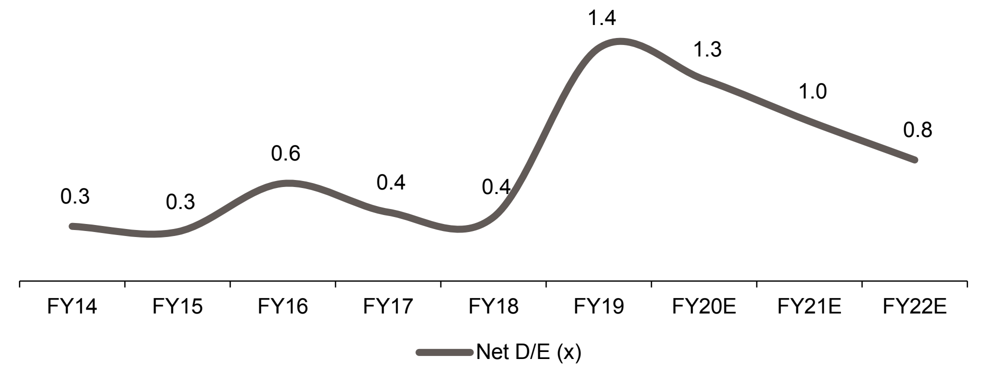
Exhibit 108: Merger synergies improved EBITDA margin in Q3FY20



Source: Company, Emkay Research

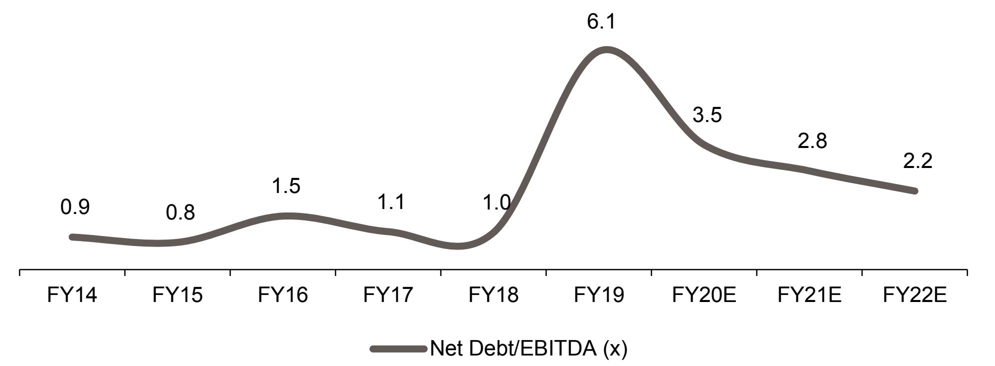
UPL recently refinanced USD400mn via bond sales at 5.25% interest rate. If we include the hedging costs, the interest costs range around ~6%-6.5%. We have factored in interest rate at 6.5% for FY21 and FY22 considering long-term hedging costs.

Exhibit 109: Net D/E



Source: Company, Emkay Research

Exhibit 110: Net Debt/EBITDA



Source: Company, Emkay Research

UPL's working capital days increased to 126 days as on Q3FY20 vs. 117 days due to Arysta acquisition. In its Q3FY20 earnings call, UPL guided for more than 15 days reduction in working capital days by Q4FY20. We have modelled in 120 days (reduction of 6 days vs. guidance of >15 days) of working capital cycle for FY20-22E. Any deterioration in working capital would delay deleveraging. We believe that UPL can deliver better working capital than 120 days as historically it has managed it in the range of 115-120 days.

Exhibit 111: UPL's working capital to remain at 120 days due to higher share of LatAm & ROW

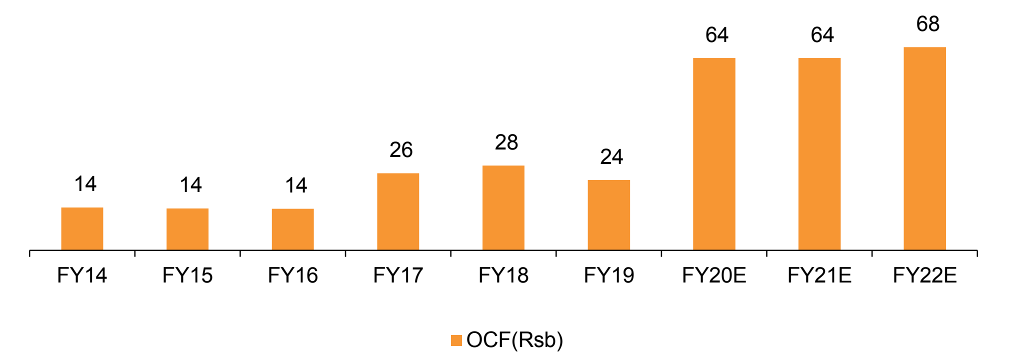
	FY16	FY17	FY18	FY19	FY20E	FY21E	FY22E
Inventory	98	93	95	155	97	97	97
Debtor	133	127	127	197	120	120	120
Loans & adv.	13	13	11	11	13	13	13
Oth. curr. assets	31	26	36	55	37	37	37
Curr. liabilities	156	146	149	207	141	141	141
Provisions	4	4	4	14	6	6	6
Net WC Days	**115**	**108**	**117**	**197**	**120**	**120**	**120**

Source: Company, Emkay Research

FCF to increase 23% over FY20-22E

We expect UPL operating cash flow to increase 2.7x in FY20 on the back of Arysta acquisition and exceptional items in the base year. We have modelled higher working capital days at 120 vs. management guidance of <110 days, as we believe that Covid-19-related disruptions would prevent any significant reduction in working capital. In addition, we have factored in just 5.9% revenue growth in FY21 with 100bps higher tax rate which limits meaningful upsides on operating cash flow. We acknowledge that our working capital assumptions are conservative and UPL could surprise us on the positive side. Favorable weather conditions across all regions could act as a catalyst for improvement in the working capital cycle.

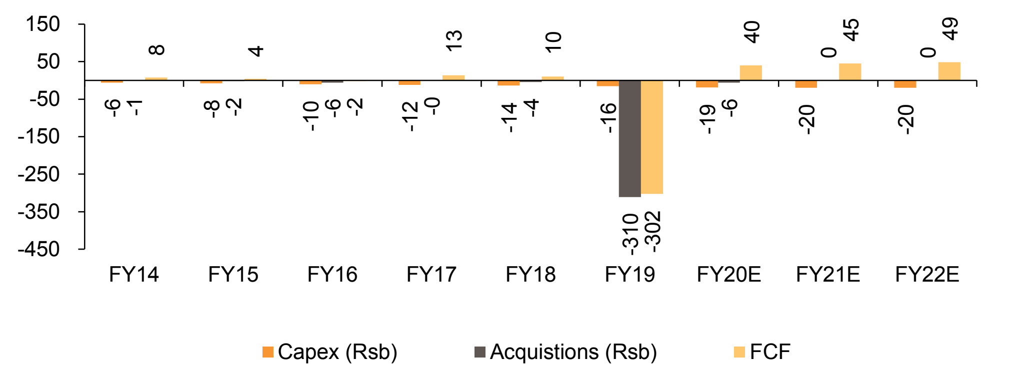
Exhibit 112: UPL's OCF to increase 2.6x in FY20E but remain flat thereafter due to working capital



Source: Company, Emkay Research

UPL's capex should increase to Rs19bn in FY20 vs. Rs16bn in FY19. We expect it remain at Rs20bn in FY21/22E as UPL would incur capex for in-house manufacturing of select Arysta molecules and for expanding registrations in new geographies of Arysta's products.

Exhibit 113: Capex to increase due to in-house manufacturing of certain Arysta molecules and new registrations

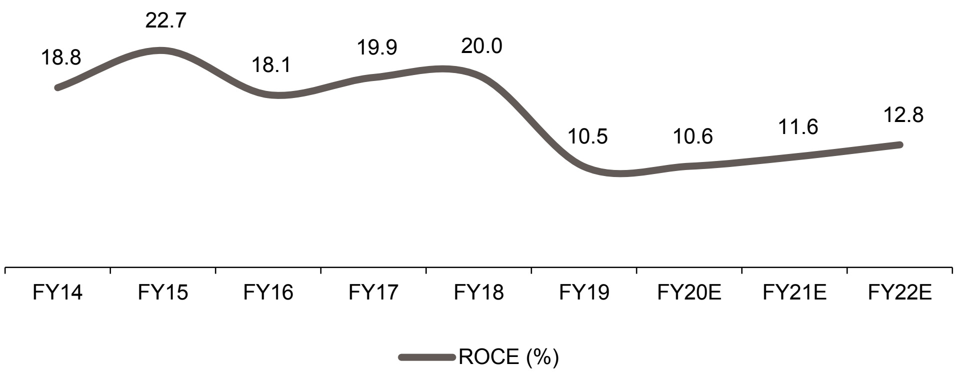


Source: Company, Emkay Research

Return ratios to improve with improvement in margins

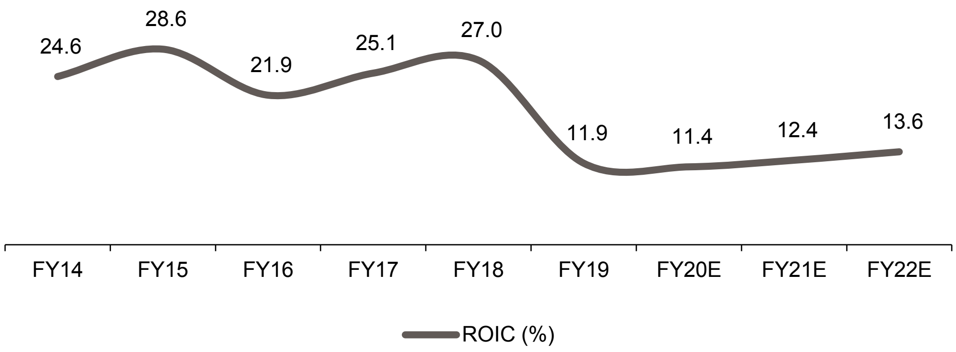
UPL's ROCE should improve to by 224bps over FY20-22E to 12.8% on an improvement in EBITDA margins. UPL will have a long road to recover its ROCE to pre-Arysta levels of >20%, and it will be a gradual process. UPL's ROE should improve in FY21 on an improvement in EBITDA margins and ROCE. UPL's ROE should improve by 702bps over FY20-22E due to one-time exceptional expenses on account of the Arysta acquisition in FY20, depressing ROE in FY20. Adjusted for one-time expenses, ROE decreases by 28bps over FY20-22E due to de-leveraging.

Exhibit 114: Pre-tax ROCE to improve on the back of margin improvement



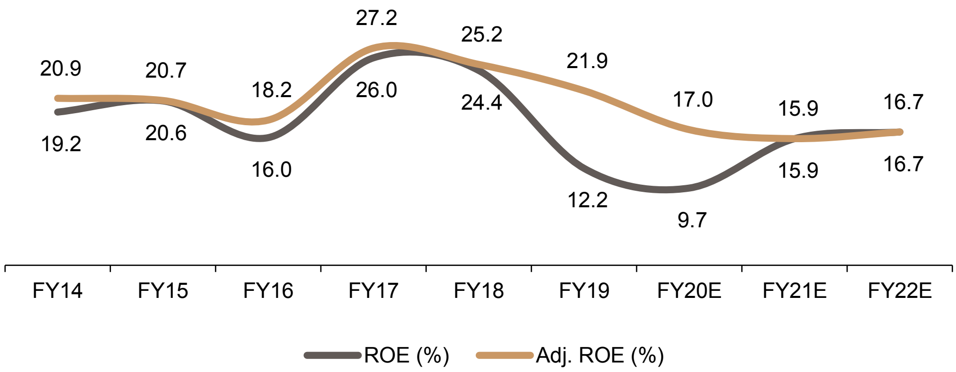
Source: Company, Emkay Research

Exhibit 115: ROIC



Source: Company, Emkay Research

Exhibit 116: ROE to recover in FY21E due to exceptional items in base year



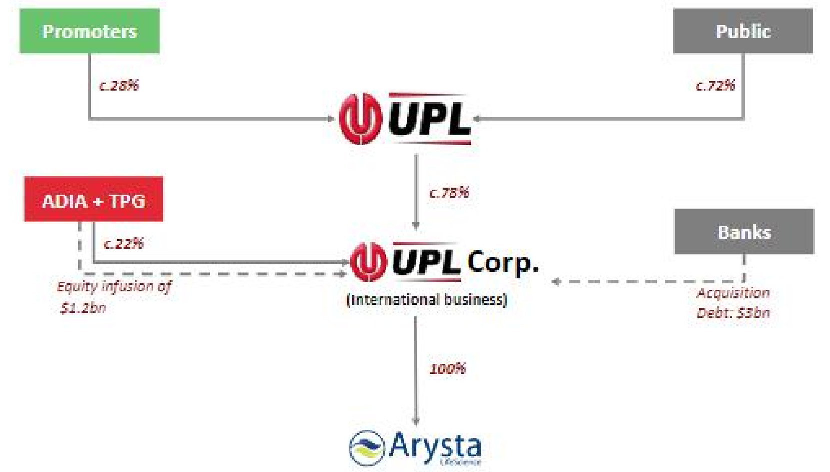
Source: Company, Emkay Research

Exit plan for investors in UPL Corp

Abu Dhabi Investment Authority (ADIA) and TPG Capital have invested USD600mn each in UPL Corp for a 22% stake (11% each). This transaction has a three year lock-in which ends in FY22. ADIA and TPG have two exit options: 1) sell stake to another PE; 2) list UPL Corp on the stock exchange via an IPO. We believe that with higher leverage, UPL's ability to buy back is limited. We note that UPL has first right of refusal in case the investors sell stake to another PE.

Hence, we believe that following scenarios are possible: a) UPL offers its own shares in a swap and buys back; b) ADIA and TPG continue to hold shares for a few more years till UPL deleverages its balance sheet and had the ability to re-leverage to buy their stake; and c) UPL swaps part of the stake in UPL Corp with UPL and buys back balance. UPL's CFO Mr. Anand Vora has indicated to the media that the company is open to all the above options.

Exhibit 117: ADIA and TPG stake in UPL Corp



Source: Company, Emkay Research

Exhibit 118: Exit option

Exit option with UPL investors
Sell stake to another PE
List UPL Corp on stock exchange via IPO

Source: Company, Emkay Research

Exhibit 119: Possible scenarios

Possible scenarios
UPL offers its own shares in a swap and buys back
ADIA and TPG continue to hold shares for a few more years till UPL deleverages its balance sheet and had the ability to re-leverage to buy their stake
UPL swaps part of stake in UPL Corp with UPL and buy backs balance.

Source: Company, Emkay Research

Risks

Adverse weather

Demand for agrochemicals is dependent on agriculture which depends largely on weather. Adverse weather conditions like drought, floods, lower pest infestation could result in lower demand for agro chemicals.

Supply chain disruption

UPL procures raw materials largely from China and India. Any disruptions in supply chain can pose risk to its ability to do business. Recently, raw material supplies from China were disrupted due to environmental crackdown by Chinese authorities and plant shutdowns due to Covid-19.

Regulatory risk

Agrochemicals across the globe are regulated by local agencies in each country. Changes in government policies (e.g., banning molecules, dosage restrictions) can impact UPL's revenues.

Litigation risk

Agrochemical companies are susceptible to huge compensation in litigation. Recently, Bayer has been under litigation in the US for Glyphosate (RoundUp from Monsanto) which could result in payouts. In addition, litigation on patents can also result in expenses. UPL was recently ordered by a Delaware court to pay USD31mn to AgroFresh Solutions Inc. for infringing its patent on a technology that keeps apples fresh in storage after harvest. UPL has mentioned that it will appeal in higher courts.

Commodity price

Farmers plant crops based on expected profitability. Any fall in commodity prices impact their incomes and thus their ability to spend on inputs such as chemicals and fertilizers. This could also result in intense price war among competitors, resulting in lower margins and sales growth.

Forex

UPL derives 87% of its revenues from outside of India and is present in all major geographies. Hence, it is susceptible to forex fluctuations. The company tries to create natural hedge in all geographies and net exposures are hedged.

Technology

Various start-ups globally have come up and have been focusing on precision farming using sensors/technology, reducing the need for agrochemicals. These technologies are currently very expensive and have not been able to scale up. However, any cost-effective innovation could reduce demand for agrochemicals.

Key Financials (Consolidated)

Income Statement

Y/E Mar (Rs mn)	FY18	FY19	FY20E	FY21E	FY22E
Net Sales	**173,780**	**218,370**	**337,134**	**356,883**	**382,745**
Expenditure	**138,730**	**175,820**	**268,083**	**278,095**	**296,747**
EBITDA	**35,050**	**42,550**	**69,051**	**78,788**	**85,998**
Depreciation	6,750	8,670	17,516	23,083	24,270
EBIT	**28,300**	**33,880**	**51,534**	**55,705**	**61,728**
Other Income	4,140	2,400	1,100	1,122	1,144
Interest expenses	7,830	9,630	17,337	17,105	15,155
PBT	**24,610**	**26,650**	**35,298**	**39,723**	**47,717**
Tax	2,750	20	6,707	7,945	9,543
Extraordinary Items	630	11,580	11,070	0	0
Minority Int./Income from Assoc.	80	720	2,994	5,412	6,495
Reported Net Income	**20,220**	**14,470**	**14,678**	**26,536**	**31,848**
Adjusted PAT	**20,850**	**26,050**	**25,748**	**26,536**	**31,848**

Balance Sheet

Y/E Mar (Rs mn)	FY18	FY19	FY20E	FY21E	FY22E
Equity share capital	1,020	1,020	1,530	1,530	1,530
Reserves & surplus	90,670	145,430	155,008	176,189	201,917
Net worth	**91,690**	**146,450**	**156,538**	**177,719**	**203,447**
Minority Interest	**190**	**33,580**	**36,574**	**41,985**	**48,481**
Loan Funds	**65,070**	**288,610**	**268,610**	**238,610**	**208,610**
Net deferred tax liability	(6,050)	19,940	17,492	17,221	16,867
Total Liabilities	**150,900**	**488,580**	**479,213**	**475,535**	**477,405**
Net block	**44,570**	**319,270**	**320,754**	**317,171**	**312,401**
Investment	**10,340**	**7,080**	**7,080**	**7,080**	**7,080**
Current Assets	**154,830**	**270,860**	**267,479**	**275,230**	**292,144**
Cash & bank balance	28,940	28,510	27,289	20,972	19,463
Other Current Assets	16,960	29,420	35,099	37,155	39,847
Current liabilities & Provision	**72,030**	**126,460**	**133,930**	**141,775**	**152,049**
Net current assets	**82,800**	**144,400**	**133,549**	**133,454**	**140,094**
Misc. exp	0	0	0	0	0
Total Assets	**150,900**	**488,580**	**479,213**	**475,535**	**477,405**

Cash Flow

Y/E Mar (Rs mn)	FY18	FY19	FY20E	FY21E	FY22E
PBT (Ex-Other income) (NI+Dep)	**20,470**	**24,250**	**34,198**	**38,601**	**46,573**
Other Non-Cash items	0	0	0	0	0
Chg in working cap	(6,790)	(36,040)	7,181	(6,493)	(8,503)
Operating Cashflow	**28,390**	**23,560**	**64,355**	**64,351**	**67,952**
Capital expenditure	(17,020)	(341,700)	(19,000)	(19,500)	(19,500)
Free Cash Flow	**11,370**	**(318,140)**	**45,355**	**44,851**	**48,452**
Investments	(6,560)	3,260	0	0	0
Other Investing Cash Flow	(1,499)	16,360	(5,750)	170	170
Investing Cashflow	**(20,939)**	**(319,680)**	**(23,650)**	**(18,208)**	**(18,186)**
Equity Capital Raised	10	0	510	0	0
Loans Taken / (Repaid)	4,490	223,540	(20,000)	(30,000)	(30,000)
Dividend paid (incl tax)	(2,120)	(3,575)	(4,070)	(4,590)	(5,355)
Other Financing Cash Flow	(2,211)	74,986	(1,030)	(765)	(765)
Financing Cashflow	**(7,661)**	**285,321**	**(41,927)**	**(52,460)**	**(51,275)**
Net chg in cash	**(210)**	**(10,800)**	**(1,221)**	**(6,317)**	**(1,509)**
Opening cash position	28,800	39,060	28,010	26,789	20,472
Closing cash position	**28,940**	**28,510**	**27,289**	**20,972**	**19,463**

Source: Company, Emkay Research

Key Ratios

Profitability (%)	FY18	FY19	FY20E	FY21E	FY22E
EBITDA Margin	20.2	19.5	20.5	22.1	22.5
EBIT Margin	16.3	15.5	15.3	15.6	16.1
Effective Tax Rate	11.2	0.1	19.0	20.0	20.0
Net Margin	12.6	12.2	8.5	8.9	10.0
ROCE	23.2	11.3	10.9	11.9	13.2
ROE	25.2	21.9	17.0	15.9	16.7
RoIC	30.4	12.7	12.0	13.0	14.3

Per Share Data (Rs)	FY18	FY19	FY20E	FY21E	FY22E
EPS	27.3	34.1	33.7	34.7	41.6
CEPS	36.1	45.4	56.6	64.9	73.4
BVPS	119.9	191.4	204.6	232.3	265.9
DPS	2.8	4.7	5.3	6.0	7.0

Valuations (x)	FY18	FY19	FY20E	FY21E	FY22E
PER	13.3	10.7	10.8	10.5	8.7
P/CEPS	10.1	8.0	6.4	5.6	5.0
P/BV	3.0	1.9	1.8	1.6	1.4
EV / Sales	1.3	2.0	1.5	1.4	1.2
EV / EBITDA	6.3	10.5	7.5	6.3	5.4
Dividend Yield (%)	0.8	1.3	1.5	1.7	1.9

Gearing Ratio (x)	FY18	FY19	FY20E	FY21E	FY22E
Net Debt/ Equity	0.4	1.8	1.5	1.2	0.9
Net Debt/EBIDTA	1.0	6.1	3.5	2.8	2.2
Working Cap Cycle (days)	113.1	193.7	115.0	115.0	115.0

Growth (%)	FY18	FY19	FY20E	FY21E	FY22E
Revenue	6.5	25.7	54.4	5.9	7.2
EBITDA	17.4	21.4	62.3	14.1	9.2
EBIT	22.4	19.7	52.1	8.1	10.8
PAT	17.1	(28.4)	1.4	80.8	20.0

Quarterly (Rs mn)	Q3FY19	Q4FY19	Q1FY20	Q2FY20	Q3FY20
Revenue	49,210	85,250	79,060	78,170	88,920
EBITDA	8,470	12,910	12,400	14,470	21,020
EBITDA Margin (%)	**17.2**	**15.1**	**15.7**	**18.5**	**23.6**
PAT	4,688	12,120	6,430	5,020	9,500
EPS (Rs)	**-**	**-**	**-**	**-**	**-**

Source: Company, Emkay Research

Shareholding Pattern (%)	Mar-19	Jun-19	Jul-19	Sep-19	Dec-19
Promoters	27.9	27.9	27.9	27.9	27.9
FIIs	42.8	42.9	43.1	43.8	43.5
DIIs	9.1	9.6	9.6	10.6	11.1
Public and Others	20.3	19.6	19.5	17.7	17.5

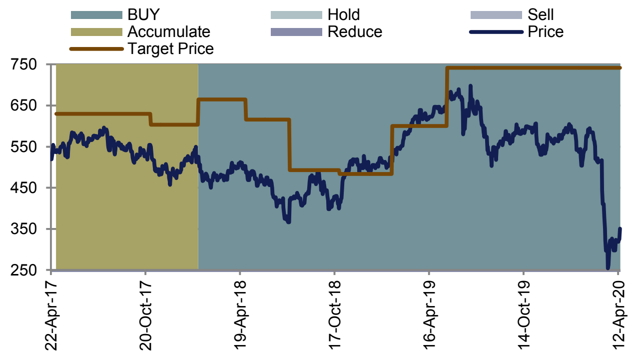
Source: Capitaline

RECOMMENDATION HISTORY TABLE

Date	Closing Price	TP	Period (months)	Rating	Analyst
20-May-19	679	742	12m	Buy	Amar Mourya
04-Feb-19	514	600	12m	Buy	Amar Mourya
11-Jan-19	522	483	12m	Buy	Amar Mourya
26-Oct-18	415	483	12m	Buy	Amar Mourya
31-Jul-18	429	493	12m	Buy	Pratik Tholiya
23-Jul-18	421	493	12m	Buy	Pratik Tholiya
30-Apr-18	487	615	12m	Buy	Pratik Tholiya
29-Jan-18	526	665	12m	Buy	Pratik Tholiya
30-Oct-17	550	603	12m	Accumulate	Sumant Kumar
31-Jul-17	585	629	12m	Accumulate	Sumant Kumar
02-May-17	536	629	12m	Accumulate	Sumant Kumar

Source: Company, Emkay Research

RECOMMENDATION HISTORY CHART



Source: Bloomberg, Company, Emkay Research

Emkay Alpha Portfolio – Agri Input & Chemicals

Analyst: Varshit Shah

Contact Details

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Sector

Agro-Chemicals and Fertilizers

Analyst bio

Varshit Shah is a Chartered Accountant and a commerce graduate from Narsee Monjee College of Commerce and Economics, Mumbai. He comes with total eight years of experience across sectors such as Chemicals, Education, Telecom, IT and Midcaps. His team currently covers 12 stocks in Agro Chemicals, Fertilizers and Midcaps.

EAP sector portfolio

Company Name	BSE200 Weight	EAP Weight	OW/UW (%)	OW/UW (bps)	EAP Weight (Normalised)
Agri Input & Chemicals	**0.80**	**0.80**	**0%**	**0**	**100.00**
Bayer CropScience*	0.11	0.11	0%	0	13.21
Chambal Fertilisers*	0.00	0.00	NA	0	0.00
Coromandel International	0.13	0.11	-18%	-2	13.55
DCM Shriram*	0.00	0.00	NA	0	0.00
Deepak Fertilisers*	0.00	0.00	NA	0	0.00
Dhanuka Agritech	0.00	0.00	NA	0	0.00
GSFC*	0.00	0.00	NA	0	0.00
Insecticides India*	0.00	0.00	NA	0	0.00
PI Industries	0.17	0.17	0%	0	21.17
Rallis India	0.00	0.00	NA	0	0.00
Sharda Cropchem*	0.00	0.00	NA	0	0.00
Sterling Tools	0.00	0.00	NA	0	0.00
UPL*	0.39	0.42	6%	2	52.08
Cash	**0.00**	**0.00**	**NA**	**0**	**0.00**

Source: Emkay Research

** Not under coverage: Equal Weight*

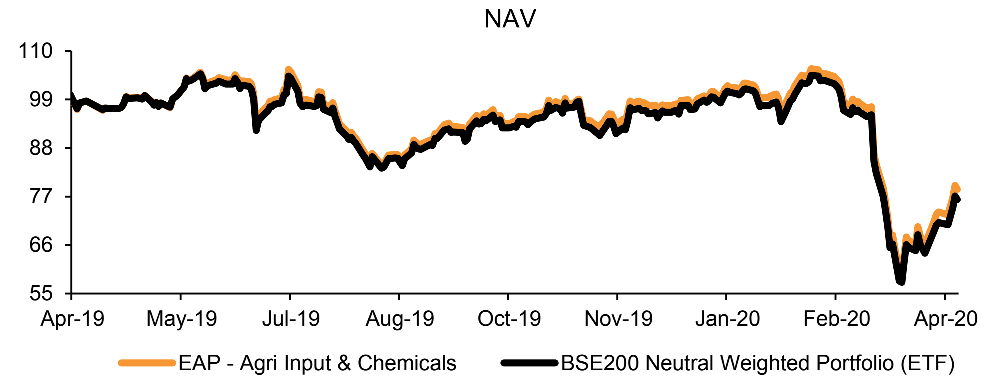
High Conviction/Strong Over Weight   High Conviction/Strong Under Weight

Sector portfolio NAV

	Base					Latest
	1-Apr-19	17-Jul-19	17-Oct-19	17-Jan-20	18-Mar-20	17-Apr-20
EAP - Agri Input & Chemicals	100.0	100.8	95.4	102.7	72.3	78.6
BSE200 Neutral Weighted Portfolio (ETF)	100.0	99.6	94.2	101.4	70.1	76.3

**Performance measurement base date 1st April 2019*
Source: Emkay Research

NAV chart



Source: Emkay Research

Please see our model portfolio (Emkay Alpha Portfolio): SMID

Please see our model portfolio (Emkay Alpha Portfolio): Nifty

"Emkay Alpha Portfolio – SMID and Nifty are a supporting document to the Emkay Alpha Portfolios Report and is updated on regular intervals"

Emkay Rating Distribution

Ratings	Expected Return within the next 12-18 months.
BUY	Over 15%
HOLD	Between -5% to 15%
SELL	Below -5%

Completed Date: 20 Apr 2020 17:11:51 (SGT)
Dissemination Date: 20 Apr 2020 17:12:51 (SGT)

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