

#### INSTITUTIONAL RESEARCH

# **Vinati Organics**

**BUY** 

INDUSTRY	СНЕМ	ICALS				
CMP (as on 18	CMP (as on 18 Jun 2018)					
Target Price		Rs	1,185			
Nifty			10,800			
Sensex			35,548			
KEY STOCK DATA	4					
Bloomberg			VO IN			
No. of Shares (m		51				
MCap (Rs bn) / (	52/770					
6m avg traded va	alue (Rs n	nn)	20			
STOCK PERFORM	/ANCE (%	6)				
52 Week high /	low	Rs 1,125/756				
	3M	6M	12M			
Absolute (%)	26.8	(1.9)	7.6			
Relative (%)	21.8	(9.5)	(6.6)			
SHAREHOLDING	PATTER	N (%)				
Promoters		74.01				
FIs & Local MFs		6.28				
FPIs	FPIs					
Public & Others			16.10			
6 865						

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Source: BSE

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### Skilled and selective

Vinati Organics (VO IN) is a diversified chemicals manufacturer with an impeccable product selection history, superior return ratios (FY18 RoE/RoIC: 19.5/25.6%), strong environmental practices and a robust earnings trajectory. VO is a leader in its key 2-Acrylamido-2-Methylpropane products like Sulfonic Acid (ATBS-45% global share), Iso Butyl Benzene (IBB-65% global share) & Iso Butylene(IB-70% domestic share) with technology tie-ups with leading national institutes. An immense option value from Para Amino Phenol (PAP) of Rs 7.0bn (~95% of its FY18 top-line) makes Vinati Organics a business to own. Despite strong capex visibility (of ~Rs 7.5bn), Vinati Organics executed a buy-back of Rs 240mn in Oct-17, this exudes management's confidence in generating strong cash flows.

Exit of Lubrizol in 4QFY18 (a global ATBS supplier) and likely addition of BASF's Ibuprofen plant in USA (link) aiding IBB sales add to near term triggers. Though valuations looked stretched, 28.9/23.5x

FY19/FY20 EPS; we believe VO is likely to trade at a premium to peers due to a large option value (from PAP) and strong cash generation (annual OCF ~Rs 1.2-1.6 bn from FY19-21). We value VO at 25x Jun-20 EPS and resume coverage with a TP of Rs 1,185.

- The company has a strong launch pipeline with PAP, Iso-Butyl Aceto Phenone (IBAP) and Butylated Phenols incrementally adding "Rs 9.0bn to its topline. VO is likely to invest Rs 5.0bn to manufacture PAP, n-1 intermediate for Paracetamol. The product has a revenue potential of Rs 7.0bn. Though there is no clarity on commercial sales of PAP, we expect PAP facility to be commissioned by FY21E.
- Mr. Vinod Saraf, a technocrat promoter works with a meticulous product selection criteria (payback period of <5 years, integration benefits, green manufacturing, cost leadership). The promoters hold 74.01% of equity.

### **Financial Summary**

Rs mn	FY16	FY17	FY18P	FY19E	FY20E	FY21E
Net Sales (in Rs mn)	5,995	6,408	7,434	9,151	11,056	13,146
Growth (%)	(22.3)	6.9	16.0	23.1	20.8	18.9
EBIDTA (in Rs mn)	1,754	2,170	2,109	2,592	3,222	3,849
EBIDTA Margin (%)	29.2	33.9	28.4	28.3	29.1	29.3
APAT (in Rs mn)	1,002	1,403	1,439	1,740	2,137	2,532
EPS (Rs.)	19.5	27.3	28.0	33.9	41.6	49.3
P/E (x)	50.2	35.9	35.0	28.9	23.5	19.9
EV/EBITDA	28.5	23.0	23.3	18.8	15.1	12.6
RoE (%)	20.5	23.0	19.5	19.8	20.1	19.8

Source: Company, HDFC sec Inst Research



Vinati Organics' FY18 Sales was at 7.43bn. It is noteworthy that PAP project is expected generate sales of Rs 7.0bn (~95% of FY18 Sales)

Total demand for PAP in India is to the tune of ~25,000 MTPA and all of it is being imported.

Vinati Organics is setting up a 30,000 MTPA PAP facility and aims at import substitution.

Vinati has been able to develop the desired quality levels for PAP which is more cost effective as imports as of now after almost 15 years of efforts.

### Para Amino Phenol: A potential game changer

- PAP is a n-1 intermediate used to manufacture Paracetamol. Paracetamol is one of the most widely used analgesic (pain reliever) and antipyretic (antifever) drugs. More than 80% of PAP is used worldwide to manufacture Paracetamol while, 7% is used as a rubber antioxidant and 5% is used in dyes.
- Vinati Organics has planned a capex of Rs 5.0bn in setting up a 30,000 TPA capacity of PAP, with an incremental sales potential of Rs 7.0bn.
- While there are conventional methods available to manufacture PAP, Vinati Organics has adopted to manufacture PAP using a single step process (catalytic hydrogenation of Nitrobenzene). The process proposed by VO is a greener and cost efficient giving it an edge over Chinese competitors.

#### **PAP Demand In India (TPA)**

Users of PAP in India	Plant	<b>PAP Demand</b>
Granules India/ Triton Labs	Telangana	8,650
Meghmani Organics	Dahej, Gujarat	5,400
Farmsons	Nandesari, Gujarat	14,400
Vamsi Laboratories	Solapur, MH	850
ShriKrishna Pharma	Vijayada, Telangana	4,500
Pan Drugs	Gujarat	500
Para Products	Ghaziabad, UP	2,500
Bharat Chemicals	Tarapur	1,700

Source: Industry, HDFC Sec Inst Research

- We understand that Vinati has been striving to develop a threshold purity and quality of PAP for the last 15 years.
- The Company has already begun manufacturing PAP on a pilot basis and large scale facility will soon be built.

- The total demand of PAP in India is fully met through imports (~25,000 TPA). Vinati Organics is expected to grab this as an import substitution opportunity with a cost leadership in manufacturing PAP due to its novel manufacturing process (more efficient than Chinese manufacturers). China is the largest manufacturer and consumer of PAP, with a capacity of more than 1,00,000 TPA.
- Vinati Organics' FY18 Sales/gross Block are at Rs 7.43bn/ Rs 6.05bn. It is noteworthy that PAP project is expected generate sales of Rs 7.0bn (~95% of FY18 Sales), with a capex of Rs 5.0bn (~83% of its FY18 gross block).

#### **Global Demand And Capacity (TPA)**

Para Amino Phenol	Demand	Capacity
PAP in China	49,000	110,000
PAP global for Paracetamol	150,000	160,000
PAP global demand for hair dyes	5,000	N.A
PAP India demand	30,000	30,000

#### **Novel Process Of PAP Manufacturing**

Pt/C. H

Source: Industry, HDFC Sec Inst Research



Vinati Organics is putting up a 39,000 MTPA capacity for Butylated Phenols.

Butyaled Phenols is expected to commission in FY20E with a sales potential of Rs 2.0bn and a capex outlay of Rs 1.5bn.

Butylated Phenols is a 400,000 MTPA market globally.

### Butylated phenols and IBAP strengthen the launch pipeline

- Butyl Phenols are intermediates which find applications as raw materials for products that go into a wide variety of industries such as perfumery, inks & resins, plastics and lubricants. Butyl phenols are not directly used for these applications, but act as building blocks for making useful products.
- Vinati Organics plans to introduce 4 products under this product group. Namely, (a) Para-Tertiary Butyl Phenol (PTBP) (b) Ortho-Tertiary Butyl Phenol (OTBP) (c) 2,4-Di Tertiary Butyl Phenol (2,4-DTBP) (d) 2,6-Di Tertiary Butyl Phenol (2,6-DTBP). Almost all quantity of butyl phenols used in India is imported. Around 35-40% of the total quantity finds application in the perfumery industry. Around 15% is used for plastic additives and the remaining butyl phenols are used for inks/resins and lubricants.
- In India PTBP and OTBP are large volume products, globally, 2,6-DTBP and 2,4-DTBP are large volume products. Globally, these di-tertiary butyl phenols are widely used in lubricants, plastic additives and fuel additives The use of 2,6-DTBP as a jet fuel additive is a large volume application globally. Globally, PTBP is also used in poly carbonate manufacturing.
- Some companies that are large volume manufacturers of butyl phenols are SI Group, BASF, Songwon, Oxiris, Chemtura/ Addivant, Eutec, Kaoching, Tasco, DIC. Almost all these butyl phenol manufacturers are forward integrated and they also manufacture antioxidants for plastics and lubricants from di tertiary butyl phenols.
- The estimated capacity of butyl phenols globally is close to 400,000 TPA. However, a large quantity of butylated phenols are captively consumed. Vinati Organics already has a capacity of Iso-Butylene (IB)

- which is a key raw material required to manufacture Butylated Phenols making the project pass filters the company's product selection criteria.
- In India, currently, there are no manufacturers for butyl phenols. Previously, companies like Herdillia (Now SI Group), Balmer Lawrie, Naik Naware Chemical Pvt Ltd tried to manufacture these products. However, due to lack of scale, IB supply constraint, they couldn't manufacture products economically.
- Vinati Organics is looking at this segment as an import substitution opportunity and is putting up a capacity 39,000 MTPA. The company is expected to employ Rs 1.5bn in this project with an expected revenue potential of Rs 2.0bn. The project is expected to commission in FY20E.
- Vinati Organics has been manufacturing Iso Butyl Benzene(IBB) since its inception in 1989, to take this forward and derive synergies from the ready market from IBB customers VO is likely to put up a Rs 1.0 bn capex for manufacturing Iso Butyl Acetophenon (IBAP) which is a forward integration strategy adopted by the company. IBAP is used as a precursor in manufacturing Ibuprofen.
- It has been discovered that BASF, USA has taken up a mega expansion plan of Ibuprofen and is expected to put up an Ibuprofen capacity with a capex of EUR 200 mn. This bodes well for the company as it provides further visibility to the sales of IBAP and IBB to BASF.
- BASF currently is a key customer of Vinati Organics.
   BASF, USA took a maintenance shutdown in FY18 which impacted the sales of IBB, VO had to bear a sales loss for ~2.5 quarters which severly impacted IBB volumes.

IBAP is expected to add ~Rs 1.0-1.5 bn to the company's topline.

The startup date for IBAP has not been disclosed yet and the management is currently reaching out to customers for a stronger visibility in sales. The company is expected to invest Rs 1.0 bn to manufacture IBAP, as per the management the process of manufacturing IBAP is in place (technology tie up with National Chemical Laboratory, Pune) and the management is currently reaching out to customers for a stronger visibility to ensure assured off-take. IBAP is expected to add ~Rs 1.5bn to VO's topline, however clarity with respect to plant start up is awaited.

#### **Butylated Phenols**

	Applications	Total Demand and Imports (TPA)	Major Importing Countries		
Para-Tertiary Butyl Phenol (PTBP)	Technical Grade: Perfumery Standard Grade: Resin/Ink		Korea, Taiwan, Singapore and Russia		
Ortho-Tertiary Butyl Phenol (OTBP)	Perfumery	Switzerland, Taiwan			
2, 4-Di Tertiary Butyl Phenol (2, 4-DTBP)	Anti-oxidants and UV Stabilizers	30,442	Switzerland, Taiwan, Singapore and China.		
2, 6-Di Tertiary Butyl Phenol (2, 6-DTBP)	Anti-oxidants and UV Stabilizers		Switzerland, Taiwan, Singapore and China.		

Source: Industry, HDFC Sec Inst Research



IBAP and Butylated Phenols are a forward integration of IBB and IB.

IBAP and Butylated Phenols may not be margin accretive, however will help in maintaining current margins.

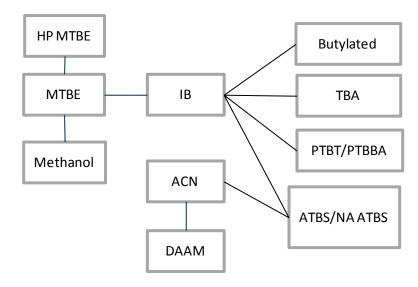
Vinati Organics has been able to make gainful usage of wastes/by-products by selling TBA,TOA, Tertiary Butyl Amine, Hexenes, C10 aromatics etc.

### **Strong Backward and forward integration**

- Vinati Organics' business can be seen as a concert of 3 important value chains (a) ATBS Value Chain (b) IBB Value Chain (c) IB Value Chain. The management of the company uses integration as a key filter in its product selection mechanism.
- Vinati Organics manufactured 2-Acrylamido-2-methylpropane sulfonic acid (ATBS) using Acrylo Nitrile (ACN) and Iso-Butylene (IB). The company later on started manufacturing Iso-Butylene and backwarded integrated. ACN, is also used to manufacture DAAM and TBA. While, IB chain helped the company foray into PTBT, PTBBA. The company then identified Butylated Phenols as a bigger opportunity from the IB chain and is expected to start manufacturing Butylated Phenols from FY20E. Also,

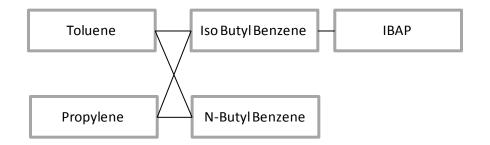
- MTBE is used to manufacture High Purity MTBE and Methanol.
- Vinati uses Toluene and Propylene (refinery outputs) to manufacture Iso-Butyl Benzene and Normal Butyl Benzene. IBB is a key ingredient used in the value chain to manufacture Ibuprofen (a widely used anti-inflammatory and analgesic drug). Vinati Organics is likely to move up the value chain of IBB and will manufacture Iso Butyl Acetophenon (IBAP). The company also manufactures Hexenes and C10 aromatics from Toluene and Propylene.
- We understand from the management of Vinati Organics that a separate team focusing towards 'NEW PRODUCTS' has been set up. We remain excited about this development, as product innovation has been a key strength of the company.

#### **ATBS And IB Value Chain**



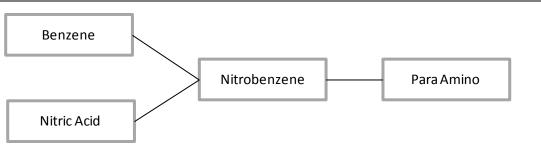


#### **IBB Value Chain**



Source: Company, HDFC Sec Inst Research

### **PAP Block Diagram**



Source: Company, HDFC Sec Inst Research



Vinati Organics has undertaken a de-bottlenecking exercise and is expected to add 4,000 MTPA of ATBS to take the total capacity to 30,000 MTPA.

The management is also evaluating de-bottlenecking of IBB capacity as internal consumption requirements are likely to increase due to forward integration into IBAP.

### Market share gains in ATBS as lubrizol exits

- ATBS contributed to ~50% of the total revenues of Vinati Organics FY18. The company has expanded its ABTS capacity from 2500 MTPA in FY18 to 26,000 MTPA in FY18 and currently has taken up a de-bottlenecking project to further add 4,000 MTPA of ATBS capacity.
- We understand that one of the key player of ATBS globally, Lubrizol has taken an total exit from the market. Lubrizol had ~25% market share in ATBS globally.
- We expect Vinati to be a key beneficiary of this development and garner incremental market share.
   Acting on this news, the management has decided to

- de-bottleneck its existing capacity from 26,000 MTPA to 30,000 MTPA. We expect Vinati Organics to gain ~65% of the market share owing to the capacity expansion and Lubrizol's exit.
- Also, Vinati Organics lost out on ~2.5 quarters of IBB sales due to a maintenance shut down taken by one of its key customers. The plant has now resumed operations and recovery in sales is expected.
- Also the likely addition of BASF's Ibuprofen plant in USA (link) is expected to help the sales growth of IBB and IBAP.

**Steady Capacity Additions (TPA Final Capacity)** 

Products	FY06	FY07	FY08	FY09	FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18	FY19E
ATBS	2,500	3,000	4,000	5,000	10,000	12,000	26,000	26,000	26,000	26,000	26,000	26,000	26,000	30,000
IBB	10,000	10,000	14,000	14,000	14,000	14,000	16,000	16,000	16,000	16,000	16,000	16,000	16,000	25,000
IB	-	-	-	-	-	12,000	12,000	12,000	12,000	12,000	12,000	15,000	15,000	15,000
TBA	-	300	300	500	500	500	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
HPMTBE	-	-	-	-	-	-	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000

Source: Company, HDFC Sec Inst Research



The company started with an IBB plant in 1992. The next product launch came in as ATBS in 2002 and IB project was commenced in 2010.

Typically, new launches for Vinati Organics have been rather slow.

We understand that a new team for new launches has been set-up in order to benefit from diversification.

### Vinati Organics – A journey in short

- Vinati Organics Limited (VOL) was established in 1989 by Mr. Vinod Saraf, an entrepreneur with a background in finance but open enough to venture into speciality chemical manufacture. For a while after its inception, VOL was a single chemical producing manufacturer. VOL was producing Isobutyl benzene, for use in manufacture of Ibuprofen, with a technology they received from Institut Français du Pétrole (IFP), France.
- In 1999, Mr. Vinod Saraf, CMD of Vinati Organics Limited (VOL), approached Dr. Prashant Barve, Head, Process Development and Engineering Group at NCL to explore new opportunities in specialty chemical manufacture. Because of its numerous and diverse applications, ATBS was identified as one of the potential products. The challenge was to innovate a synthetic process that was commercially feasible and profitable. The NCL team not only successfully met this challenge but came up with a highly streamlined, continuous production method minimising the cost and the environmental impact.
- In July 2000, the NCL team demonstrated the manufacture of ATBS at the scale of 1kg. Considering the costs of the raw materials involved and the cost at which the global competitors were selling ATBS at, the process was rejected by VOL as non-feasible. By November'2000. NCL's team tuned up the process in such a way that the raw material cost drastically reduced and the project became viable for VOL to go ahead with. The team also completed basic engineering activity along with the process demonstration to VOL team. With valuable inputs from NCL's team, the plant was ready by July 2002 and testing began in order to streamline the process

- further. In October 2002, the plan spread over 25 acres, built to international safety standard and equipped with remote operation technology, was commissioned at Lote, Maharashtra.
- It seemed, however, that the VOL's rough ride wasn't quite over. By early 2003, various clients from the EU started rejecting the ATBS shipped by Vinati Organics on the quality control (QC) bases. Since there were no global norms set for the acceptable quality of ATBS, VOL provided values for 18 parameters with their product, on basis of which, the quality of ATBS could be assessed. The NCL-VOL team was back on the learning curve with respect to the QC expectations of their global clients. The learning process lasted till 2005, when a breakthrough occurred.
- Only acceptable ATBS for enhanced oil recovery application was the one with polymer weight higher than 4,00,000 amu. The team discovered that the chain transfer agent used in the manufacturing process was causing the polymer to be of lower molecular weight. Once appropriate changes were made, the NCL-VOL team was able to produce the polymer of required molecular weight. This commercial breakthrough in 2005 cleared the path for Vinati Organics to manufacture enhanced oil recovery grade ATBS. There has been a steady progress in the ATBS plant capacity at VOL since then.
- Producing 25,000 tonnes per annum (tpa) and employing 400 people, VOL has become the largest venture in speciality chemical manufacture in the Lote industrial area of Maharashtra state. In fact, it is now the largest manufacturer of ATBS in the world, followed by Lubrizol at 15,000 tpa.



Vinati Organics got their first commercial breakthrough for ATBS in 2005 after years of struggling.

In 2012, Vinati Organics expanded their ATBS capacity to 25,000 MTPA.

In order to backward integrate operations, VO put up a 12,000 MTPA Iso-Butylene plant.

- Vinati Organics has also established a plant of capacity 12,000 tpa for production of isobutylene onsite, thus adopting the 'backward integration' policy to make the manufacture more profitable. While NCL holds the US and worldwide patent for the manufacturing process, Vinati Organics Limited holds the commercial license for the manufacture.
- There are many conventional ways of manufacturing PAP. However, the development of a catalyst and a process for p-Aminophenol via single step catalytic hydrogenation of nitrobenzene is a cost efficient and an environmentally friendly process. Vinati Organics

has been striving to arrive at the right purity and quality of PAP for the last 15 years. p-Aminophenol is mainly used in the production of paracetamol, a mild analgesic drug. The conventional manufacturing route is a multistep process involving iron/acid reduction, which poses a serious environmental problem. The proposed route involves catalytic hydrogenation of nitrobenzene to give directly p-aminophenol with a selectivity of 65%. The bench scale (2 litre) process has been successfully worked upon and a pilot plant (100 kg/day) is commissioned. Based on the data to be collected at pilot scale, it is proposed to commercialize this process for 30,000 TPA scale by Vinati Organics.

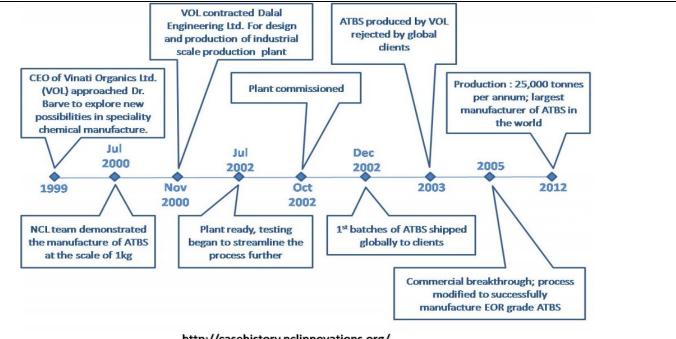
#### **Product Profile**

Product	Market Share	FY18 Revenue Mix (%)	Remarks
ATBS	45% Globally	50	VO will de-bottleneck capacity from 26,000 MTPA
IBB	65% Globally	21	to 30,000 MTPA to increase market share to 65%.  IBB sales set to improve as BASF plans Ibuprofen expansion, IBB capacity expansion likely.
IB	70% Domestic	8	IB derivatives: PTBBA/PTBMB have started contributing to topline from FY18.
MTBE	Largest manufacturer in India	5	The purity level of 99.97% attained by Vinati is the highest in the world.
Butylated Phenols	To be the largest manufacturer in India	Yet to be commissioned	Expected to add Rs 2.0 bn to the top-line from FY20E.
РАР	To be the largest manufacturer in India	Yet to be commissioned	VO is likely to generate Rs 7.0 bn (~94% of its FY18 topline) from sales of PAP, no clarity on start up date.
IBAP	To be the largest manufacturer in India	Yet to be commissioned	Iso Butyl Acetophenone is a precursor to Ibuprofen and forward integrated with
TB Amine	Only manufacturer in India	2-3%	IB derivatives, has started contributing to topline from FY17.
TBA TOA	Only manufacturer in India Only manufacturer in India	4	IB derivatives, has started contributing to topline from FY17.

Source: Company, HDFC Sec Inst Research



#### **ATBS Journey**



http://casehistory.nclinnovations.org/

Source: Industry, HDFC Sec Inst Research



Vinati Organics has partnered with significant national institutes viz. National Chemical Laboratory(Pune, India), Institut Francais du Petrole (France), Saipem(Italy)as their technology/R&D partner.

Vinati Organics has a sticky client base and caters to MNC's like Clariant, BASF, Dow, NALCO, Shasun.

### Tie-ups and achievements

- IFC invested \$16mn (\$11mn ECB and \$5mn by FCCB) in the company in 2011 by subscribing to FCCBs. The IFC's investment objective clearly states that the company's focus was on investing in green manufacturing and fostering a healthy business model with apt filters in product selection. Vinati Organics was able to attract a credible investor by the virtue of its strong SHE practices and quality of business.
- Vinati Organics won a gold rating by EcoValdis for CSR. EcoValdis is a CSR rating agency strict criteria's in place. The EcoVadis CSR rating methodology is the blueprint of the CSR assessment program which assesses the quality of a company's CSR management system. The process captures and analyzes information and distills it into a scorecard with a Rating on a 0 to 100 scale.
- A Corporate Social Responsibility (CSR) assessment is an evaluation of how well a company has integrated the principles of CSR into their business. The rating criteria is as follows, Bronze: EcoVadis rating between 37 and 45, Silver: EcoVadis rating between 46 and 61 and Gold: EcoVadis rating between 62 and 100
- Vinati Organics has attained 99.8% purity levels for IBB and is considered as the best in the world. The company has achieved 99.97% purity levels for HP-MTBE and is the highest anybody has attained till now. Vinati Organics has also reached a 0.5% variation level in purity standards of ATBS vis-à-vis 3% tolerance levels globally.

#### **Journey**

1989	Incorporation of VOL
1992	IBB plant comes on stream with 1,200 MT production capacity
1996	Capacity expansion of IBB to 3,000 MT
1997	Capacity expansion of IBB to 5,000 MT
2002	ATBS plant started operations with 1,000 MT production capacity
2006	IBB capacity expansion to 10,000 MT. ATBS capacity expansion to 3,600 MT
2007	Started n-tertiary Butylacrylamide (TBA) production
2008	IBB capacity expansion to 14,000 MT
2009	ATBS capacity expansion to 12,000 MT. TBA capacity expansion to 500 MTA
2010	Isobutylene plant comes on stream with a capacity of 12,000 MT
2011	Announced capex for DAAM plant.
2012	Commissioned the HP MTBE plant with a capacity of 6000 MTPA
2013	Completed construction of DAAM plant, de-bottlenecked IBB capacity to 16000 TPA and completed ATBS expansion $$

2014 Invested Rs 200 mn in zero discharge and wastage facility. 2015 Development of multiple new products like PTBT, PTBBA.

2015 Development of multiple new products like PIBI, PIBBA

Gained a gold medal from EcoValdis CSR evaluation program.

2017 Announced capex on Butylated Phenols, PAP and IBAP.

2018 Announced de-bottlenecking of ATBS capacity from 26,000 MTPA to 30,000 MTPA.

#### **Tie Ups**

	Tie up						
ATBS	National Chemical Laboratory, Pune						
IBB	INSTITUT FRANCAIS DU PETROLE (IFP), France						
IB	Saipem SpA, Italy						
IBAP	National Chemical Laboratory, Pune						
PAP	National Chemical Laboratory, Pune						
PTBT/PTBBA	IICT, Hyderabad						
Courses Company LIDEC Con last December							

Source: Company, HDFC Sec Inst Research

to 26.000 MTPA.



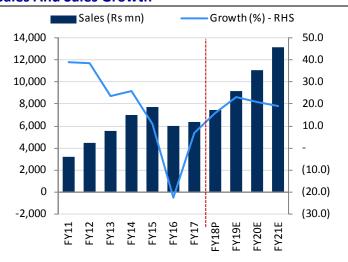
Sales growth of 16.0% in FY18 was largely due to higher crude oil prices (cost+delta model). Volume growth was subdued due to loss of sales in IBB.

Absolute EBITDA is expected to be protected as VO passes on RM inflation. We are building in 28.3%/29.1%/29.3% EBITDA margin in FY19E,FY20E,FY21E.

We expect a marginal improvement in RoIC to the tune of 200 bps from FY18 to FY20E as de-bottlenecking of ATBS/IBB is expected to improve economies of scale.

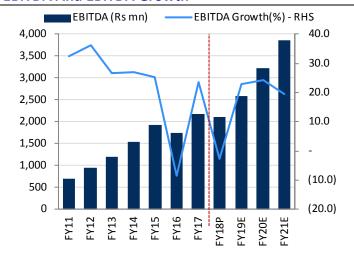
### **Financial analysis**

#### **Sales And Sales Growth**



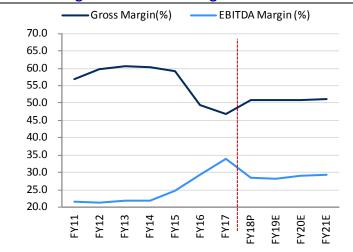
Source: Company, HDFC sec Inst Research

#### **EBITDA And EBITDA Growth**



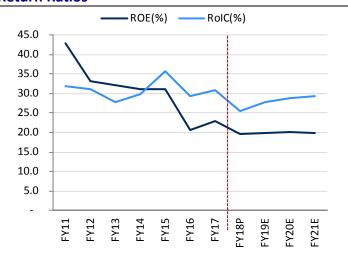
Source: Company, HDFC sec Inst Research

#### **Gross Margin And EBITDA Margin**



Source : Company, HDFC sec Inst Research

#### **Return Ratios**



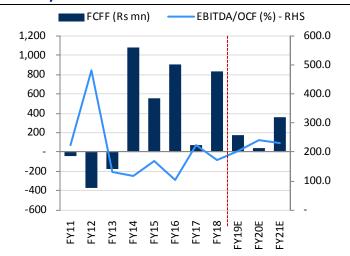
Source: Company, HDFC sec Inst Research



Operating profit/Operating Cash flows(%) are consistently over100% and are expected to cross 200% in FY19E.

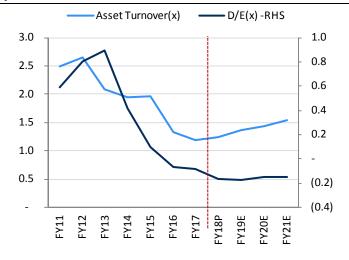
We expect Vinati Organics to be debt free in FY19E and asset turns are expected to improve from 1.2x to 1.5x from FY18 to FY20E.

#### **EBITDA/OCF vs FCFF**



Source: Company, HDFC sec Inst Research

#### D/E vs Asset Turns





ATBS capacity is expected to reach 30,000 MTPA by the end of FY19E.

We expect Vinati organics to improve its ATBS market share from 45% to 65% globally by FY20E.

IBB volumes are expected to increased due to higher demand for Ibuprofen and incremental capacities being put up globally.

Internal consumption of IB is likely to increased due to captive consumption of IB for Butylated Phenols.

#### **Assumptions**

FY13	FY14	FY15	FY16	FY17	FY18	FY19E	FY20E	FY21E
16,000	16,000	16,000	16,000	16,000	16,000	25,000	25,000	25,000
13,493	13,898	14,315	14,744	14,744	14,302	16,876	19,070	21,549
3.0	3.0	3.0	3.0	-	(3.0)	18.0	13.0	13.0
84.3	86.9	89.5	92.2	92.2	89.4	67.5	76.3	86.2
151.7	174.6	162.2	120.9	110.6	110.6	126.7	126.7	126.7
29.2	15.1	(7.1)	(25.5)	(8.5)	0.1	14.5	-	-
2,047	2,426	2,322	1,782	1,630	1,582	2,138	2,416	2,730
33.1	18.5	(4.3)	(23.3)	(8.5)	(3.0)	35.1	13.0	13.0
	16,000 13,493 3.0 84.3 151.7 29.2 2,047	16,000 16,000 13,493 13,898 3.0 3.0 84.3 86.9 151.7 174.6 29.2 15.1 2,047 2,426	16,000     16,000     16,000       13,493     13,898     14,315       3.0     3.0     3.0       84.3     86.9     89.5       151.7     174.6     162.2       29.2     15.1     (7.1)       2,047     2,426     2,322	16,000     16,000     16,000     16,000       13,493     13,898     14,315     14,744       3.0     3.0     3.0     3.0       84.3     86.9     89.5     92.2       151.7     174.6     162.2     120.9       29.2     15.1     (7.1)     (25.5)       2,047     2,426     2,322     1,782	16,000     16,000     16,000     16,000     16,000       13,493     13,898     14,315     14,744     14,744       3.0     3.0     3.0     -       84.3     86.9     89.5     92.2     92.2       151.7     174.6     162.2     120.9     110.6       29.2     15.1     (7.1)     (25.5)     (8.5)       2,047     2,426     2,322     1,782     1,630	16,000       16,000       16,000       16,000       16,000         13,493       13,898       14,315       14,744       14,744       14,302         3.0       3.0       3.0       -       (3.0)         84.3       86.9       89.5       92.2       92.2       89.4         151.7       174.6       162.2       120.9       110.6       110.6         29.2       15.1       (7.1)       (25.5)       (8.5)       0.1         2,047       2,426       2,322       1,782       1,630       1,582	16,000       16,000       16,000       16,000       16,000       25,000         13,493       13,898       14,315       14,744       14,744       14,302       16,876         3.0       3.0       3.0       -       (3.0)       18.0         84.3       86.9       89.5       92.2       92.2       89.4       67.5         151.7       174.6       162.2       120.9       110.6       110.6       126.7         29.2       15.1       (7.1)       (25.5)       (8.5)       0.1       14.5         2,047       2,426       2,322       1,782       1,630       1,582       2,138	16,000     16,000     16,000     16,000     16,000     25,000     25,000       13,493     13,898     14,315     14,744     14,744     14,302     16,876     19,070       3.0     3.0     3.0     -     (3.0)     18.0     13.0       84.3     86.9     89.5     92.2     92.2     89.4     67.5     76.3       151.7     174.6     162.2     120.9     110.6     110.6     126.7     126.7       29.2     15.1     (7.1)     (25.5)     (8.5)     0.1     14.5     -       2,047     2,426     2,322     1,782     1,630     1,582     2,138     2,416

ATBS	FY13	FY14	FY15	FY16	FY17	FY18	FY19E	FY20E	FY21E
Installed Capacity(MT)	26,000	26,000	26,000	26,000	26,000	26,000	30,000	30,000	30,000
Unit sold	13,625	14,300	19,475	17,626	19,036	21,701	25,174	27,691	29,906
YoY %	9.0	5.0	36.2	(9.5)	8.0	14.0	16.0	10.0	8.0
Utilisation	52.4	55.0	74.9	67.8	73.2	83.5	83.9	92.3	99.7
Realistion per unit (Rs/kg)	163.4	197.2	179.7	151.9	150.4	174.2	182.9	192.0	201.6
YoY %	(4.3)	20.7	(8.9)	(15.4)	(1.0)	15.8	5.0	5.0	5.0
Total sales value (Rs In mn)	2,226	2,820	3,499	2,678	2,864	3,780	4,604	5,318	6,031
YoY %	4.3	26.7	24.1	(23.5)	6.9	32.0	21.8	15.5	13.4

Isobutylene	FY13	FY14	FY15	FY16	FY17	FY18	FY19E	FY20E	FY21E
Installed Capacity(MT)	12,000	12,000	12,000	12,000	15,000	15,000	15,000	15,000	15,000
Total Unit sold/Production	8,400	9,600	12,000	11,525	12,990	14,944	15,444	16,288	17,055
YoY %	7.7	14.3	25.0	(4.0)	12.7	15.0	3.3	5.5	4.7
Utilisation	70.0	80.0	100.0	96.0	86.6	99.6	103.0	108.6	113.7
Realistion per unit (Rs/kg)	114.3	154.8	126.7	72.5	74.0	74.7	80.0	80.0	80.0
YoY %	50.1	35.5	(18.2)	(42.7)	2.0	1.0	7.0	-	-
Total sale value (Rs In mn)	560	867	887	508	544	604	659	673	686
YoY %	61.9	54.8	2.3	(42.7)	7.1	11.1	9.1	2.0	2.0

Source: HDFC Sec Inst Research



Mrs. Vinati Saraf Mutreja has played an instrumental role in gaining ATBS market share.

Mr. Vinod Saraf spearheads the product ideation function of the company.

## **Management team**

Name	Category/Designation	Professional Details
Mr. Vinod Saraf	Promoter, MD	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.
Mrs. Vinati Saraf Mutreja	Promoter, 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).
Mrs. Viral Saraf Mittal	Promoter, Director (Corporate Strategy)	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.
Mr. Girish M. Dave	Non Executive Chairman and Director	He is a Mcom, LLB and CAIIB graduate. He has more than 4 decades of experience in the legal field.
Mr. A.A. Krishnan	Independent Non- Executive	He is a Chemical Engineer and has more than 4 decades of experience in the Petro Chemical Industry.
Mr. Sunil Saraf	Promoter, Non- Independent Non- Executive	He is a Commerce Graduate from the Rajasthan University.
Mr. C.B. Gokhale	Independent Non- Executive	He has a vast experience in advisory/consultancy of building or architecture.
Mr. Mohit Mutreja	Promoter, Non- Independent Non- Executive	He attended the University of Pennsylvania, where he graduated summa cum laude in Bachelor of Science in Economics (Finance) from the Wharton School and Bachelor of Engineering in Computer Science. He previously worked at Goldman, Sachs and Co., Deutsche Bank Securities Inc. and Citadel Investment Group.

Source: Company, HDFC Sec Inst Research



Vinati Organics is exposed to the risk of Rupee/Dollar fluctuation.

The company derives ~75% of its revenues from exports and an appreciation in rupee could hurt export revenues.

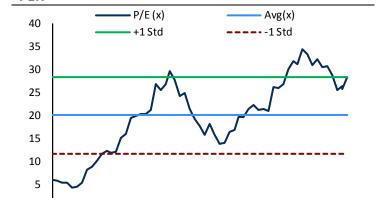
Average 5 year P/E for VO has been 20x, while currently VO is trading at P/E of 35.0x which is well over 1 standard deviation. **PER** 

We believe the valuations are stretched and value VO at 25x FY20E EPS.

### **Risks, Outlook and Valuation**

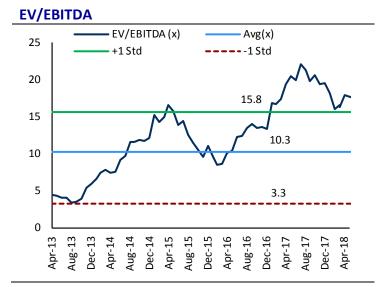
- We expect Vinati Organics to execute 3 projects with a capex of Rs 8.0 bn by FY21E and reap benefits of the same over a span of 2-3 years. VO has a strong launch pipeline and is expected to grow its Sales/EBITDA/PAT by a 3 year CAGR of 20.9%/22.2%/20.7% respectively.
- Vinati Organics has been pursuing to commercialize the PAP project for the last 15 years, though the pilot plant for PAP has started we believe any purity/quality related issues in PAP can lengthen the process of commercialization of the plant.
- Mr. Vinod Saraf's (Managing Director) presence in the management of Vinati Organics has been of a monumental importance. We believe it's a threat to VO, if due to unanticipated reasons Mr Vinod Saraf has to retire from his current role.

- New product launches and product selection are key variables that can affect the stock, given that the management follows a strict criteria for product selection we believe new launches come at a slow rate.
- We remain believers in Vinati Organics timely execution of projects and unmatchable product selection. Vinati Organics is expected to report superior return ratios with a prudent capital allocation strategy. We thus value Vinati Organics at a premium to its Chemical peers and resume coverage. We value Vinati Organics at 25x June'20 EPS to arrive at a TP of Rs 1,185.



Dec-14 Apr-15 Aug-16

Apr-16





#### **Income Statement**

Year ending March (Rs mn)	FY16	FY17	FY18P	FY19E	FY20E	FY21E
Net Revenues	5,995	6,408	7,434	9,151	11,056	13,146
Growth (%)	(22.3)	6.9	16.0	23.1	20.8	18.9
Material Expenses	2,963	3,005	3,776	4,647	5,627	6,716
Employee Expenses	359	419	490	549	614	688
Other Expenses	920	814	1,059	1,365	1,592	1,893
EBITDA	1,754	2,170	2,109	2,592	3,222	3,849
EBITDA Margin (%)	29.2	33.9	28.4	28.3	29.1	29.3
EBITDA Growth (%)	(8.6)	23.7	(2.8)	22.9	24.3	19.5
Depreciation	185	216	234	302	385	468
EBIT	1,568	1,953	1,876	2,290	2,837	3,382
Other Income (Incl. EO Items)	376	125	170	180	190	200
Interest	79	19	12	10	6	2
PBT	1,866	2,060	2,034	2,460	3,021	3,579
<b>Exceptional Items</b>	0	0	0	0	0	0
PBT After Exceptional Items	1,866	2,060	2,034	2,460	3,021	3,579
Tax (Incl Deferred)	550	657	595	720	884	1,047
RPAT	1,316	1,403	1,439	1,740	2,137	2,532
Minority Interest	0	0	0	0	0	0
Extraordinary Items	314	0	0	0	0	0
APAT	1,002	1,403	1,439	1,740	2,137	2,532
APAT Growth (%)	(13.5)	40.1	2.6	21.0	22.8	18.5
Adjusted EPS (Rs)	19.5	27.3	28.0	33.9	41.6	49.3
AEPS Growth (%)	(13.5)	40.1	2.6	21.0	22.8	18.5

Source: Company, HDFC sec Inst Research

#### **Balance Sheet**

FY16	FY17	FY18P	FY19E	FY20E	FY21E
103	103	103	103	103	103
5,305	6,697	7,864	9,535	11,542	13,882
5,408	6,800	7,967	9,638	11,645	13,985
-	-	-	-	-	-
133	148	3	3	-	-
288	23	152	102	52	2
421	171	155	105	52	2
492	730	837	737	637	337
6,321	7,700	8,959	10,480	12,334	14,325
3,819	4,676	4,568	5,541	5,955	6,288
248	74	349	174	674	1,174
-	-	-	-	-	-
-	-	-	-	-	-
175	191	253	253	253	253
-	-	-	-	-	-
4,242	4,941	5,171	5,967	6,882	7,714
447	651	822	1,033	1,373	1,599
1,148	1,405	1,771	1,830	2,352	2,921
14	536	650	824	1,050	1,249
750	666	1,370	1,597	1,638	1,953
269	12	15	18	22	26
2,628	3,270	4,629	5,302	6,436	7,748
223	327	634	596	783	930
325	183	206	193	200	208
549	511	841	789	984	1,138
2,079	2,760	3,788	4,513	5,452	6,610
6,321	7,700	8,959	10,480	12,334	14,325
	5,305 5,408	103 103 5,305 6,697 5,408 6,800 133 148 288 23 421 171 492 730 6,321 7,700  3,819 4,676 248 74 175 191 175 191 4,242 4,941 447 651 1,148 1,405 14 536 750 666 269 12 2,628 3,270 223 327 325 183 549 511 2,079 2,760	103 103 103 5,305 6,697 7,864 5,408 6,800 7,967 -	103       103       103       103         5,305       6,697       7,864       9,535         5,408       6,800       7,967       9,638         -       -       -       -         133       148       3       3         288       23       152       102         421       171       155       105         492       730       837       737         6,321       7,700       8,959       10,480         3,819       4,676       4,568       5,541         248       74       349       174         -       -       -       -         175       191       253       253         -       -       -       -         4,242       4,941       5,171       5,967         447       651       822       1,033         1,148       1,405       1,771       1,830         14       536       650       824         750       666       1,370       1,597         269       12       15       18         2,628       3,270       4,629       5,302	103       103       103       103       103         5,305       6,697       7,864       9,535       11,542         5,408       6,800       7,967       9,638       11,645         -       -       -       -         133       148       3       3       -         288       23       152       102       52         421       171       155       105       52         492       730       837       737       637         6,321       7,700       8,959       10,480       12,334         3,819       4,676       4,568       5,541       5,955         248       74       349       174       674         -       -       -       -       -         175       191       253       253       253         -       -       -       -       -         4,242       4,941       5,171       5,967       6,882         447       651       822       1,033       1,373         1,148       1,405       1,771       1,830       2,352         14       536       650       824

Source: Company, HDFC sec Inst Research



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#### **Cash Flow Statement**

(Rs mn)	FY16	FY17	FY18P	FY19E	FY20E	FY21E
Reported PBT	1,866	2,060	2,034	2,460	3,021	3,579
Non-operating & EO Items	(35)	(125)	(170)	(180)	(190)	(200)
Interest Expenses	33	19	12	10	6	2
Depreciation	184	216	234	302	385	468
Working Capital Change	73	(747)	(392)	(498)	(898)	(844)
Tax Paid	(447)	(454)	(482)	(820)	(984)	(1,347)
OPERATING CASH FLOW (a)	1,674	969	1,235	1,275	1,340	1,659
Capex	(766)	(899)	(401)	(1,099)	(1,300)	(1,300)
Free Cash Flow (FCF)	908	70	834	176	40	359
Investments	-	-	-	-	-	-
Non-operating Income	62	125	170	180	190	200
Others	(18)	-	-	-	-	-
INVESTING CASH FLOW ( b )	(722)	(774)	(231)	(919)	(1,110)	(1,100)
Debt Issuance/(Repaid)	(252)	(250)	(16)	(50)	(53)	(50)
Interest Expenses	(33)	(19)	(12)	(10)	(6)	(2)
FCFE	(1,051)	(1,167)	(429)	(1,159)	(1,359)	(1,352)
Share Capital Issuance	-	-	(240)	0	0	0
Dividend	(217)	(31)	(278)	(308)	(370)	(432)
Others	-	20	245	240	240	240
FINANCING CASH FLOW ( c )	(502)	(279)	(300)	(129)	(189)	(244)
NET CASH FLOW (a+b+c)	450	(84)	704	227	41	314
EO Items, Others	1	-	-	-	-	(1)
Closing Cash & Equivalents	750	666	1,370	1,597	1,638	1,953

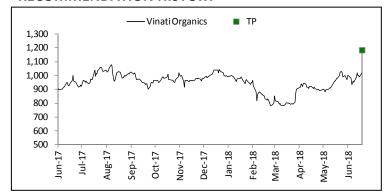
Source: Company, HDFC sec Inst Research

### **Key Ratios**

Key Ratios							
	FY16	FY17	FY18P	FY19E	FY20E	FY21E	
PROFITABILITY (%)							
GPM	49.4	46.9	50.8	50.8	50.9	51.1	
EBITDA Margin	29.2	33.9	28.4	28.3	29.1	29.3	
APAT Margin	16.7	21.9	19.4	19.0	19.3	19.3	
RoE	20.5	23.0	19.5	19.8	20.1	19.8	
RoIC (or Core RoCE)	29.3	30.9	25.6	27.7	28.9	29.2	
RoCE	18.5	20.3	17.4	18.0	18.8	19.0	
EFFICIENCY	-	-	-	-	-	-	
Tax Rate (%)	35.4	31.9	29.3	29.3	29.3	29.3	
Fixed Asset Turnover (x)	1.3	1.2	1.2	1.4	1.4	1.5	
Inventory (days)	23.8	38.3	43.4	45.4	49.6	48.2	
Debtors (days)	61.1	82.7	93.4	80.6	85.0	88.1	
Other Current Assets (days)	0.8	31.6	34.3	36.3	<i>37.9</i>	37.7	
Payables (days)	11.9	19.3	33.5	26.2	28.3	28.0	
Other Current Liab & Provns	17.3	10.8	10.9	8.5	7.2	6.3	
(days)		10.0	10.5				
Cash Conversion Cycle (days)	56.5	122.5	126.7	127.5	137.0	139.7	
Debt/EBITDA (x)	0.2	0.1	0.1	0.0	0.0	0.0	
Net D/E (x)	(0.1)	(0.1)	(0.2)	(0.2)	(0.1)	(0.2)	
Interest Coverage (x)	20.0	104.9	154.9	225.5	462.5	1,599.3	
PER SHARE DATA (Rs)	-	-	-	-	-	-	
EPS	19.5	27.3	28.0	33.9	41.6	49.3	
CEPS	23.1	31.5	32.5	39.7	49.1	58.4	
Dividend	4.0	0.5	4.5	5.0	6.0	7.0	
Book Value	105.2	132.3	155.0	187.5	226.6	272.1	
VALUATION	-	-	-	-	-	-	
P/E (x)	50.2	35.9	35.0	28.9	23.5	19.9	
P/BV (x)	9.3	7.4	6.3	5.2	4.3	3.6	
EV/EBITDA (x)	28.5	23.0	23.3	18.8	15.1	12.6	
EV/Revenues (x)	8.3	7.8	6.6	5.3	4.4	3.7	
OCF/EV (%)	3.3	1.9	2.5	2.6	2.8	3.4	
FCF/EV (%)	(1.5)	(1.8)	(0.8)	(2.3)	(2.7)	(2.7)	
FCFE/Mkt Cap (%)	(2.1)	(2.3)	(0.9)	(2.3)	(2.7)	(2.7)	
Dividend Yield (%)	0.4	0.1	0.5	0.5	0.6	0.7	
Courses Commons LIDEC and Inst De							

Source: Company, HDFC sec Inst Research

#### **RECOMMENDATION HISTORY**



Date	CMP	Reco	Target	
18-Jun-18	1,020	BUY	1,185	

#### **Rating Definitions**

BUY : Where the stock is expected to deliver more than 10% returns over the next 12 month period

NEUTRAL : Where the stock is expected to deliver (-)10% to 10% returns over the next 12 month period

SELL : Where the stock is expected to deliver less than (-)10% returns over the next 12 month period



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#### Disclosure:

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