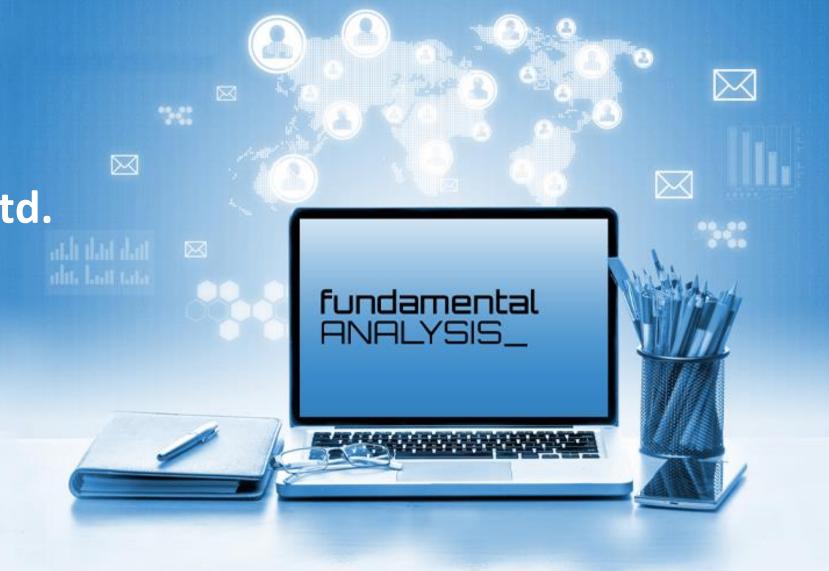


July 14, 2022











Industry	LTP	Recommendation	Base Case Fair Value	Bull Case Fair Value	Time Horizon
Engineering	Rs 1803	Buy in Rs 1790-1820 band & add on dips in Rs 1630-1650 band	Rs 1996	Rs 2138	2 quarters

HDFC Scrip Code	IONEXCEQNR
BSE Code	500214
NSE Code	IONEXCHANG
Bloomberg	ION IN
CMP Jul 14, 2022	1803.4
Equity Capital (Rs cr)	14.7
Face Value (Rs)	10
Equity Share O/S (cr)	1.5
Market Cap (Rs cr)	2644.9
Book Value (Rs)	460.8
Avg. 52 Wk Volumes	27,600
52 Week High (Rs)	2947.0
52 Week Low (Rs)	1562.0

Share holding Pattern % (Jun 2022)					
Promoters	27.0				
Institutions	12.5				
Non Institutions	44.3				
Total	100.0				



for details about the ratings, refer at the end of the report

\* Refer at the end for explanation on Risk Ratings

### **Fundamental Research Analyst**

Atul Karwa

atul.karwa@hdfcsec.com

#### Our Take:

Ion Exchange (IEIL) specializes in water and environment management with over five decades of experience. There is huge potential in water and wastewater treatment as the demand for water is going to outstrip the supply causing water scarcity in many areas of India. IEIL's operating performance will benefit over the medium term from its healthy unexecuted orders and timely execution of its order from the Sri Lankan Water Board and the order received from UP SWSM. Outstanding order book of Rs 2,674cr including the Sri Lanka and UP projects provides a strong visibility.

Focus of the Government on optimum utilisation of water due to the declining ground water levels could provide a strong boost to the water treatment chemicals business. Expansion of membrane and chemical capacity indicates strong demand for its products and would drive its revenues in the coming years.

### **Valuation & Recommendation:**

The expansion of the membrane facility and greenfield expansion of chemicals capacity (environment clearance awaited) are likely to be strong growth drivers for IEIL especially when the demand drivers for its products/services remain robust. We expect IEIL's Revenue/EBITDA/PAT to grow at 10/13/12% CAGR over FY22-FY24E, led by increased execution of orders. We believe investors can buy the stock in Rs 1790-1820 band and add on dips to Rs 1630-1650 band (11.5x FY24E EPS) for a base case fair value of Rs 1996 (14x FY24E EPS) and bull case fair value of Rs 2138 (15x FY24E EPS) over the next 2 quarters.

### **Financial Summary**

Financial Summary									
Particulars (Rs cr)	Q4FY22	Q4FY21	YoY (%)	Q3FY22	QoQ (%)	FY21	FY22	FY23E	FY24E
Operating Income	496	445	11.5	388	27.9	1,450	1,577	1,755	1,919
EBITDA	95	85	11.0	43	122.0	202	213	244	272
APAT	83	70	18.4	28	192.4	144	163	185	203
Diluted EPS (Rs)	58.4	49.3	18.4	20.0	192.4	101.2	114.4	129.9	142.6
RoE-%						33.1	28.0	25.0	22.2
P/E (x)						17.8	15.8	13.9	12.7
EV/EBITDA						10.4	9.8	7.8	6.6

(Source: Company, HDFC sec)







#### **Q4FY22 Result Review**

Revenues of the company grew by 11.5% YoY in Q4FY22 to Rs 496cr driven by robust growth across all segments. Revenues from the Engineering segment expanded by 10.3% to Rs 321cr. Chemicals and Consumer Products revenues grew 16.7% and 12.7% respectively. EBITDA increased by 11% YoY to Rs 95cr whereas EBITDA margin compressed marginally to 19.1% on account of raw material inflation and higher growth in employee expenses. PAT growth remained strong, up by 18% YoY to Rs 83cr while PAT margins witnessed an expansion of ~100bps to 16.7%.

Order backlog at the end of the quarter stood at Rs 2674cr (including Sri Lanka and UP projects). The company intends to complete its expansion of membrane capacity by the end of FY23. Total capex envisaged for FY23 is ~Rs 60-70cr. Additionally, the company is waiting for environment clearance for greenfield expansion of its chemical capacity expansion which would entail capex of ~Rs 200-250cr over FY23-FY24.

### **Key Triggers**

### Huge potential in water and wastewater treatment

India is one of the most water-stressed regions in the world, with 600 million Indians facing extreme water stress, according to a NITI Aayog report from 2018. The report warns that by 2030 water demand could be twice the existing supply which could lead to severe water scarcity for millions of people and a ~6% loss to the country's GDP. Thus, the importance of managing water needs and resources in an efficient manner is becoming ever more crucial. Reusing and recycling water resources is essential in maintaining a sustainable future.

The UN Waste Water Assessment Programme report states that high-income countries treat approximately 70% of the wastewater that is generated. The ratio drops to 38% in upper-middle-income countries, 28% in lower-middle-income countries and 8% in low-income countries. This adds up to around 20% of the wastewater being treated globally. According to a recent report published by Central Pollution Control Board (March 2021), India's current water treatment capacity is 27.3% and the sewage treatment capacity is 18.6 % (with another 5.2 % capacity being added). Though India's waste and sewage treatment capacity is higher than the global average of around 20%, considering the enormity of the problem, it is far from adequate, and without swift measures, there could be serious complications without a prompt response.

Robust governmental initiatives, such as the Atal Mission for Rejuvenation and Urban Transformation, National Mission for Clean Ganga, Jal Jeevan Mission, and Community Drinking Water Schemes, contribute to the growth of the Indian water and wastewater treatment market.

In Budget 2022, the Jal Shakti Ministry has been allocated Rs 86,189 crore, an increase of 24 per cent from Rs 69,052 crore given in 2021-22. The Drinking Water and Sanitation Department has received Rs 67,221 crore in the Union Budget, whereas the Water Resources, River







Development, and Ganga Rejuvenation Department has been allocated Rs 18,967.88 crore. Under the Jal Jeevan Mission, Rs 60,000 crore has been allocated to provide tap water connections to 3.8 crore households in 2022-23.

Increased expenditure by the Government on water treatment and management schemes could drive strong growth for companies like IEIL. The outstanding order book of the company stood at Rs 1,268cr at the end of FY22. In addition to this, IEIL has Rs 250cr worth of orders from its Sri Lanka project and Rs 1,156cr from UP State Water & Sanitation Mission. Bid pipeline continues to remain strong with Rs 6,700cr of orders.

#### Established market position in the water treatment business

The Ion Exchange group has strong expertise in providing full range of products in the water treatment segment. The group has an established brand because of its longstanding presence in the water treatment business and strong nationwide aftersales service. Additionally, revenue is diversified, with 58% sales from the engineering division, 34% from the chemicals division, and 8% from the consumer products division in FY22. Also, the Ion Exchange group caters to customers in diverse industries such as steel, engineering, power auto, food and beverages, and paper industries. The diverse end-user industry base protects the Ion Exchange group from downturn in any one industry.

### **Expanding market for water and water treatment chemicals**

The market for water and water treatment chemicals in India is expected to expand leaps and bounds due to the focus on optimum utilization of water resources. Increased investments by the Government, industry and rapid urbanization is expected to lead to greater demand for water treatment chemicals. Expansion in Oil and Gas refineries and increasing treated water requirement from power, chemicals and F&B sectors continues to drive water treatment chemicals market in India. Water treatment chemicals are used for the treatment of water in boilers, cooling towers, and effluents from industries and sewage treatment plants.

The global water treatment chemicals market size is projected to grow from USD 39.1 billion in 2021 to USD 61.1 billion by 2026, at a CAGR of 9.3% between 2021 and 2026. In India, Water Treatment Chemicals Market size was valued at over USD 600 million in 2020 and the market is projected to register a CAGR of over 9.5% in terms of revenue during the forecast period (2021-2026). Coagulants and Flocculants constitute the largest segment of approximately 38% of the total market size, followed by biocides and disinfectants which constitute close to 19%. Other large segments are defoamers (7% share) and pH adjusters (5% share). Chemicals business for IEIL remains very profitable and there is a good visibility for topline and bottomline growth here.

## Increasing awareness to drive demand for water purifiers

With health consciousness rising and awareness on the importance of safe drinking water rising, the water purifiers market is growing at a healthy pace. The steadily growing market is also witnessing strong competition in both the organised and unorganised segment. The market







growth was stagnant earlier due to low penetration of electricity and less purchasing power. The market witnessed a double digit CAGR during FY14-FY20 both in terms of revenue and volume, due to increase in awareness about declining water quality and about benefits of using water purifier. According to Imarc, the Indian water purifier market is one of the largest in the Southeast Asian region and expected to grow at CAGR of over 10% during 2022-2027. IEIL is the pioneer of the revolutionary RO technology, in India, and its brand Zero B has emerged as one of the premier brand in this segment.

### Membrane manufacturing plant to reduce costs

IEIL is in the process of expanding its membrane manufacturing plant. Earlier it had inaugurated a new membrane manufacturing plant in Goa in Oct-2017, at a cost of Rs 50cr. This has helped the company in reducing cost of technology and gain market share in the fast growing RO water purification system. RO is one of the greenest solutions for industrial wastewater management as it does not require use of any harmful chemicals within the process of producing the permeate, which is the major factor for the growth of the market, nationwide.

The Global Ion Exchange Membrane Market was valued at \$830mn in FY20 and is projected to grow at a CAGR of 3-4% through FY28 to \$1.1bn, owing to the growing demand for safe drinking water. IEIL is likely to be the key beneficiary of growing trend in this technology with additional potential for exports. The expansion is expected to be completed by Q4FY23. In addition, its plan for a greenfield plant at a cost of Rs 200+ Cr is awaiting regulatory approvals. This can go on stream in FY24-FY25. These new capacities could lead to high organic growth for the company.

### **Risks & Concerns**

## Working capital-intensive operations

Although the company receives mobilisation advance from customers, its operations are working capital intensive with receivables of 111 days in FY22. The group is partly protected against working capital issues due to back-to-back arrangements with suppliers.

### Susceptibility to economic cycles

The engineering and capital goods industries are linked to economic cycles, and thus, investment tends to be cyclical. The slowdown in the Indian economy resulted in a reduction in capital expenditure in sectors such as steel, infrastructure, and power which are key customer segments for IEIL. Thus the investment cycle could adversely impact its revenues.

## Foreign exchange volatility

Almost 31% of the revenues are earned from exports and the company is exposed to changes in exchange rates. This could impact its profits in times of strengthening rupee.







### Delays in implementation of government initiatives

Although the government has announced big plans, timely implementation holds the key.

### **Competition from peers**

In the consumer products segment, Eureka Forbes and Kent are the leaders in water purification and the company faces stiff competition from them. Consumer products segment continues to make losses after so many years and despite many assurances it is yet to turn profitable.

### Low shareholding of promoters

Promoters (consisting of different families) together own 27% of capital.

### Receivables from Sri Lanka could get delayed

Despite being protected in terms of receivables, the pending order of ~Rs 250cr from the Srilanka project could get into jeopardy due to the troubles faced by the country.

### **Delayed capex**

Capex for greenfield facility has been delayed for some time due to regulatory approvals.

### Seasonality in revenue

IEIL faces seasonality in the sense that Q4 is the best quarter for Engineering division historically.

### Low dividend payout

Dividend and capital allocation policies can be improved. Currently the dividend payout is just 9%. It holds a large amount of cash compared to its business requirements.

### **Complicated holding structure**

IEIL has too many subsidiaries and associate companies. This needs to be simplified for better control and efficiency of capital.

## **Peer Comparison**

(FY22)	CMP (Rs)	Mkt Cap (Rs cr)	Sales (Rs cr)	EBITDA (%)	PAT (%)	RoE (%)	P/E (x)	P/B (x)	Net Debt/Eq. (x)
Ion Exchange	1803.4	2644.9	1576.9	13.5	10.3	28.0	15.8	3.9	-0.7
VA Tech Wabag	242.7	1509.4	2979.3	7.8	4.4	8.6	11.4	1.0	0.0







## **Segmental Results**

(Rs cr)	Q4FY22	Q4FY21	YoY (%)	Q3FY22	QoQ (%)	FY22	FY21	YoY (%)
Revenues								
Engineering	320.8	291.0	10.3	216.8	48.0	935.1	940.7	-0.6
Chemicals	151.5	129.8	16.7	146.7	3.3	557.9	439.6	26.9
Consumer Products	42.5	37.7	12.7	35.2	20.7	136.6	108.4	25.9
EBIT								
Engineering	73.2	55.7	31.5	11.3	545.9	106.8	99.5	7.3
Chemicals	34.5	38.9	-11.5	30.8	11.9	120.8	106.2	13.8
Consumer Products	-1.6	-1.4	NA	-0.2	NA	-3.6	-3.7	NA
EBIT Margin								
Engineering	22.8%	19.1%	368 bps	5.2%	1758 bps	11.4%	10.6%	84 bps
Chemicals	22.8%	30.0%	-724 bps	21.0%	177 bps	21.7%	24.2%	-250 bps
Consumer Products	-3.8%	-3.6%	-21 bps	-0.7%	-316 bps	-2.7%	-3.4%	75 bps
Revenue Share								
Engineering	62.2%	63.3%	-112 bps	54.4%	784 bps	57.4%	63.2%	-580 bps
Chemicals	29.4%	28.3%	112 bps	36.8%	-741 bps	34.2%	29.5%	471 bps
Consumer Products	8.2%	8.2%	3 bps	8.8%	-59 bps	8.4%	7.3%	110 bps

(Source: Company, HDFC sec)

## **Company Background:**

Ion Exchange was originally formed as a subsidiary of Permutit, UK in 1964. It became a wholly owned Indian company in 1985. The company has expanded its footprints globally and possesses a diversified product range. It offers one stop water and non-water treatment solutions catering to diverse segments like infrastructure, industry, institutions, municipal, homes and communities, urban and rural. It offers a wide range of solutions across the water cycle from pre-treatment to process water treatment, waste water treatment, recycle, zero liquid discharge, sewage treatment, packaged drinking water, sea water desalination etc.

IEIL is also engaged in manufacturing ion exchange resins, speciality chemicals for water and waste water treatment as well as non-water applications. It has three facilities for in-house R&D and two applications and testing centres. The company has over 50 patents to their credit and 100+ products commercialized.







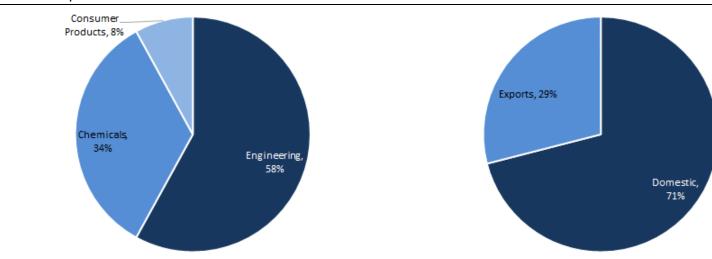
It has a global presence apart from presence in major cities in India with sales & service centres and dealer network of more than 100. The products are exported to Africa, Japan, Middle East, Russia, South East Asia, Europe, UK, USA, Canada and neighbouring countries with exports accounting for 29% of the revenues in FY22.

The engineering division plans and executes orders for installation of large and medium-sized water and effluent treatment plants. The chemical division manufactures ion-exchange resins and industrial chemicals and sells its products in India, and in overseas markets such as the US, the Middle East, Europe, and South-East Asia. The consumer products division offers a range of water-care products for homes and institutions under the Zero-B brand.

The manufacturing plants of the company are located in Gujarat (resin), Andhra Pradesh (water treatment chemicals) and Goa (membrane and consumer products) while it has assembly centres at Navi Mumbai and Hosur, Tamil Nadu. It has three R&D facilities located in Andhra Pradesh, Bangalore and Navi Mumbai.

Mr Rajesh Sharma, Chairman and MD of the company has more than 4 decades of experience in water treatment industry. He has worked in Corporate Strategy, Organisation Development, and International Business Management during his career.

### Revenue breakup



(Source: Company, HDFC sec)







### **Engineering Segment**

IEIL designs, engineers, manufactures and sells medium and large size equipment for water and waste water treatment plants including recycling & Zero liquid discharge plants. These are offered as standard and pre-engineered plants as well as customized, design & build projects undertaken on turnkey, BOOT or EPC basis. The Engineering segment caters to industrial, municipal and institutional segment and also includes O&M Services. It accounted for 58% of the revenues in FY22 with an outstanding order book of Rs 2,674cr (including Sri Lanka and UP Govt orders) and bid pipeline of Rs 6,700cr as of FY22.

### **Chemicals Segment**

IEIL is engaged in manufacturing water treatment chemicals, ion exchange resins and other specialty chemicals. Water treatment chemicals are used in boiler, cooling water treatment, coagulation and flocculation, membrane cleaning etc. while the resins are used for softening, demineralization in water treatment and various non-water separation processes. Specialty Chemicals include performance chemicals used in processing of Paper, Sugar, Pharma and Refinery segment. The chemicals segment contributed to 34% of revenues in FY22.

### **Consumer Products segment**

Ion Exchange is the pioneer of the revolutionary RO technology, in India and its brand 'Zero B' has emerged as one of the premier brand in this segment. Zero B has pioneered many path-breaking innovations in the field of technology to provide a one stop water treatment solution for home and the community. Apart from systems for specific medical, laboratory and hospital water applications, typical requirements include:

- Water for drinking and use in kitchens and canteens
- Softened water for bathing and laundry
- Management of heating and cooling water circuits with speciality chemical treatment programmes
- Swimming pool water filtration and disinfection

Consumer products segment contributed to 8% of revenues in FY22.







### **Financials**

### **Income Statement**

(Rs cr)	FY20	FY21	FY22	FY23E	FY24E
Net Revenues	1480	1450	1577	1755	1919
Growth (%)	27.3	-2.0	8.8	11.3	9.3
Operating Expenses	1345	1247	1364	1511	1646
EBITDA	135	202	213	244	272
Growth (%)	26.3	50.3	5.4	14.4	11.7
EBITDA Margin (%)	9.1	14.0	13.5	13.9	14.2
Depreciation	24	28	28	32	42
Other Income	35	33	42	44	48
EBIT	146	208	227	256	278
Interest expenses	16	13	10	8	7
PBT	130	195	217	247	271
Tax	37	52	56	62	68
PAT	94	143	161	185	203
Share of Asso./Minority Int.	-1	1	2	0	0
Adj. PAT	93	144	163	185	203
Growth (%)	44.1	54.5	13.0	13.5	9.8
EPS	65.5	101.2	114.4	129.9	142.6

### **Balance Sheet**

(Rs cr)	FY20	FY21	FY22	FY23E	FY24E
SOURCE OF FUNDS					
Share Capital	14	14	14	14	14
Reserves	349	492	641	808	991
Shareholders' Funds	363	506	656	822	1005
Minority Interest	2	0	-1	-1	-1
Total Debt	91	41	55	65	15
Net Deferred Taxes	-1	-5	-9	-9	-9
Other Non-curr. Liab.	19	14	9	10	11
Total Sources of Funds	474	555	710	888	1022
APPLICATION OF FUNDS					
Net Block & Goodwill	194	190	192	220	357
CWIP	12	15	20	45	11
Investments	5	5	9	9	9
Other Non-Curr. Assets	41	36	49	54	59
Total Non Current Assets	252	245	270	328	436
Inventories	135	128	181	172	192
Debtors	502	449	508	568	611
Cash & Equivalents	373	505	536	734	774
Other Current Assets	120	111	122	137	148
Total Current Assets	1129	1193	1347	1611	1726
Creditors	494	535	523	605	669
Other Current Liab & Provisions	413	348	382	445	471
Total Current Liabilities	906	883	906	1051	1140
Net Current Assets	223	310	441	560	586
Total Application of Funds	474	555	710	888	1022







#### **Cash Flow Statement**

(Rs cr)	FY20	FY21	FY22	FY23E	FY24E
Reported PBT	130	195	217	247	271
Non-operating & EO items	2	14	-16	-4	-4
Interest Expenses	-6	-12	10	8	7
Depreciation	24	28	28	32	42
Working Capital Change	-11	22	-76	79	15
Tax Paid	-36	-50	-71	-62	-68
OPERATING CASH FLOW (a)	102	197	91	300	262
Capex	-32	-30	-50	-85	-145
Free Cash Flow	70	167	42	215	117
Investments	22	0	-4	0	0
Non-operating income	-8	-102	-39	0	0
INVESTING CASH FLOW ( b )	-17	-132	-92	-85	-145
Debt Issuance / (Repaid)	11	-48	1	10	-50
Interest Expenses	-13	-12	-8	-8	-7
FCFE	82	6	-8	216	60
Share Capital Issuance	0	0	0	0	0
Dividend	-12	-3	-12	-18	-20
Others	-15	-12	-8	0	0
FINANCING CASH FLOW ( c )	-14	-63	-19	-17	-77
NET CASH FLOW (a+b+c)	71	3	-20	198	40

### **Price chart**



### **Key Ratios**

Particulars	FY20	FY21	FY22	FY23E	FY24E
Profitability Ratios (%)					
EBITDA Margin	9.1	14.0	13.5	13.9	14.2
EBIT Margin	9.9	14.3	14.4	14.6	14.5
APAT Margin	6.3	9.9	10.3	10.5	10.6
RoE	29.9	33.1	28.0	25.0	22.2
RoCE	36.3	41.5	36.1	32.0	29.2
Solvency Ratio (x)					
Net Debt/EBITDA	-2.1	-2.3	-2.3	-2.7	-2.8
Net D/E	-0.8	-0.9	-0.7	-0.8	-0.8
PER SHARE DATA (Rs)					
EPS	65.5	101.2	114.4	129.9	142.6
CEPS	82.0	120.7	134.1	152.6	172.0
BV	255.2	355.5	460.8	577.6	706.2
Dividend	6.0	10.0	10.0	13.0	14.0
Turnover Ratios (days)					
Debtor days	114	120	111	112	112
Inventory days	33	33	36	37	35
Creditors days	112	130	123	117	121
VALUATION (x)					
P/E	27.5	17.8	15.8	13.9	12.7
P/BV	7.1	5.1	3.9	3.1	2.6
EV/EBITDA	17.0	10.4	9.8	7.8	6.6
EV / Revenues	1.5	1.4	1.3	1.1	0.9
Dividend Yield (%)	0.3	0.6	0.6	0.7	0.8
Dividend Payout (%)	9.2	9.9	8.7	10.0	9.8

(Source: Company, HDFC sec)







#### **HDFC Sec Retail Research Rating description**

#### **Green Rating stocks**

This rating is given to stocks that represent large and established business having track record of decades and good reputation in the industry. They are industry leaders or have significant market share. They have multiple streams of cash flows and/or strong balance sheet to withstand downturn in economic cycle. These stocks offer moderate returns and at the same time are unlikely to suffer severe drawdown in their stock prices. These stocks can be kept as a part of long term portfolio holding, if so desired. This stocks offer low risk and lower reward and are suitable for beginners. They offer stability to the portfolio.

#### **Yellow Rating stocks**

This rating is given to stocks that have strong balance sheet and are from relatively stable industries which are likely to remain relevant for long time and unlikely to be affected much by economic or technological disruptions. These stocks have emerged stronger over time but are yet to reach the level of green rating stocks. They offer medium risk, medium return opportunities. Some of these have the potential to attain green rating over time.

#### **Red Rating stocks**

This rating is given to emerging companies which are riskier than their established peers. Their share price tends to be volatile though they offer high growth potential. They are susceptible to severe downturn in their industry or in overall economy. Management of these companies need to prove their mettle in handling cyclicality of their business. If they are successful in navigating challenges, the market rewards their shareholders with handsome gains; otherwise their stock prices can take a severe beating. Overall these stocks offer high risk high return opportunities.

#### Disclosure:

I, Atul Karwa, (MMS-Finance), authors and the names subscribed to this report, hereby certify that all of the views expressed in this research report accurately reflect our views about the subject issuer(s) or securities. HSL has no material adverse disciplinary history as on the date of publication of this report. We also certify that no part of our compensation was, is, or will be directly or indirectly related to the specific recommendation(s) or view(s) in this report.

Research Analyst or her relative or HDFC Securities Ltd. does not have any financial interest in the subject company. Also Research Analyst or his relative or HDFC Securities Ltd. or its Associate may have beneficial ownership of 1% or more in the subject company at the end of the month immediately preceding the date of publication of the Research Report. Further Research Analyst or her relative or HDFC Securities Ltd. or its associate does not have any material conflict of interest.

#### Any holding in stock - No

HDFC Securities Limited (HSL) is a SEBI Registered Research Analyst having registration no. INH000002475.

#### Disclaimer:

This report has been prepared by HDFC Securities Ltd and is meant for sole use by the recipient and not for circulation. The information and opinions contained herein have been compiled or arrived at, based upon information obtained in good faith from sources believed to be reliable. Such information has not been independently verified and no guaranty, representation of warranty, express or implied, is made as to its accuracy, completeness or correctness. All such information purposes only. Descriptions of any company or companies or their securities mentioned herein are not intended to be complete and this document is not, and should not be construed as an offer or solicitation of an offer, to buy or sell any securities or other financial instruments.

This report is not directed to, or intended for display, downloading, printing, reproducing or for distribution to or use by, any person or entity who is a citizen or resident or located in any locality, state, country or other jurisdiction where such distribution, publication, reproduction, availability or use would be contrary to law or regulation or what would subject HSL or its affiliates to any registration or licensing requirement within such jurisdiction.

If this report is inadvertently sent or has reached any person in such country, especially, United States of America, the same should be ignored and brought to the attention of the sender. This document may not be reproduced, distributed or published in whole or in part, directly or indirectly, for any purposes or in any manner.

Foreign currencies denominated securities, wherever mentioned, are subject to exchange rate fluctuations, which could have an adverse effect on their value or price, or the income derived from them. In addition, investors in securities such as ADRs, the values of which are influenced by foreign currencies effectively assume currency risk. It should not be considered to be taken as an offer to sell or a solicitation to buy any security. HSL may from time to time solicit from, or perform broking, or other services for, any company mentioned in this mail and/or its attachments.

HSL and its affiliated company(ies), their directors and employees may; (a) from time to time, have a long or short position in, and buy or sell the securities of the company(ies) mentioned herein or (b) be engaged in any other transaction involving such securities and earn brokerage or other compensation or act as a market maker in the financial instruments of the company(ies) discussed herein or act as an advisor or lender/borrower to such company(ies) or may have any other potential conflict of interests with respect to any recommendation and other related information and opinions.

HSL, its directors, analysts or employees do not take any responsibility, financial or otherwise, of the losses or the damages sustained due to the investments made or any action taken on basis of this report, including but not restricted to, fluctuation in the prices of shares and bonds, changes in the currency rates, diminution in the NAVs, reduction in the dividend or income.

HSL and other group companies, its directors, associates, employees may have various positions in any of the stocks, securities and financial instruments dealt in the report, or may make sell or purchase or other deals in these securities from time to time or may deal in other securities of the companies / organizations described in this report.

HSL or its associates might have managed or co-managed public offering of securities for the subject company or might have been mandated by the subject company for any other assignment in the past twelve months.

HSL or its associates might have received any compensation from the companies mentioned in the report during the period preceding twelve months from t date of this report for services in respect of managing or co-managing public offerings, corporate finance, investment banking or merchant banking, brokerage services or other advisory

service in a merger or specific transaction in the normal course of business.

HSL or its analysts did not receive any compensation or other benefits from the companies mentioned in the report. Compensation of this report. Accordingly, neither HSL nor Research Analysts have any material conflict of interest at the time of publication of this report. Compensation of our Research

Research entity has not been engaged in market making activity for the subject company. Research analyst has not served as an officer, director or employee of the subject company. We have not received any compensation/benefits from the subject company or third party in connection with the Research Report.

HDFC securities Limited, I Think Techno Campus, Building - B, "Alpha", Office Floor 8, Near Kanjurmarg Station, Opp. Crompton Greaves, Kanjurmarg (East), Mumbai 400 042 Phone: (022) 3075 3400 Fax: (022) 2496 5066

Analysts is not based on any specific merchant banking, investment banking or brokerage service transactions. HSL may have issued other reports that are inconsistent with and reach different conclusion from the information presented in this report.

Compliance Officer: Binkle R. Oza Email: complianceofficer@hdfcsec.com Phone: (022) 3045 3600

HDFC Securities Limited, SEBI Reg. No.: NSE, BSE, MSEI, MCX: INZ000186937; AMFI Reg. No. ARN: 13549; PFRDA Reg. No. POP: 11092018; IRDA Corporate Agent License No.: CA0062; SEBI Research Analyst Reg. No.: INH000002475; SEBI Investment Adviser Reg. No.: INA000011538; CIN - U67120MH2000PLC152193

Mutual Funds Investments are subject to market risk. Please read the offer and scheme related documents carefully before investing.

