

Stock Update

Ion Exchange (India) Ltd.

March 6, 2023





Ion Exchange (India) Ltd.

Industry	LTP	Recommendation	Base Case Fair Value	Bull Case Fair Value	Time Horizon
Engineering	Rs 3429	Buy in Rs 3400-3480 band & add on dips in Rs 3000-3050 band	Rs 3770	Rs 4020	2-3 quarters

HDFC Scrip Code	IONEXCEQNR
BSE Code	500214
NSE Code	IONEXCHANG
Bloomberg	ION IN
CMP Mar 3, 2023	3429.5
Equity Capital (Rs cr)	14.7
Face Value (Rs)	10
Equity Share O/S (cr)	1.5
Market Cap (Rs cr)	5030
Book Value (Rs)	496.6
Avg. 52 Wk Volumes	29,000
52 Week High (Rs)	3445.0
52 Week Low (Rs)	1500.7

Share holding Pattern % (Dec 2022)	
Promoters	27.0
Institutions	12.2
Non Institutions	60.8
Total	100.0



HDFCsec Retail research
stock rating meter

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 likely to outstrip the supply causing water scarcity in many areas of the globe including India. IEIL's has witnessed steady order book both in domestic and international markets with order book of Rs 3650cr (visibility of ~2-3 years) and bid pipeline of over Rs 8400cr. The environment clearance for its resin facility expansion is expected to be received in Q4 and the company expects consumer products division to break even at EBIT level in FY23.

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.

On July 14, 2022, we had initiated coverage on the stock ([Link](#)) with a recommendation to 'Buy in Rs 1790-1820 band & add more on dips in Rs 1630-1650 band' for base case fair value of Rs 1996 and bull case fair value of Rs 2138. The stock achieved our bull case target on September 9, 2022.

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 17/14/15% CAGR over FY22-FY25E, led by increased execution of orders. We believe investors can buy the stock in Rs 3400-3480 band and add on dips in Rs 3000-3050 band (18x Dec'24E EPS) for a base case fair value of Rs 3770 (22.5x Dec'24E EPS) and bull case fair value of Rs 4020 (24x Dec'24E EPS) over the next 2-3 quarters.

Financial Summary (consolidated)

Particulars (Rs cr)	Q3FY23	Q3FY22	YoY (%)	Q2FY23	QoQ (%)	FY22	FY23E	FY24E	FY25E
Operating Income	512	388	31.9	448	14.4	1,577	1,910	2,210	2,544
EBITDA	62	43	46.1	53	17.1	213	220	270	318
APAT	48	28	69.1	39	23.2	163	170	209	248
Diluted EPS (Rs)	33.8	20.0	69.1	27.4	23.2	114.4	119.2	147.1	174.3



RoE-%						28.0	23.2	23.2	22.4
P/E (x)						30.0	28.8	23.3	19.7
EV/EBITDA (x)						20.6	19.7	16.0	13.2

(Source: Company, HDFC sec)

Q3FY23 Result Review

IEIL recorded revenues of Rs 512cr in Q3FY23, a growth of 31.9% YoY. Revenues from the Engineering segment expanded by 50.5% to Rs 326cr. Chemicals and Consumer Products revenues grew 3.3% and 29.7% respectively. EBITDA increased by 46.1% YoY to Rs 62cr whereas EBITDA margin expanded ~120bps to 12.2% on higher operating leverage. PAT growth remained strong, up by 69.1% YoY to Rs 48cr while PAT margins witnessed an expansion of ~206bps to 9.4%.

Order backlog at the end of the quarter stood at Rs 2923cr (including Sri Lanka and UP projects). The company expects to receive environment clearance for its resin expansion projects in Q4FY23. Capex expected for expansion is Rs 200-250cr over FY24-FY25 while maintenance capex would be Rs 60-70cr.

Key Triggers

Bid and execution pipeline remains strong

IEIL has strong bid pipeline of ~Rs 8400cr of which ~25-30% is exports. As a thumb rule, the bid win rate for the company is ~20% which would imply Rs 1600-1700cr worth of orders in the engineering division. The outstanding order book as of Q3FY23 stood at Rs 2923cr giving visibility of ~2-3 years. In addition to this the company bagged an order of Rs 726cr from Indian Oil Corp. on 2-Feb-23 for a water treatment plant taking the order book to ~Rs 3650cr.

Ion has bid for a water supply agreement in two districts (Varanasi and Aligarh) where it is supposed to reach 900 villages. Under this contract, Ion is involved in extracting and treating groundwater, and supplying drinking water to households. The management expects a significant flow of revenue (~30% of Rs 1140cr contract) from this contract in FY23 and balance in FY24. O&M revenues will flow over the next 10 years. Depending on the attractiveness of the projects, it may bid for more states for similar services. L&T is the key competitor in this space.

Greenfield expansion in chemicals segment

The chemicals segment is the most profitable segment for the company and IEIL is doing a greenfield expansion for resins. IEIL is awaiting environment clearance for its project which it expects to receive in Q4 and commercial production to begin from middle of FY25. The total capex on this is expected to be upwards of Rs 200-250cr and it has the potential to double resin revenues. Resins account for 60% of chemicals segment revenue. Chemicals segment account for ~33% of revenue and over 55% of EBIT in 9MFY23.



Improved profitability in the consumer products business

The consumer products business has been incurring losses for the past few years. With increasing awareness on the importance of safe drinking water and growing share of RO technology purifiers, the management expects this segment to break even in FY23. This would aid in increasing the overall profitability of the company.

Strong growth opportunity in ZLD system

Industries and government regulatory agencies from Europe, North America, to China and India, probably the world's largest industrial water consumers, are rapidly resorting to Zero Liquid Discharge (ZLD) systems, to recover all liquid from wastewater or effluent, and return it to the system as clean and reusable water. Currently, the Government of India has ordered, that a wide range of industries should migrate to ZLD treatment techniques. It has been legislated for industries ranging from fertilizer, brick, coffee, refineries and textile facilities to sugar, paper, paint, and power plants.

IEIL has recently won two orders from IOCL which includes the use of ZLD system. Installation of ZLD system is expected to pick up in the coming years and IEIL with a proven track record could benefit from increasing order inflows.

Industry winds in favour

The demand for water and wastewater treatment solutions is mainly driven by rapid urbanization. Growing manufacturing and services sectors are creating demand for recycling and reuse systems. Other factors that are contributing to the growth of the market are improving standards of living, water scarcity, and emergence of more stringent water related laws and regulations, particularly for effluent discharge. River cleaning initiatives in India have led to strongest enforcement of regulatory compliance, and imposition of recycling and reuse systems with the provision of subsidies or incentives for implementation.

Indian Wastewater treatment solutions segment is forecasted to grow at a CAGR of ~9% from Fiscal 2021 to Fiscal 2031 and Indian water & environment industry is projected to register a healthy CAGR of 8-9% during the period 2022-2026.

Out of the Indian market about one third is industrial segment while the balance is municipal segment. However the industrial segment is expected to grow at ~12% over the next decade vs 7% by the municipal segment. Within Industrial segment, demand from Pharma, Food & Beverage, Chemicals and refinery is growing fast.

India treats just 28% of the sewage generated. There is a lot of headroom for growth in sewage treatment due to industrialization and Govt focus.



IEIL has presence in the entire value chain from preliminary treatment to zero liquid discharge. Very few companies in India provide solutions across the spectrum of water and waste water management. The Company has in-house manufacturing of membranes which is used in different technologies for secondary and tertiary treatment.

Of the total Engineering segment sales, IEIL derives ~10% of revenue from membranes, ~15–20% from O&M services, and the rest from remaining EPC related contracts. India's Resin market size is Rs. 300 Cr. IEIL has 40% market share of Resin in India. Resins are being imported in India and Thermax Ltd. is the major competitor. The Chemical business contributes 34% to the revenue and has 22-24% EBIT and contributes 50% to the total profits of the entire business. The current capacity for Resins- 36,000 TPA, is running at 70-75% utilization levels. The facility is expected to get optimally utilized at 90% by FY24.

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. Competition risk for other products/services from L&T water, Concord Enviro, Triveni engineering, Praj industries. IEIL operates in the EPC industry which is fragmented.



Risk of rising materials costs

The steel and cement price movements would certainly have an impact on the Engineering business. Similarly, the petrochemical prices (Crude derivative are a major RM cost) and other commodity price movements on the chemical front would have an impact on the chemical segment.

Low shareholding of promoters

Promoters (consisting of different families) together own 27% of capital. About 16% stake is held by trusts formed for promoters and employees.

Receivables from Sri Lanka could get delayed

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

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 9-10%. 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. Process of merger of two subsidiaries with IEIL is underway.



Ion Exchange (India) Ltd.

Segmental Results

(Rs cr)	Q3FY23	Q3FY22	YoY (%)	Q2FY23	QoQ (%)	9MFY23	9MFY22	YoY (%)
Revenues								
Engineering	326.3	216.8	50.5	257.7	26.6	935.1	940.7	-0.6
Chemicals	151.5	146.7	3.3	159.5	-5.1	557.9	439.6	26.9
Consumer Products	45.7	35.2	29.7	45.5	0.3	136.6	108.4	25.9
EBIT								
Engineering	31.0	11.3	173.5	18.2	70.7	106.8	99.5	7.3
Chemicals	37.8	30.8	22.8	37.7	0.3	120.8	106.2	13.8
Consumer Products	-1.5	-0.2	NA	-0.5	NA	-3.6	-3.7	NA
EBIT Margin								
Engineering	9.5%	5.2%	427 bps	7.0%	246 bps	11.4%	10.6%	84 bps
Chemicals	25.0%	21.0%	396 bps	23.6%	133 bps	21.7%	24.2%	-250 bps
Consumer Products	-3.3%	-0.7%	-263 bps	-1.1%	-217 bps	-2.7%	-3.4%	75 bps
Revenue Share								
Engineering	62.3%	54.4%	795 bps	55.7%	665 bps	57.4%	63.2%	-580 bps
Chemicals	28.9%	36.8%	-785 bps	34.5%	-554 bps	34.2%	29.5%	471 bps
Consumer Products	8.7%	8.8%	-11 bps	9.8%	-111 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 31% 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.

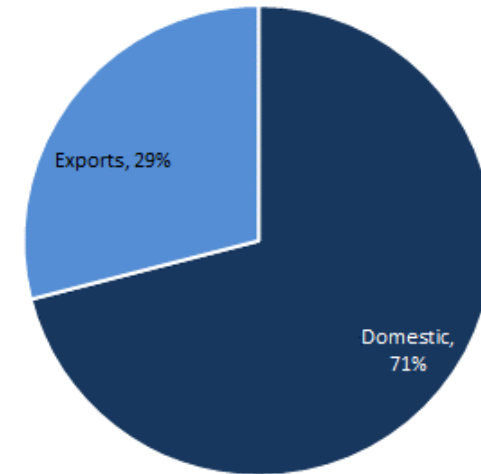
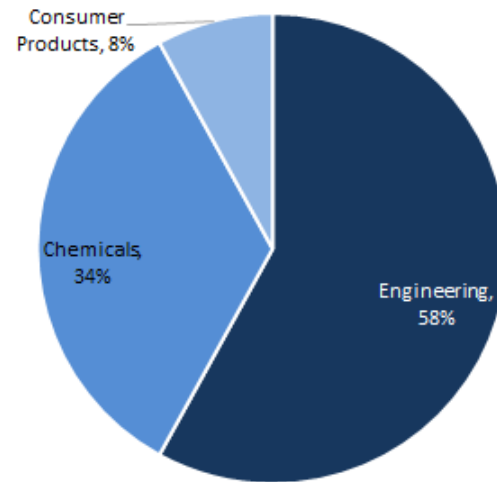
The manufacturing plants of the company are located in Gujarat (resin), Andhra Pradesh (water treatment chemicals) and Goa (membrane and consumer products) while it has assembly centres at Navi Mumbai and Hosur, Tamil Nadu. It has three R&D facilities located in Andhra Pradesh, Bangalore and Navi Mumbai.

The customer base is also spread over various industries, comprising JSW Steel Ltd and Steel Authority of India Ltd; L&T Ltd and Bharat Heavy Electricals Ltd; Jindal Power Ltd and NTPC Ltd, Indian Oil Corporation Ltd, Hindustan Petroleum Corporation Ltd, and Vedanta Ltd. The group also caters to players in other sectors such as auto, food and beverages, paper, pharma, chemical and cement.

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 (FY22)



(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



Ion Exchange (India) Ltd.

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 (consolidated)

Income Statement

(Rs cr)	FY21	FY22	FY23E	FY24E	FY25E
Net Revenues	1450	1577	1910	2210	2544
Growth (%)	-2.0	8.8	21.1	15.7	15.1
Operating Expenses	1247	1364	1691	1941	2226
EBITDA	202	213	220	270	318
Growth (%)	50.3	5.4	3.0	22.7	17.9
EBITDA Margin (%)	14.0	13.5	11.5	12.2	12.5
Depreciation	28	28	29	35	42
Other Income	33	42	48	55	64
EBIT	208	227	238	290	340
Interest expenses	13	10	9	10	8
PBT	195	217	229	280	331
Tax	52	56	62	74	86
PAT	143	161	167	206	246
Share of Asso./Minority Int.	1	2	3	3	3
Adj. PAT	144	163	170	209	248
Growth (%)	54.5	13.0	4.2	23.3	18.6
EPS	101.2	114.4	119.2	147.1	174.3

Balance Sheet

(Rs cr)	FY21	FY22	FY23E	FY24E	FY25E
SOURCE OF FUNDS					
Share Capital	14	14	14	14	14
Reserves & Surplus	492	641	794	982	1206
Shareholders' Funds	506	656	808	996	1220
Minority Interest	0	-1	-2	-3	-3
Total Debt	41	55	60	65	40
Net Deferred Taxes	-5	-9	-9	-9	-9
Other Non-curr. Liab.	14	9	10	11	13
Total Sources of Funds	555	710	867	1060	1261
APPLICATION OF FUNDS					
Net Block & Goodwill	190	192	183	248	434
CWIP	15	20	70	140	42
Investments	5	9	9	9	9
Other Non-Curr. Assets	36	49	54	62	74
Total Non Current Assets	245	270	315	459	559
Inventories	128	181	251	279	293
Debtors	449	508	618	704	817
Cash & Equivalents	505	536	620	624	721
Other Current Assets	111	122	141	157	174
Total Current Assets	1193	1347	1631	1764	2006
Creditors	535	523	602	666	767
Other Current Liab & Provisions	348	382	478	497	537
Total Current Liabilities	883	906	1080	1163	1303
Net Current Assets	310	441	552	601	702
Total Application of Funds	555	710	867	1060	1261

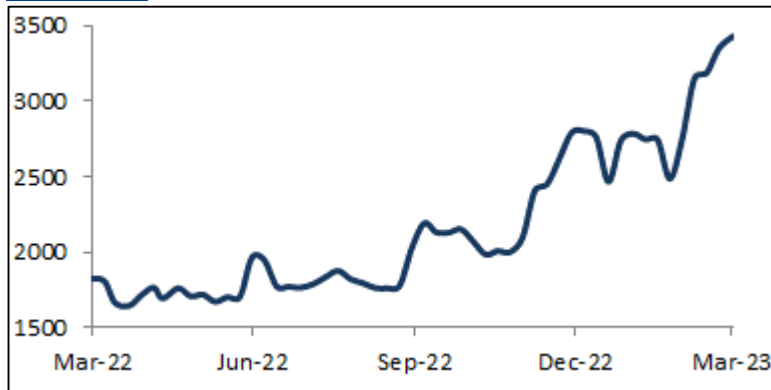


Ion Exchange (India) Ltd.

Cash Flow Statement

(Rs cr)	FY21	FY22	FY23E	FY24E	FY25E
Reported PBT	195	217	230	282	334
Non-operating & EO items	14	-16	-5	-7	-10
Interest Expenses	-12	10	9	10	8
Depreciation	28	28	29	35	42
Working Capital Change	22	-76	-26	-46	-4
Tax Paid	-50	-71	-62	-74	-86
OPERATING CASH FLOW (a)	197	91	176	200	285
Capex	-30	-50	-70	-170	-130
Free Cash Flow	167	42	106	30	155
Investments	0	-4	0	0	0
Non-operating income	-102	-39	0	0	0
INVESTING CASH FLOW (b)	-132	-92	-70	-170	-130
Debt Issuance / (Repaid)	-48	1	5	5	-25
Interest Expenses	-12	-8	-9	-10	-8
FCFE	6	-8	101	25	121
Share Capital Issuance	0	0	0	0	0
Dividend	-3	-12	-17	-21	-24
Others	-12	-8	0	0	0
FINANCING CASH FLOW (c)	-63	-19	-21	-26	-58
NET CASH FLOW (a+b+c)	3	-20	84	4	97

Price chart



Key Ratios

Particulars	FY21	FY22	FY23E	FY24E	FY25E
Profitability Ratios (%)					
EBITDA Margin	14.0	13.5	11.5	12.2	12.5
EBIT Margin	14.3	14.4	12.5	13.1	13.4
APAT Margin	9.9	10.3	8.9	9.5	9.8
RoE	33.1	28.0	23.2	23.2	22.4
RoCE	41.5	36.1	30.2	30.1	29.3
Solvency Ratio (x)					
Net Debt/EBITDA	-2.3	-2.3	-2.5	-2.1	-2.1
Net D/E	-0.9	-0.7	-0.7	-0.6	-0.6
PER SHARE DATA (Rs)					
EPS	101.2	114.4	119.2	147.1	174.3
CEPS	120.7	134.1	139.8	171.4	203.7
BV	355.5	460.8	568.0	700.0	857.4
Dividend	10.0	10.0	12.0	15.0	17.0
Turnover Ratios (days)					
Debtor days	120	111	108	109	109
Inventory days	33	36	41	44	41
Creditors days	130	123	108	105	103
VALUATION (x)					
P/E	33.9	30.0	28.8	23.3	19.7
P/BV	9.6	7.4	6.0	4.9	4.0
EV/EBITDA	21.8	20.6	19.7	16.0	13.2
EV / Revenues	3.0	2.8	2.3	2.0	1.7
Dividend Yield (%)	0.3	0.3	0.3	0.4	0.5
Dividend Payout (%)	9.9	8.7	10.1	10.2	9.8

(Source: Company, HDFC sec)



Ion Exchange (India) Ltd.

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 cyclical 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**, Research Analyst, **MMS**, 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. SEBI conducted the inspection and based on their observations have issued advise/warning. The said observations have been complied with. 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 his/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 his 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 and opinions are subject to change without notice. This document is for 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, etc.

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 or third party in connection with preparation of the research 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 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.

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

Compliance Officer: Murlu V Karkera 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.