

Initiating Coverage

Banco Products Ltd.

01-September-2021





Industry	LTP	Recommendation	Base Case Fair Value	Bull Case Fair Value	Time Horizon
Auto Ancillaries	Rs 212	Buy in the band of Rs 210-214 and add on dips in Rs 186-190 band	Rs 240	Rs 265	2 quarters

HDFC Scrip Code	BANPRO
BSE Code	500039
NSE Code	BANCOINDIA
Bloomberg	BNCO IN
CMP Aug 31, 2021 (Rs)	211.7
Equity Capital (cr)	14.3
Face Value (Rs)	2
Eq. Share O/S (cr)	7.2
Market Cap (Rs cr)	1514.1
Book Value (Rs)	115.9
Avg.52 Wk Volume	416,500
52 Week High (Rs)	222.3
52 Week Low (Rs)	83.5

Share holding Pattern % (Jun, 2021)					
Promoters	67.88				
Institutions	0.28				
Non-Institutions	31.84				
Total	100.0				

Retail Research Risk Rating:

	BL	UE*				
 •	 		 	•	_	

^{*} Refer at the end for explanation on Risk Ratings

Fundamental Research Analyst

Atul Karwa atul.karwa@hdfcsec.com

Our Take:

Banco Products India Ltd. (BPIL) has established track record and strong position in engine cooling modules catering to multiple end-user industries. It manufactures Engine Cooling Modules such as Radiators, Charged Air Coolers, Fuel Coolers, Oil Coolers, and Condensers. It offers both Copper Brass coolers and Aluminum coolers. Its products are used in Passenger Cars, Light Commercial Vehicles, Medium, and Heavy Commercial Vehicle, Agricultural Tractors, High-Performance Bikes, Harvesters, Construction Machineries, Power Generation Equipment, Traction Rail locomotives, and other similar equipment. Its high level of integration in operations, diversified product portfolio, long-standing association with reputed clientele, established global operations in auto ancillary segment through its foreign subsidiaries and its distribution network in more than 80 countries are the key positives for the company. Revival in the automobile industry should lead to higher demand for engine coolers. Nederlandse Radiateuren Fabriek B.V (NRF), is its wholly-owned subsidiary and is engaged in the business of manufacturing and distribution of heat transfer products like radiators, cooling systems, and a few others. BPIL has taken many initiatives to improve margins in its European subsidiary NRF over the last couple of years which should yield results in the coming years. Banco Gaskets (India) Limited (BGIL), another subsidiary of BPIL, manufactures engine sealing systems (gaskets) and supplies to major auto-OEMs in India. Mr. Mehul K. Patel, the main promoter of BPIL has more than 40 years of experience in the automobile and auto-ancillary industry. A broad split among its end user industries is Automobiles (mainly CV) 50%, Earthmoving and construction equipment 20%, Industrial (25% and other (including Rail and Marine) 5%.

Valuations & Recommendation:

We expect BPIL revenue/EBITDA/PAT to grow at 14/21/26% CAGR over FY21-FY23, driven by revival in the auto industry and operating leverage. The company operates a net debt free cash rich balance sheet with Rs 122cr of cash. We believe investors can buy the stock in the band of Rs 210-214 and add on dips to Rs 186-190 band (7.5x FY23E EPS) for a base case fair value of Rs 240 (9.5x FY23E EPS) and bull case fair value of Rs 265 (10.5x FY23E EPS).



Financial Summary

(Rs cr)	Q1FY22	Q1FY20	YoY (%)	Q4FY21	QoQ (%)	FY20	FY21	FY22E	FY23E
Operating Income	500.8	274.3	82.6	444.8	12.6	1,422.1	1,532.6	1,808.4	2,007.4
EBITDA	71.7	27.4	162.2	26.6	169.6	122.2	178.1	238.7	261.0
APAT	45.9	17.6	161.4	18.4	149.6	76.6	113.7	158.4	180.5
Diluted EPS (Rs)	6.4	2.5	161.4	2.6	149.6	10.7	15.9	22.2	25.2
RoE (%)						9.9	14.8	18.0	18.3
P/E (x)						19.8	13.3	9.6	8.4
EV/EBITDA (x)						12.6	7.9	5.8	5.2

(Source: Company, HDFC sec)

Recent Triggers

Q1FY22 financials

The company reported robust numbers for Q1FY22. Revenue increased 83% yoy and 13% on a sequential basis to Rs 445cr. EBITDA increased by 170% qoq to Rs 72cr as raw material costs moderated and selling and administrative expenses declined. EBITDA margins expanded 435/835bps yoy/qoq to 14.3% while PAT margins improved 276/503 bps to 9.2%. Key reason for the exceptional performance was the encouraging performance in Europe. Operating leverage benefits kicked in due to higher volumes in Europe.

In June 2021, commercial vehicle registrations in the EU markets increased by 12.4% year-on-year to 185,573 units. During the first half of the year, EU commercial vehicle registrations went up by 36.9% to 1 million units, reflecting the contribution of the big gains recorded between March and May.

Key Triggers

Integrated manufacturing facility, diversified product profile

The manufacturing facilities of BPIL have an annual capacity to produce 3.33 million radiators. BPIL is India's largest manufacturer of engine cooling systems and engine sealing systems. BPIL also has a Department of Science, Government of India (DSIR) approved R&D facility located at Vadodara which is equipped with capability for developing, improvising, prototyping and testing of engine cooling systems. BPIL manufactures more than 1000 engine cooling modules and heat exchangers, each customized according to the requirements of its end user industry. BPIL caters to the demand from multiple end-user industries, thus making it relatively less prone to



being dependent on a single industry. While the major demand comes from the auto industry (LCV and MCV segment), BPIL also caters to industrial and earth moving equipment, rail locomotives along with agricultural equipment industry. Besides supplying in the domestic after-market, BPIL is also India's leading exporter of after-market radiators to Europe. Aluminum Radiator contributed 86% of revenue in FY20 vs 79% in FY18 while Copper Brass Radiator - 14% revenue in FY20 vs 21% in FY18.

Its subsidiary, NRF, is an established player in the European after-market segment and has a well-diversified product range with more than 8000 SKU (Stock Keeping Unit) in its portfolio. NRF, along with its nine subsidiaries, has three manufacturing facilities. Furthermore, it has 19 warehouses spread across Europe to facilitate express delivery across 80 countries. Known for the production of high quality Radiators, NRF also produces a large range of other engine cooling and air conditioning products.

Automotive industry to witness strong growth

Vehicle penetration in India stands at around 25-28 four-wheelers per 1000 people as per various estimates. Historically, vehicle sales in some of the key global markets have shown an inflexion point at a similar level of penetration. Barring the slowdown in last couple of years, India has been witnessing strong GDP growth driven by factors like increasing disposable incomes in the rural agriculture sector, presence of a large pool of skilled and semiskilled workers, and a strong educational system. This is likely to result in increased vehicle penetration and BPIL is likely to be a key beneficiary of an uptick in passenger vehicle sales.

After two consecutive fiscals of steep volume decline (29% and 21% in FY20 and FY21, respectively), following multiple headwinds such as revised axle norms, BS-VI transition, and the pandemic, CV sales are expected to pick up sharply by 23-28% in FY22 (Crisil estimates) and similarly in FY23. BPIL will benefit out of this as its share in sales to CV manufacturers is ~40% of total sales.

Moving forward towards EV journey

The Board of Banco Products approved the incorporation of a wholly-owned subsidiary (WOS) Banco New Energy Cooling Systems Ltd. in Apr-21. The new subsidiary company will be incorporated in India to carry on all types of business of manufacturing, assembling, importing, exporting and distribution of all kinds of Heat Exchangers for Electrical Vehicles (EV) - Automotive / non-Automotive and Industrial applications. Also, the sectors where BPIL has a strong hold such as agriculture tractors, construction machineries and power generation etc. are likely to have only limited impact of EV trend.



Industrial demand on the up

India is at a multi-year capex cycle, according to BofA Securities. The global brokerage said the multi-year capex cycle in India will be similar to that seen in FY03-12. It expects \$356 billion of orders to be awarded over two years, 14% and 7% growth in FY22 and FY23 respectively. BPIL will benefit out of this spend due to the nature of products that it supplies.

Well-established relationship with reputed OEMs and corporates

BPIL has a well-diversified clientele consisting of OEMs, corporates and Indian Railways. BPIL has a DSIR approved R&D facility, wherein new products are developed in consultation with OEMs. The technical capability enables BPIL to work with OEMs to develop a customized product in accordance with the design and technical requirements before the product is launched. Also, BPIL is a green channel partner with many OEMs. The aforesaid arrangements give a competitive edge to BPIL over many other auto ancillary manufactures.

Client base



(Source: Conpany)



Healthy Aftermarket sales ensures high margins

Aftermarket contributes ~35% to consolidated sales, that ensures recurring sales and high profit margins. A large part of this revenue comes from the European markets through NRF. In the past 4 years, NRF has doubled its Aftermarket volume.

Changes in emission standards to lead to increase in content per vehicle

Governments of various countries have implemented better emission standards to improve air quality. Emission standards set quantitative limits on the permissible amount of specific air pollutants that may be released from specific sources over specific timeframes. They are generally designed to achieve air quality standards and to protect human life. This could lead to fresh and higher demand for engine coolong/sealing systems from manufacturers like BPIL.

The CO2 emission targets for 2025 and 2030 were voted by the European council and parliament and will be published in the official journal before mid-2019. CO2 reduction target for 2025 is -15% compared to 2021 for passenger cars and LCV. For 2030 the targets compared to the 2021 baseline are -37.5% for passenger cars and -31% for LCV.

Some of these standards applicable to India and their date of implementation are as under:

BS IV – April 2020 – Automobiles

CEV IV – April 2021 – Construction Equipment Vehicles

TREM IV – October 2021 – Agricultural Tractors and Other Equipments

CEV V - April 2024 - Construction Equipment Vehicles

TREM V – April 2024 - Agricultural Tractors and Other Equipments

The Indian Government is in discussion with the Power industry to implement new CPCB norms. BPIL has initiated joint development projects with its key customers to develop successful and contemporary solutions well ahead of the emission norms change deadline.

Changes in emission norms to BS-VI in the automotive industry and BS-IV in the construction machinery and off-highway sectors led to large number of new opportunities which BPIL has managed successfully. In general, the OEM customer expectations in respect to product thermal efficiency, compactness, lower weight and product reliability has reached new high bar which is positive of BPIL.



Strong Financials

BPIL has a comfortable capital structure on account of low reliance on debt to meet capital expenditure as well as working capital requirements. Overall gearing stood at 0.02x in FY21 as compared to 0.13x in FY20. EBITDA and PAT margins have improved sharply in FY21 by 300/200 bps to 11.6/7.4% respectively after contracting over the last 2 years. The company operates a net debt free cash rich balance sheet with Rs 122cr of cash. BPIL has not availed any moratorium as a Covid relief measure, in line with Reserve Bank of India (RBI) guidelines, for servicing of its bank facilities, which further underlines its strong liquidity profile. For FY20, BPIL paid out Rs 20 as dividend (ex-date 18-03-2020).

What could go wrong?

Slowdown in automobile industry

BPIL primarily caters to the automobile industry in India and Europe, which are emerging from a major slowdown. Although the improving trends are encouraging, a huge part of the recent growth was on account of pent-up demand. Sustenance of demand would be the key monitorable in the coming quarters.

Rapid adoption of EVs could reduce coolers requirement

EVs tend to generate lesser heat than internal combustion engines. Rapid adoption of EVs could significantly dent the demand for company's products. In BPIL's view these developments will take long time before necessary ecosystem and infrastructure are available for commercial success of electric vehicles. BPIL enjoys broad based customer portfolio. The sectors where it has its strengths such as agriculture tractors, construction machineries, and power generation etc. are likely to have only limited impact of EV trend. Also about 80% of its Automobile targeted sales go to CV segment, where the EV transition is likely to be much slower and back ended.

High working capital needs

BPIL supplies to a diversified set of industries where each industry has its own specifications. As a result, it has almost 8,000 SKUs (NRF) and ~1,000 SKUs (BPIL) and has to keep high amount of inventory.

Lack of pricing power

BPIL lacks pricing power as it is highly dependent on OEM manufacturers. In rising pricing scenario many OEM squeeze the component manufacturers which impact their margins.



Forex fluctuations

The company derives ~30% of its revenues from export markets and is exposed to the vagaries of forex fluctuations. However 99% of its raw materials are imported and hence provide a natural hedge.

Rising raw material costs could impact margins temporarily

Aluminium is the major raw material consumed by BPIL and is generally procured in equal mix from domestic and international markets. Diversified product portfolio and higher lead time in procurement of materials result in higher 3 CARE Ratings Limited Press Release inventory holding. Aluminium prices have risen in the past few quarters. Although this is normally passed over to the customers, it happens with a lag. Demand from industrial segment is susceptible to economic slowdown which could impact BPIL's topline and bottomline growth.

About the company

Incorporated in 1961, BPIL is one of the largest players in gaskets and radiators in the organized sector that have applications in automobiles, oil engines, compressors and locomotives. The Company designs, develops and manufactures Engine Cooling Modules such as Radiators, Charged Air Coolers, Fuel Coolers, Oil Coolers and Condensers. It offers both copper-brass and aluminium coolers. BPIL currently has the capacity to produce 33.3 lakh radiators annually spread across its five manufacturing locations. BPIL has set up a 100% EOU at Vadodara with EU being the major export market for the company.

During 2010, BPIL acquired entire equity of NRF, for Euro 17.7mn. NRF, established in 1927 has a very strong presence in the European after-market sales for radiators and cooling systems along with a strong supply chain network and has expertise in express delivery to more than 80 countries globally. NRF, along with its subsidiaries, has manufacturing facilities across Europe for manufacturing cooling products for the automotive market, industrial, rail and marine sector.

Major customers for gaskets include Maruti, Tata Motors, Hero Honda and the TVS Group. For heat exchangers Tata Motors, Ashok Leyland, M&M Koel, TAFE, JCB, Indian Railways are the major customers. Domestic market accounts for ~70% of sales while exports contribute ~30%.



Snapshot of Subsidiary companies

(₹ in Lakhs)

Sr.	Name of Subsidiary Company	Reporting	Share	Reserves	Total	Total	Investments	Turnover/	Profit /	Provision	Profit /	Proposed	% of	Date of
No.		Period ended on	Capital	& Surplus	Assets	Liabilities	(except	income *	(Loss)	for	(Loss)	Dividend	Share	acquisition
1							investments		before	Taxation *	after		Holding	
1							in the		taxation *		taxation *			
				00.500	10.044	44.000	subsidiary)	40.470		251			40004	
1	Nederlandse Radiateuren Fabriek BV (NRF)	31st March 2021	96	36,586	48,D11	11,329		40,470	237	354	590		100%	23.02.2010
1.1	NRF Thermal Engineering BV (Skopimex BV)	31st March 2021	13	293	878	572	-	6,918	-1	0	-1		100%	
1.2	NRF France SARL	31st March 2021	158	-18	5,564	5,424	-	9,176	-321	-	-321	-	100%	
1.3	NRF Thermal Engineering Poland Zoo	31st March 2021	11	-376	3,537	3,902	-	63	-427	38	-389		100%	
1.4	NRF Deutschland GMBH	31st March 2021	87	-103	761	778	-	-	25	-409	-384	-	100%	
1.5	NRF Espana S.A.	31st March 2021	2,859	1,733	10,193	5,601	-	16,119	377	-94	283	-	100%	
1.6	NRF Poland Sp.z.o.o.	31st March 2021	15	6,492	21,900	15,392	-	44,056	5,859	-1,410	4,449	_	100%	
1.7	NRF Italia Srl	31st March 2021	9	1,326	3,752	2,418	-	6,862	213	-47	166	-	100%	-
1.8	NRF Switzerland AG	31st March 2021	51	61	213	101		558	-2	-0	-3		100%	
1.9	NRF USA	31st March 2021	2,016	-1,918	232	134	-	62	-206	-	-206	-	100%	
2.	Banco Gaskets (India) Limited	31st March 2021	3,500	3,69B	9,494	2,296	-	13,595	1,815	451	1,364	-	100%	26.08.2011



Financials – Consolidated

Income Statement

(Rs cr)	FY19	FY20	FY21	FY22E	FY23E
Net Revenues	1566.7	1422.1	1532.6	1808.4	2007.4
Growth (%)	17.3	-9.2	<i>7.8</i>	18.0	11.0
Operating Expenses	1391.2	1299.9	1354.5	1569.7	1746.4
EBITDA	175.6	122.2	178.1	238.7	261.0
Growth (%)	-1.8	-30.4	45.8	34.0	9.3
EBITDA Margin (%)	11.2	8.6	11.6	13.2	13.0
Depreciation	29.2	32.8	33.7	34.7	36.0
Other Income	10.4	25.2	9.0	14.5	20.1
EBIT	156.8	114.6	153.5	218.5	245.1
Interest expenses	4.3	3.1	3.6	3.0	2.8
PBT	152.5	111.5	149.8	215.5	242.3
Tax	69.2	34.9	36.1	57.1	61.8
PAT	83.3	76.6	113.7	158.4	180.5
Share of Asso./Minority Int.	0.0	0.0	0.0	0.0	0.0
Adj. PAT	69.1	76.6	113.7	158.4	180.5
Growth (%)	-40.8	10.8	48.5	39.3	13.9
EPS	9.7	10.7	15.9	22.2	25.2

Balance Sheet

As at December (Rs cr)	FY19	FY20	FY21	FY22E	FY23E
SOURCE OF FUNDS					
Share Capital	14.3	14.3	14.3	14.3	14.3
Reserves	818.4	695.7	814.1	915.3	1024.3
Shareholders' Funds	832.7	710.0	828.4	929.6	1038.6
Minority Interest	0.0	0.0	0.0	0.0	0.0
Borrowings	39.5	91.2	13.7	3.4	0.0
Net Deferred Taxes	49.1	47.1	38.4	38.4	38.4
Total Source of Funds	921.2	848.3	880.5	971.4	1077.0
APPLICATION OF FUNDS					
Net Block & Goodwill	184.3	193.4	189.8	180.1	174.1
CWIP	12.6	2.6	1.0	1.0	1.0
Investments	68.5	9.2	0.8	20.8	50.8
Other Non-Curr. Assets	24.0	25.5	11.3	5.8	8.0
Total Non Current Assets	289.4	230.8	202.9	207.7	233.9
Inventories	479.4	476.2	563.9	608.1	695.3
Trade Receivables	271.6	293.6	270.3	335.3	380.2
Cash & Equivalents	127.1	70.4	122.6	119.3	104.8
Other Current Assets	27.1	17.6	26.9	28.5	30.6
Total Current Assets	905.3	857.8	983.8	1091.1	1210.9
Trade Payables	255.7	224.1	284.5	305.3	342.7
Other Current Liab & Provisions	17.8	16.1	21.6	22.1	25.2
Total Current Liabilities	273.5	240.2	306.2	327.5	367.8
Net Current Assets	631.8	617.6	677.6	763.7	843.0
Total Application of Funds	921.2	848.4	880.5	971.4	1077.0



Cash Flow Statement

(0)	EV40	EV20	EV24	EVAAE	EVANE
(Rs cr)	FY19	FY20	FY21	FY22E	FY23E
PBT	158.2	111.5	149.8	215.5	242.3
Non-operating & EO items	29.5	-0.8	-4.1	5.6	-2.2
Interest Expenses	-5.4	-6.0	3.6	3.0	2.8
Depreciation	33.4	32.8	33.7	34.7	36.0
Working Capital Change	-92.2	-48.9	-0.1	-89.5	-93.8
Tax Paid	-61.1	-36.4	-26.1	-57.1	-61.8
OPERATING CASH FLOW (a)	62.4	52.1	156.8	112.2	123.3
Capex	-41.5	-25.8	-32.0	-25.0	-30.0
Free Cash Flow	20.9	26.4	124.8	87.2	93.3
Investments	-40.2	53.7	6.9	-20.0	-30.0
Non-operating income	30.1	121.6	-33.6	0.0	0.0
INVESTING CASH FLOW (b)	-51.6	149.5	-58.7	-45.0	-60.0
Debt Issuance / (Repaid)	34.2	48.9	-74.6	-10.3	-3.4
Interest Expenses	-4.1	-3.1	-3.6	-3.0	-2.8
FCFE	40.9	247.4	19.9	53.8	57.1
Share Capital Issuance	0.0	0.0	0.0	0.0	0.0
Dividend	-77.2	-164.5	0.0	-57.2	-71.5
FINANCING CASH FLOW (c)	-47.1	-118.7	-78.2	-70.5	-77.7
NET CASH FLOW (a+b+c)	-36.3	82.9	19.9	-3.4	-14.4

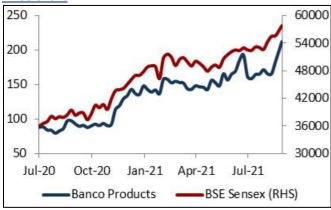
Key Ratios

	FY19	FY20	FY21	FY22E	FY23E
Profitability Ratios (%)					
EBITDA Margin	11.2	8.6	11.6	13.2	13.0
EBIT Margin	10.0	8.1	10.0	12.1	12.2
APAT Margin	4.4	5.4	7.4	8.8	9.0
RoE	8.4	9.9	14.8	18.0	18.3
RoCE	18.3	13.7	18.7	24.6	24.9
Solvency Ratio (x)					
Net Debt/EBITDA	-0.5	0.2	-0.6	-0.5	-0.4
Net D/E	-0.1	0.0	-0.1	-0.1	-0.1
PER SHARE DATA (Rs)					
EPS	9.7	10.7	15.9	22.2	25.2
CEPS	13.7	15.3	20.6	27.0	30.3
BV	116.5	99.3	115.9	130.0	145.3
Dividend	8.0	20.0	2.0	8.0	10.0
Turnover Ratios (days)					
Inventory days	61.5	72.5	67.1	61.1	65.0
Debtor days	107.0	122.6	123.9	118.3	118.5
Creditors days	51.0	61.6	60.6	59.5	58.9
VALUATION (x)					
P/E	21.9	19.8	13.3	9.6	8.4
P/BV	1.8	2.1	1.8	1.6	1.5
EV/EBITDA	7.8	12.6	7.9	5.8	5.2
EV/Revenues	0.9	1.1	0.9	0.8	0.7
Dividend Yield (%)	3.8	9.4	0.9	3.8	4.7

(Source: Company, HDFC sec Research)



Price chart



HDFCSec 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.

Blue 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 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 his relative or HDFC Securities Ltd. does not have any financial interest in the subject company at the end of the month immediately preceding the date of publication of the 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 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: 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.

