APL Apollo Tubes

03 August 2017



Strong execution ability; geared for growth

- APL Apollo Tubes (Apollo) has emerged as the largest manufacturer of Electric Resistance Welded (ERW) steel tubes in India, supported by strong 21% Cagr in manufacturing capacity over FY12-17. A large capacity combined with investments in distribution and branding has driven 26% volume Cagr and 27% revenue Cagr for the company over FY12-17.
- The company continues to invest in capacity expansion from 1.3mtpa to 2mtpa, including addition of 0.5mtpa of DFT-based capacity, which would enable superior products and smaller delivery timelines, and engender higher profitability.
- Geographically well-spread manufacturing capacity (to contain logistics costs) and efficient manufacturing processes have ensured cost competitiveness vs. unorganised as well as organised players.
- A product portfolio that is twice as big as the nearest competition along with a few patented designs should ensure that company would continue to benefit from growing demand for steel pipes from construction, auto, energy, and agriculture and from spending on infrastructure.
- Healthy operating and free cash flow should ensure that debt levels would continue to come down steadily over FY17-20. This will support EPS growth at much faster levels compared with volume/revenue growth, going forward.

IIFL's score-card for unrated companies

Key Positives (with 5 as r	Score of 1-5 nost positive)	-	Score of 1-5 as most risky)
Industry growth potential	///	Regulatory	××
Dominant position within the industry	////	Corporate Governance	××
Balance-sheet strength, profitability ratios	///	Competition (including possible foreign)	xxx
Execution track record of management	////	Liquidity (trading volume)	××××

СМР	Rs1581
Market cap (US\$m)	585
Enterprise value(US\$m)	676
Bloomberg	APAT IN
Sector	Metals
Shareholding pattern (%)	
Promoter	37.5
FII	23.7
DII	15.2
Others	23.6
52Wk High/Low (Rs)	1742/811
Shares o/s (m)	24
Daily volume (US\$ m)	0.3
Dividend yield FY16ii (%)	0.8
Free float (%)	62.5

	1M	3M	1Y	
Absolute (Rs)	2.1	6.6	69.7	
Absolute (US\$)	3.3	7.3	78.8	
Rel. to Sensex	-3.0	-1.9	53.6	
Cagr (%)			3 yrs	
EPS			34.8	
Stock performa	nce			
Vol('000	, LHS) ——	Price (Rs., F	RHS)	
1,500		Г	2,000	
1,000		M	1,500	
	-	الممم	1,000	
500		-	500	
0	اجمد وحسرا معشاها ام	<u> </u>	0	
Aug-15 Oct-15 Dec-15	reb-16 Apr-16 Jun-16 Aug-16 Oct-16 Dec-16	Feb-17 Apr-17 Jun-17 Aug-17		

Price performance (%)

Financial summary (Rs m)

Y/e 31 Mar, Consolidated	FY14A	FY15A	FY16A	FY17A
Revenues (Rs m)	24,970	31,383	42,136	45,450
Ebitda margins (%)	6.6	5.8	6.7	7.1
Pre-exceptional PAT (Rs m)	592	638	1,259	1,459
Reported PAT (Rs m)	590	638	1,006	1,459
Pre-exceptional EPS (Rs)	25.3	27.2	53.7	61.8
Growth (%)	(18.7)	7.6	97.5	15.1
PER (x)	62.6	58.1	29.4	25.6
ROE (%)	14.9	13.9	23.7	22.7
Net debt/equity (x)	1.1	0.8	1.1	0.8
EV/Ebitda (x)	25.4	22.7	15.3	13.3
Price/book (x)	8.7	7.5	6.5	5.2

Source: Company, IIFL Research. Priced as on 02 August 2017

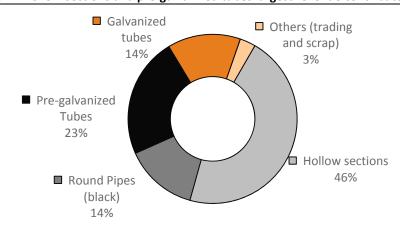


Leading steel pipes company

APL Apollo Tubes (formerly Bihar Tubes) commenced operations in 1986 as a private limited company promoted by late Mr. Sudesh Gupta. It has emerged as one of India's leading ERW steel tubes manufacturer with a capacity of 1.3mtpa spread out evenly across northern, southern, and western India. The company is commissioning 0.2mtpa greenfield capacity at Raipur to cater to markets in eastern India. It is also adding lines of new DFT mills (500ktpa) at existing sites in the four regions, which would enable it to offer superior products with lower turnaround times to customers.

Apollo's product profile includes hollow sections, pre-galvanized tubes, galvanized tubes, round pipes and special value added products (door and window frames and railing tubes). At least 70% of the company's products are niche categories that have limited competition. Its products cover a range of industry applications such as urban infrastructure, automobile, construction, housing, energy, irrigation, and solar plants. Over the years, the company has established a strong distribution network across India with more than 600 dealers and 26 warehouses.

Figure 1: Hollow sections and pre-galvanized tubes largest revenue contributors in FY17



^{*}split for revenue from manufactured goods. Source: Company, IIFL Research

Figure 2: Management profile

Name	Designation	Descripiton
Sanjay Gupta	Executive Chairman	He has over 2 decades of experience in various steel industry segments. He is responsible for steering the company with a clear vision of growth in context with changing market scenarios. Under his leadership, the company grew exponentially gaining national and international recognition.
Ashok Gupta	Managing Director	He is a steel industry veteran with over three decades of experience. He has earlier worked at senior management positions in SAIL, Bhushan Steel, LN Mittal Group (African Continent), Jindal, etc. He has been instrumental in transforming the organization and generating incremental profitability and expansions.
Vinay Gupta	Director	He has over 18 years of experience in exports and international markets. He possesses in-depth knowledge of manufacturing and trading pipes, tubes, sheets and other steel products. He has been specifically assigned with the development of pregalvanized business.

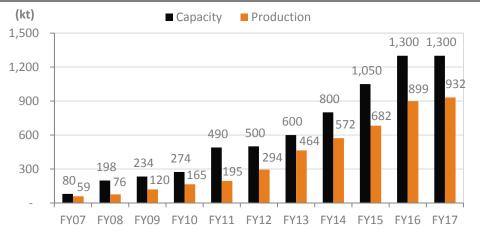
Source: Company, IIFL Research

Strong volume growth supported by expanding capacity

Apollo has expanded its capacity at 32% Cagr over the past decade from 80kt in 2007 to 1.3mt at present spread over six facilities across India. It has used the organic and inorganic route to expand capacity. Its major acquisitions include Apollo Metalex Pvt Limited in 2007, Shri Lakshmi Metal Udyog in 2008, and Lloyds Line Pipes Limited in 2012. In line with capacity expansions, the company has delivered strong 32% volume Cagr in over the past decade.



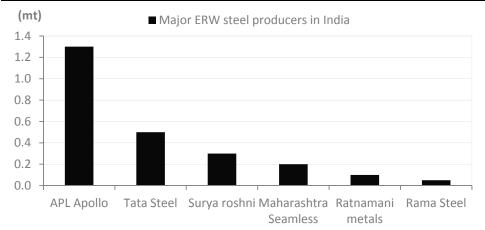
Figure 3: Strong volume growth history



Source: Company, IIFL Research

Importantly, Apollo's capacity expansion has come about during the period when capacity of the overall organized industry has grown at a much slower pace. Thus, Apollo has benefited from market share gains from organized as well as unorganized competitors.

Figure 4: Apollo is the largest ERW steel player in domestic market



Source: Industry data, IIFL Research

Targeting capacity of 2mtpa (+54%) by end FY18

The management intends to continue with its aggressive expansion plans to drive volume growth over FY17-19. With a view to tap the market in eastern India, the company is investing Rs1.25bn to set up a 325kt greenfield capacity in Raipur, Chhattisgarh. One production line out of the planned six lines has been commissioned and management expects to commence production on all lines by 3QFY18.

Figure 5: Geographically well spread operations

Plant wise capacity (kt)	State	Existing	DFT(planned)	Total
Murbad	Maharashtra	350	125	475
Hosur	Tamil Nadu	350	125	475
Sikandarabad	Uttar Pradesh	475	125	600
Bengaluru	Karnataka	125	-	125
Raipur	Chhattisgarh	200	125	325
Total		1,500	500	2,000

Source: Company, IIFL Research

The company is also setting up new lines of Direct Form Technology (DFT) mills with a total capacity of 500kt split equally between its existing facilities in Sikandarabad, Hosur, Raipur, and Murbad. It has earmarked capex of Rs1.25bn for these mills.



DFT Technology to improve product mix and aid margins

Apollo introduced the latest global technology - Direct forming technology (DFT) in India in 2016. Under this technology, hollow sections of various shapes, sizes, and thickness are formed directly through high speed welding. It enables customised orders including size customisation. It also reduces rollover time to ~20 mins from 24-48 hours earlier under conventional technology. Besides saving time, it also enables direct material savings of ~3-7%.

This technology enables booking of small orders and enables quick turnaround time, reducing working capital requirements. It also opens an array of opportunities across various sectors such as metros, airports, prefabricated buildings, agricultural implements, solar tracking systems and various applications in the automobile industry. The high quality of customised shapes and sizes of products manufactured using DFT would enable the company to penetrate OEMs and the exports market. The company is setting up a 0.5mtpa DFT capacity across its existing facilities, expected to be commissioned by end FY18.

Apollo is also upgrading facilities to increase proportion of high-margin value added products. The company has ventured into precision tubes for automotive application. It is also setting up an inline galvanizing plant and is upgrading existing lines to the galvanized product technology.

Figure 6: Product innovation has been key to strong volume growth for APL Apollo



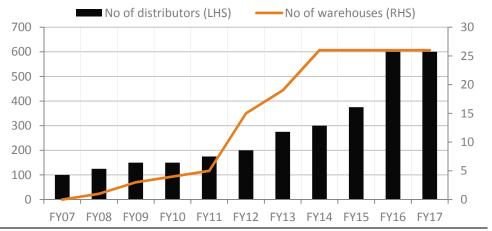
Source: Company, IIFL Research

Building entry barriers through distribution & branding

Apollo derives 80% of sales from distributors. Sale of pipes is through warehouses that cater to dealers/distributors who in turn sell to retailers. The company is expanding its business across India in new cities, towns and villages and it has increased its distribution reach over the past few years. Apollo has presence in over 300 cities and towns across India, with 26 warehouses, 600 distributors, and 40,000 retailers. Distribution reach and warehouses have expanded rapidly over the past few years in line with growing volumes. The company has introduced innovative incentive schemes for dealers such as a four-day Star Cruise to Singapore and Malaysia for over 1000 dealers and distributors.



Figure 7: Sharp increase in distributors and warehouses over the past decade



Source: Company, IIFL Research

In 2013, the company developed a focused branding strategy to create awareness and visibility of the brand and provide customers a first-hand feel of the brand. These initiatives have resulted in better sales growth in tier II and III cities than in tier I cities. Sales in small towns and villages are also growing due to increased brand awareness. The company has improved presence in trade expos, fabricator meetings, and it has focused advertising and brand engagement programmes (rural brand van activation programmes). It is also focusing on reaching out to fabricators, small traders, and farmers.

The management is working with a reputed marketing consultant to launch new brands under "APL Apollo" to cover the company's unique and innovative product portfolio. The company is targeting ~30k signage boards across the country for higher visibility.

The company launched 'Apollo Coastguard' pipes, a new brand that will tap growing consumption of galvanized steel tubes in coastal regions. This product would be made of special galvanized steel to provide corrosion resistance against wind, water, making them 100% rust proof.

The company has announced a strategic tie-up with NEXTracker to manufacture a key structural component of its solar tracking system in India. NEXTracker would get highest quality steel products sourced for its solar parks and power plants in India. This tie-up also allows Apollo to penetrate rapidly into the growing renewable energy market in India. As per estimates, the expected 100GW of solar power capacity by 2022 would require more than 1mt of premium pre-galvanized hollow section tubes.

Improving demand to drive volume growth from expanded capacities

India is one the leading ERW steel pipes and tubes manufacturing hub globally with ~7mtpa capacity. The domestic market size for ERW steel pipes is ~300bn. Apollo is the largest manufacturer of ERW steel pipes and tubes in India with current capacity of 1.3mtpa. Increase in demand from the infrastructure, construction, automobile and refining sectors continues to propel growth for ERW steel pipes and tubes.

Figure 8: Strong demand growth driven by infra, construction and auto sectors

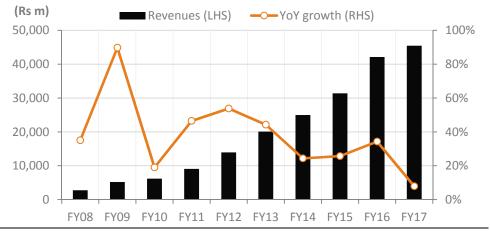


Source: Company, IIFL Research

Although overall demand is likely to grow by 9-10% annually, Apollo's volume growth should be higher since it continues to gain market share from organised as well as from unorganised competitors.

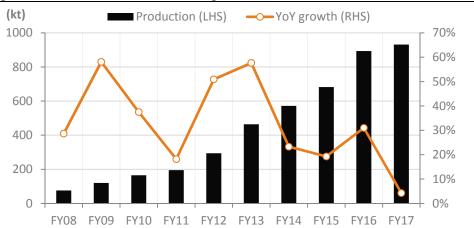


Figure 9: APL Apollo tubes delivered 36.5% revenue Cagr over the past decade...



Source: Company, IIFL Research

Figure 10: ...on the back of 32% volume growth in FY07-17

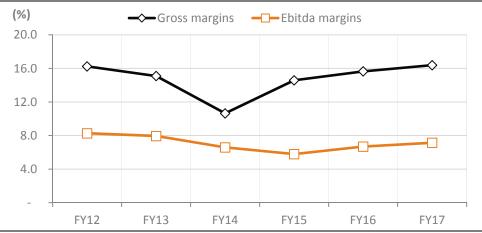


Source: Company, IIFL Research

Given that ~90% of costs are on steel, the key raw material, profitability is exposed to variations in steel price over the short term. However, the company has generally been able to pass through the changes in steel prices to customers with a short lag. This trend should continue going forward. Ebitda margins have seen an improvement in

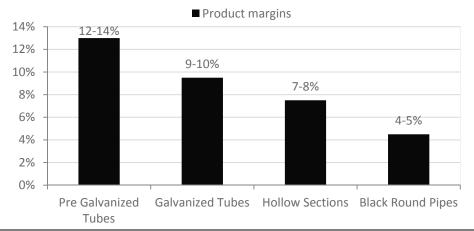
the past two years, led primarily by increasing stickiness of customers, and slightly better pricing power vs. competition. Ebitda margins will get support going forward as share of DFT product increases as these will fetch higher margins than traditional ERW steel pipes.

Figure 11: Both gross margins and Ebitda margins are expected to rise steadily over FY17-19 as product mix improves



Source: Company, IIFL Research

Figure 12:Rising proportion of galvanized tubes and DFT should drive margin expansion

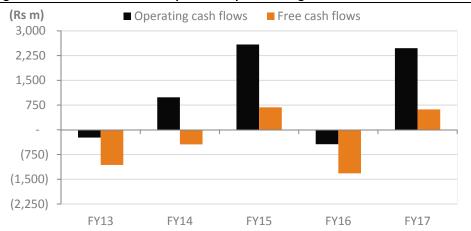


Source: Company, IIFL Research



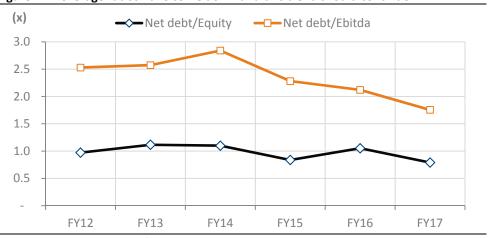
PAT growth has been higher as debt and interest costs have come down on the back of healthy cash flows.

Figure 13: Investments in new capacities impacted FCF generation



Source: Company, IIFL Research

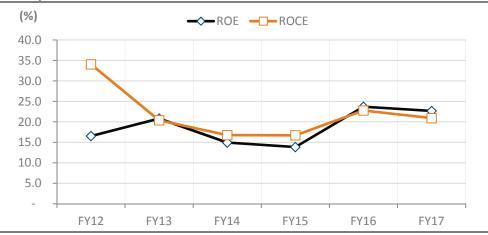
Figure 14: Leverage ratios have come down and this trend should continue



Source: Company, IIFL Research

Overall, we expect return ratios to improve steadily over the next few years, driven by higher profitability and improving asset turns.

Figure 15:ROE and ROCE have improved from the low of FY15 and should inch up steadily



Source: Company, IIFL Research



Financial summary

Income statement summary (Rs m)

Y/e 31 Mar, Consolidated	FY14A	FY15A	FY16A	FY17A
Revenues	24,970	31,383	42,136	45,450
Ebitda	1,646	1,816	2,817	3,244
Depreciation and amortisation	(164)	(220)	(341)	(512)
Ebit	1,481	1,596	2,476	2,732
Non-operating income	20	45	103	38
Financial expense	(609)	(664)	(695)	(683)
PBT	892	977	1,883	2,086
Exceptionals	(3)	0	(253)	0
Reported PBT	890	977	1,630	2,086
Tax expense	(300)	(339)	(624)	(627)
PAT	590	638	1,006	1,459
Minorities, Associates etc.	0	0	0	0
Attributable PAT	590	638	1,006	1,459

Ratio analysis

Natio alialysis				
Y/e 31 Mar, Consolidated	FY14A	FY15A	FY16A	FY17A
Per share data (Rs)				
Pre-exceptional EPS	25.3	27.2	53.7	61.8
DPS	5.0	6.0	9.9	12.0
BVPS	181.4	211.2	242.1	305.3
Growth ratios (%)				
Revenues	24.3	25.7	34.3	7.9
Ebitda	3.1	10.4	55.1	15.2
EPS	(18.7)	7.6	97.5	15.1
Profitability ratios (%)				
Ebitda margin	6.6	5.8	6.7	7.1
Ebit margin	5.9	5.1	5.9	6.0
Tax rate	33.7	34.7	38.3	30.1
Net profit margin	2.4	2.0	2.4	3.2
Return ratios (%)				
ROE	14.9	13.9	23.7	22.7
ROCE	16.8	16.7	22.8	20.9
Solvency ratios (x)				
Net debt-equity	1.1	0.8	1.1	0.8
Net debt to Ebitda	2.8	2.3	2.1	1.8
Interest coverage	2.4	2.4	3.6	4.0

Source: Company data, IIFL Research

Balance sheet summary (Rs m)

Y/e 31 Mar, Consolidated	FY14A	FY15A	FY16A	FY17A
Cash & cash equivalents	101	188	14	17
Inventories	2,885	3,196	5,944	4,696
Receivables	2,494	1,753	2,199	2,952
Other current assets	801	897	740	1,344
Creditors	1,242	2,045	2,540	3,704
Other current liabilities	688	1,115	1,481	899
Net current assets	4,351	2,873	4,875	4,406
Fixed assets	4,280	5,951	6,519	7,863
Intangibles	199	429	462	706
Investments	176	191	131	127
Other long-term assets	567	623	593	795
Total net assets	9,572	10,067	12,581	13,898
Borrowings	4,774	4,332	5,985	5,707
Other long-term liabilities	546	784	920	988
Shareholders equity	4,252	4,951	5,676	7,203
Total liabilities	9,572	10,067	12,581	13,898

Cash flow summary (Rs m)

Y/e 31 Mar, Consolidated	FY14A	FY15A	FY16A	FY17A
Ebit	1,481	1,596	2,476	2,732
Tax paid	(300)	(339)	(624)	(627)
Depreciation and amortization	164	220	341	512
Net working capital change	(3)	1,524	(2,125)	292
Other operating items	231	206	88	212
Operating cash flow before interest	1,574	3,207	155	3,120
Financial expense	(609)	(664)	(695)	(683)
Non-operating income	20	45	103	38
Operating cash flow after interest	985	2,588	(437)	2,475
Capital expenditure	(1,263)	(1,892)	(942)	(1,859)
Long-term investments	(164)	(15)	59	4
Others	(3)	0	(254)	0
Free cash flow	(444)	682	(1,574)	619
Equity raising	11	0	0	2
Borrowings	529	(443)	1,653	(278)
Dividend	(136)	(152)	(254)	(340)
Net chg in cash and equivalents	(41)	87	(175)	3

Source: Company data, IIFL Research



Disclosure: Published in 2017, © India Infoline Ltd 2017

India Infoline Group (hereinafter referred as IIFL) is engaged in diversified financial services business including equity broking, DP services, merchant banking, portfolio management services, distribution of Mutual Fund, insurance products and other investment products and also loans and finance business. India Infoline Ltd ("hereinafter referred as IIL") is a part of the IIFL and is a member of the National Stock Exchange of India Limited ("NSE") and the BSE Limited ("BSE"). IIL is also a Depository Participant registered with NSDL & CDSL, a SEBI registered merchant banker and a SEBI registered portfolio manager. IIL is a large broking house catering to retail, HNI and institutional clients. It operates through its branches and authorised persons and sub-brokers spread across the country and the clients are provided online trading through branches and Customer Care.

- a) This research report ("Report") is for the personal information of the authorized recipient(s) and is not for public distribution and should not be reproduced or redistributed to any other person or in any form without IIL's prior permission. The information provided in the Report is from publicly available data, which we believe, are reliable. While reasonable endeavors have been made to present reliable data in the Report so far as it relates to current and historical information, but IIL does not guarantee the accuracy or completeness of the data in the Report. Accordingly, IIL or any of its connected persons including its directors or subsidiaries or associates or employees shall not be in any way responsible for any loss or damage that may arise to any person from any inadvertent error in the information contained, views and opinions expressed in this publication.
- b) Past performance should not be taken as an indication or guarantee of future performance, and no representation or warranty, express or implied, is made regarding future performance. Information, opinions and estimates contained in this report reflect a judgment of its original date of publication by IIFL and are subject to change without notice. The price, value of and income from any of the securities or financial instruments mentioned in this report can fall as well as rise. The value of securities and financial instruments is subject to exchange rate fluctuation that may have a positive or adverse effect on the price or income of such securities or financial instruments.
- c) The Report also includes analysis and views of our research team. The Report is purely for information purposes and does not construe to be investment recommendation/advice or an offer or solicitation of an offer to buy/sell any securities. The opinions expressed in the Report are our current opinions as of the date of the Report and may be subject to change from time to time without notice. IIL or any persons connected with it do not accept any liability arising from the use of this document.
- d) Investors should not solely rely on the information contained in this Report and must make investment decisions based on their own investment objectives, judgment, risk profile and financial position. The recipients of this Report may take professional advice before acting on this information.
- e) IIL has other business segments / divisions with independent research teams separated by 'Chinese walls' catering to different sets of customers having varying objectives, risk profiles, investment horizon, etc and therefore, may at times have, different and contrary views on stocks, sectors and markets.
- f) This report is not directed or intended for distribution to, or use by, any person or entity who is a citizen or resident of or located in any locality, state, country or other jurisdiction, where such distribution, publication, availability or use would be contrary to local law, regulation or which would subject IIL and its affiliates to any registration or licensing requirement within such jurisdiction. The securities described herein may or may not be eligible for sale in all jurisdictions or to certain category of investors. Persons in whose possession this Report may come are required to inform themselves of and to observe such restrictions.
- g) As IIL along with its associates, are engaged in various financial services business and so might have financial, business or other interests in other entities including the subject company(ies) mentioned in this Report. However, IIL encourages independence in preparation of research report and strives to minimize conflict in preparation of research report. IIL and its associates did not receive any compensation or other benefits from the subject company(ies) mentioned in the Report or from a third party in connection with preparation of the Report. Accordingly, IIL and its associates do not have any material conflict of interest at the time of publication of this Report.
- h) As IIL and its associates are engaged in various financial services business, it might have:-
 - (a) received any compensation (except in connection with the preparation of this Report) from the subject company in the past twelve months; (b) managed or co-managed public offering of securities for the subject company in the past twelve months; (c) received any compensation for investment banking or merchant banking or brokerage services from the subject company in the past twelve months; (d) received any compensation for products or services other than investment banking or merchant banking or brokerage services from the subject company in the past twelve months; (e) engaged in market making activity for the subject company.
- i) IIL and its associates collectively do not own (in their proprietary position) 1% or more of the equity securities of the subject company mentioned in the report as of the last day of the month preceding the publication of the research report.
- j) The Research Analyst engaged in preparation of this Report or his/her relative:-
 - (a) does not have any financial interests in the subject company (ies) mentioned in this report; (b) does not own 1% or more of the equity securities of the subject company mentioned in the report as of the last day of the month preceding the publication of the research report; (c) does not have any other material conflict of interest at the time of publication of the research report.
- k) The Research Analyst engaged in preparation of this Report:-
 - (a) has not received any compensation from the subject company in the past twelve months; (b) has not managed or co-managed public offering of securities for the subject company in the past twelve months; (c) has not received any compensation for investment banking or merchant banking or brokerage services from the subject company in the past twelve months; (d) has not received any compensation for products or services other than investment banking or merchant banking or brokerage services from the subject company in the past twelve months; (e) has not received any compensation or other benefits from the subject company or third party in connection with the research report; (f) has not served as an officer, director or employee of the subject company; (g) is not engaged in market making activity for the subject company.
- L) IIFLCAP accepts responsibility for the contents of this research report, subject to the terms set out below, to the extent that it is delivered to a U.S. person other than a major U.S. institutional investor. The analyst whose name appears in this research report is not registered or qualified as a research analyst with the Financial Industry Regulatory Authority ("FINRA") and may not be an associated person of IIFLCAP and, therefore, may not be subject to applicable restrictions under FINRA Rules on communications with a subject company, public appearances and trading securities held by a research analyst account.

We submit that no material disciplinary action has been taken on IIL by any regulatory authority impacting Equity Research Analysis.



A graph of daily closing prices of securities is available at http://www.nseindia.com/ChartApp/install/charts/mainpage.jsp, www.bseindia.com and http://economictimes.indiatimes.com/markets/stocks/stock-quotes. (Choose a company from the list on the browser and select the "three years" period in the price chart).

Name, Qualification and Certification of Research Analyst: Anupam Gupta(PGDBM), Urvil Bhatt(Chartered Accountant)

India Infoline Limited (Formerly "India Infoline Distribution Company Limited"), CIN No.: U99999MH1996PLC132983, Corporate Office – IIFL Centre, Kamala City, Senapati Bapat Marg, Lower Parel, Mumbai – 400013 Tel: (91-22) 4249 9000 .Fax: (91-22) 40609049, Regd. Office – IIFL House, Sun Infotech Park, Road No. 16V, Plot No. B-23, MIDC, Thane Industrial Area, Wagle Estate, Thane – 400604 Tel: (91-22) 25806650. Fax: (91-22) 25806654 E-mail: mail@indiainfoline.com Website: www.indiainfoline.com, Refer www.indiainfoline.com for detail of Associates.

National Stock Exchange of India Ltd. SEBI Regn. No.: INB231097537/ INF231097537/ INE231097537, Bombay Stock Exchange Ltd. SEBI Regn. No.: INB011097533/ INF011097533/ BSE-Currency, MCX Stock Exchange Ltd. SEBI Regn. No.: INB261097530/ INF261097530/ INE261097537, United Stock Exchange Ltd. SEBI Regn. No.: INE271097532, PMS SEBI Regn. No. INP000002213, IA SEBI Regn. No. INA000000623, SEBI RA Regn.:- INH000000248

Key to our recommendation structure

BUY - Absolute - Stock expected to give a positive return of over 20% over a 1-year horizon.

SELL - Absolute - Stock expected to fall by more than 10% over a 1-year horizon.

In addition, **Add** and **Reduce** recommendations are based on expected returns relative to a hurdle rate. Investment horizon for **Add** and **Reduce** recommendations is up to a year. We assume the current hurdle rate at 10%, this being the average return on a debt instrument available for investment.

Add - Stock expected to give a return of 0-10% over the hurdle rate, i.e. a positive return of 10%+.

Reduce - Stock expected to return less than the hurdle rate, i.e. return of less than 10%.

Distribution of Ratings: Out of 198 stocks rated in the IIFL coverage universe, 108 have BUY ratings, 5 have SELL ratings, 63 have ADD ratings and 22 have REDUCE ratings

Price Target: Unless otherwise stated in the text of this report, target prices in this report are based on either a discounted cash flow valuation or comparison of valuation ratios with companies seen by the analyst as comparable or a combination of the two methods. The result of this fundamental valuation is adjusted to reflect the analyst's views on the likely course of investor sentiment. Whichever valuation method is used there is a significant risk that the target price will not be achieved within the expected timeframe. Risk factors include unforeseen changes in competitive pressures or in the level of demand for the company's products. Such demand variations may result from changes in technology, in the overall level of economic activity or, in some cases, in fashion. Valuations may also be affected by changes in taxation, in exchange rates and, in certain industries, in regulations. Investment in overseas markets and instruments such as ADRs can result in increased risk from factors such as exchange controls, taxation, and political and social conditions. This discussion of valuation methods and risk factors is not comprehensive – further information is available upon request.