INSTITUTIONAL RESEARCH

Logistics

Indian Railways - getting aggressive

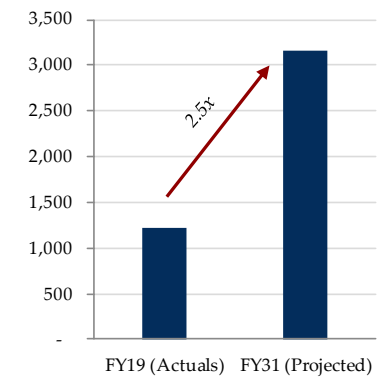
The Indian Railways (IR) is targeting to increase its market share from the current ~28% to 44% in the longer term (FY51) as per the National Rail Plan (NRP) document released recently. The IR has set near-term targets of 33% in 2026, 39% in 2031, 43% in 2041 and 44% in 2051. We believe that the IR has carried out detailed work in assessing these market share targets (which was released in their 1,178 pages document). Under the base case of the railways, it proposes to double the speed of trains to 50kmph gradually and reduce tariff on selected commodity items by 30%. IR is projecting Container tonnage to increase from 54MT to 234MT over FY18-31 (CAGR of 12%). We believe that this would be positive for companies such as CONCOR and Gateway Rail, while roadways will be impacted, which could impact demand for new trucks in the medium term.

- Railways have lost market share due to capacity constraints and restricted speeds. It is pertinent to note that share of Rail in freight movement having leads beyond 300 km has fallen from 51.5% (765 MT) in FY08 to 32.4% (727 MT) in FY19. While the quantum of freight movement has remained the same by IR, the share has fallen due to limited capacity amidst an overall increase in freight generation. Railways can gain share in the long lead segments as capacity increases. For instance, while the average leads for containers is 624kms, that of the rail-based is significantly higher at 885kms.
- **Market share gain potential**: The projected potential growth of freight traffic indicates that railways has the potential for almost 2.5x growth over the next decade subject to improved logistics performance of IR. The quantity transported by rail is targeted at 3,167MT by FY31 (1,226MT in FY19). This implies a market share of 39% in FY31 (up from 28%).
- **Calibrated strategy**: IR intends to increase the rail coefficient for cargo where it traditionally has a limited presence, i.e. high-value commodities and non-conventional commodities. Railways believes that the share of conventional freight (traditional bulk traffic) will reduce from 40% of total freight carried in 2019 to 33% in 2051. It intends to reduce tariff by up to 30% on select commodities including BOG, Cement, Containers, Food Grains and RM for Steel. Through price cuts and reduced travel time, it intends to raise rail coefficient - Balance other goods (BOG) from 4% to 16%, cement from 37% to 50%, Containers from 24% to 43% and food grains from 16% to 31%.
- **Containers – aggressive strategy**: The IR expects container tonnage to increase from 54MT to 234MT over FY18-31 (CAGR of 12%). The commissioning of the DFC will play an important part in the same. As savings from double stacking of containers will be ~20% - the cost-savings coupled with timetabled trains will add to the overall growth in rail share. The container coefficient is thus targeted to increase to 43% (from 24%).
- **Price targets:** We raise our TP on CONCOR (ADD) to Rs 500 and Gateway Distriparks (BUY) to Rs 160. We raise our FY22/23E EPS by 8% for both the companies and roll forward our TP timeframe to Mar-22 (from Sep-21). We also increase our multiple on Gateway from 8.5x EV/EBITDA to 9x to factor in the improved demand environment and the company's restructuring initiatives.

Companies	CMP* (Rs)	Reco
Container Corporation	439	ADD
Gateway Distriparks	122	BUY
Ashok Leyland	122	REDUCE
Tata Motors	242	BUY

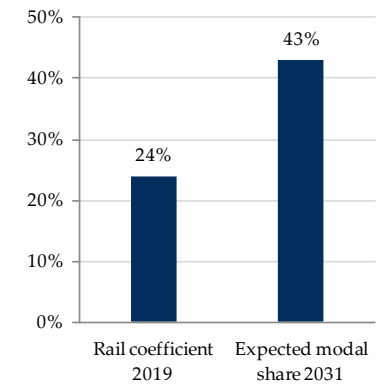
**CMP as of 13th Jan-21*

Improved logistics performance shall catalyze growth in rail freight traffic (in mn tonnes)



Source: Ministry of Railways, HSIE Research

Rail containers' rail-coefficient to increase



Source: Ministry of Railways, HSIE Research

Aditya Makharia
aditya.makharia@hdfcsec.com
+91-22-6171-7316

Mansi Lall
mansi.lall@hdfcsec.com
+91-22-6171-7357

HDFC securities 20 YEARS

Table of contents

Aggressive market share targets

The IR has set near-term market share targets of 33% in 2026, 39% in 2031, 43% in 2041 and 44% in 2051 (from current levels)

- **The Indian Railways (IR) is targeting to increase its market share from the current ~28% to 44% in the longer term (FY51) as per the National Rail Plan document released recently. The IR has set near-term targets of 33% in 2026, 39% in 2031, 43% in 2041 and 44% in 2051. We believe that the IR has carried out detailed work in assessing these market share targets (which was released in their 1,178-page NRP document). Under the base case of the railways, it proposes to double the speed of trains to 50kmph gradually and reduce tariff on selected commodity items by 30%. IR is projecting Container tonnage to increase from 54MT to 234MT over FY18-31 (CAGR of 12%). We believe that as IR gains share, it will be positive for companies such as CONCOR and Gateway Rail, while roadways will be impacted, which could impact demand for new trucks in the medium term.**

Existing scenario:

- A total freight movement of 4,464 million tonnes occurred across the country in FY18. Of which, 1,162 million tonnes were moved by rail and it registered a market share of 26% in the total freight movement (29% share in NTKM).

Share of Railways in Total Freight Movement (2017-18)

Mode	Tonnes (Millions)	Share (%)	NTKM (Billions)	NTKMS
Rail	1,163	26%	616	29%
Road	2,912	65%	1,521	71%
Coastal Shipping	234	5%	N.A.	
IWT	72	2%	N.A.	
Pipeline	84	2%	N.A.	
TOTAL	**4,464**	**100%**	**2,137**	**100%**

Source: Ministry of Railways, HSIE Research

- The Railways has provided its growth forecast for tonnage movement over FY21-51. They believe that freight will grow from 4,805T to 8220T over FY21-31 and to 15,583MT in FY51.

The total freight moved in the economy via various modes of transport was 4,709MT, as of FY19

Projected commodity demand (in million tonnes)

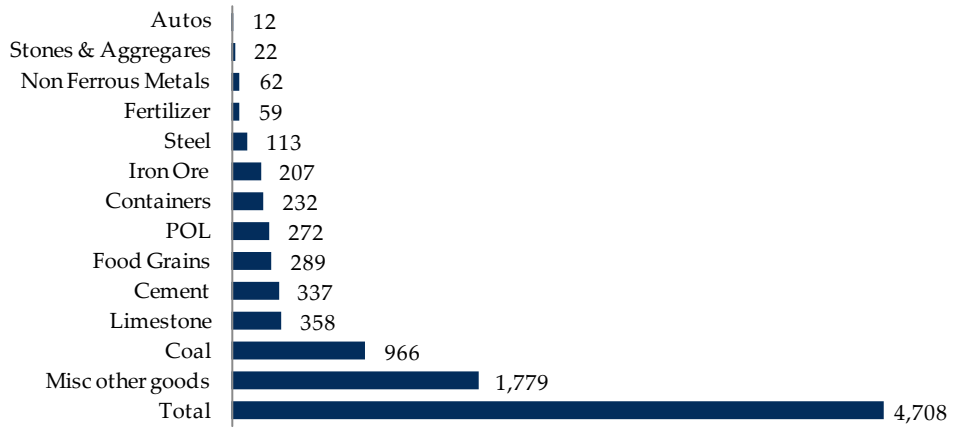
Commodity (Demand)	2019	2021	2026	2031	2041	2051
BOG	2,172	1,922	2,638	3,499	4,774	6,309
Cement	339	399	601	813	1,355	2,114
Coal	965	1,052	1,237	1,502	2,081	2,136
Container	231	316	411	546	870	1,264
Fertilizer	61	74	100	128	196	284
Food grains	287	315	362	416	541	701
Iron Ore	207	221	295	377	569	798
Pig Iron	113	121	164	215	322	452
POL	273	329	484	629	930	1,323
Steel RM	61	56	74	95	143	200
Total	**4,709**	**4,805**	**6,366**	**8,220**	**11,780**	**15,583**

Source: Ministry of Railways, HSIE Research

- This implies a 6% growth rate over FY21-26 and 5% over FY26-31. Segments such as containers and BOG will grow ahead of the market, which is positive for container rail operators.

- The total freight moved in the economy via various modes of transport was 4,709MT as of FY19. This comprises of commodities including coal, misc. goods as well as other commodities and food grains.

National freight ecosystem (in million tonnes)

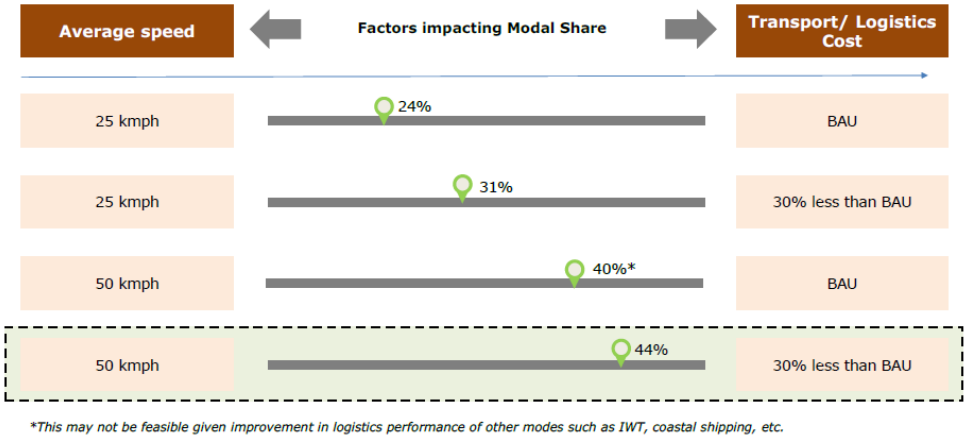


Source: Ministry of Railways, HSIE Research

- Indian Railways is now targeting to increase its market share to 44% by FY51 based on its new initiatives, including capacity enhancement, lower freight rates on select commodities as well as faster movement of trains.

Indian Railways is now targeting to increase its market share to 44% by FY51

Rail modal share under different scenario runs of Logit Model



Source: Ministry of Railways, HSIE Research

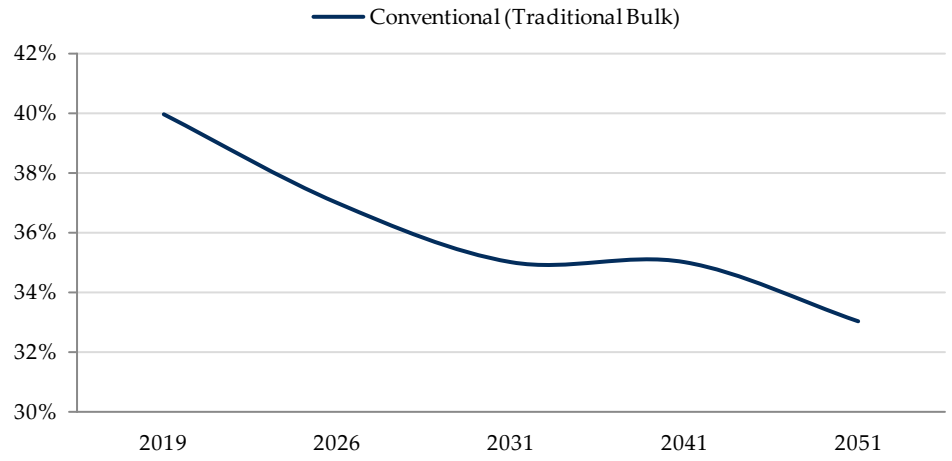
- IR intends to increase the rail coefficient for cargo where it traditionally has a limited presence i.e. high-value commodities and non-conventional commodities.

Classification of commodities

Source: Ministry of Railways, HSIE Research

- Railways believes that the share of conventional freight (traditional bulk traffic) will reduce from 40% of total freight carried in 2019 to 33% in 2051, while conventional high value and non-conventional cargo will grow.

Share of conventional commodities to go down



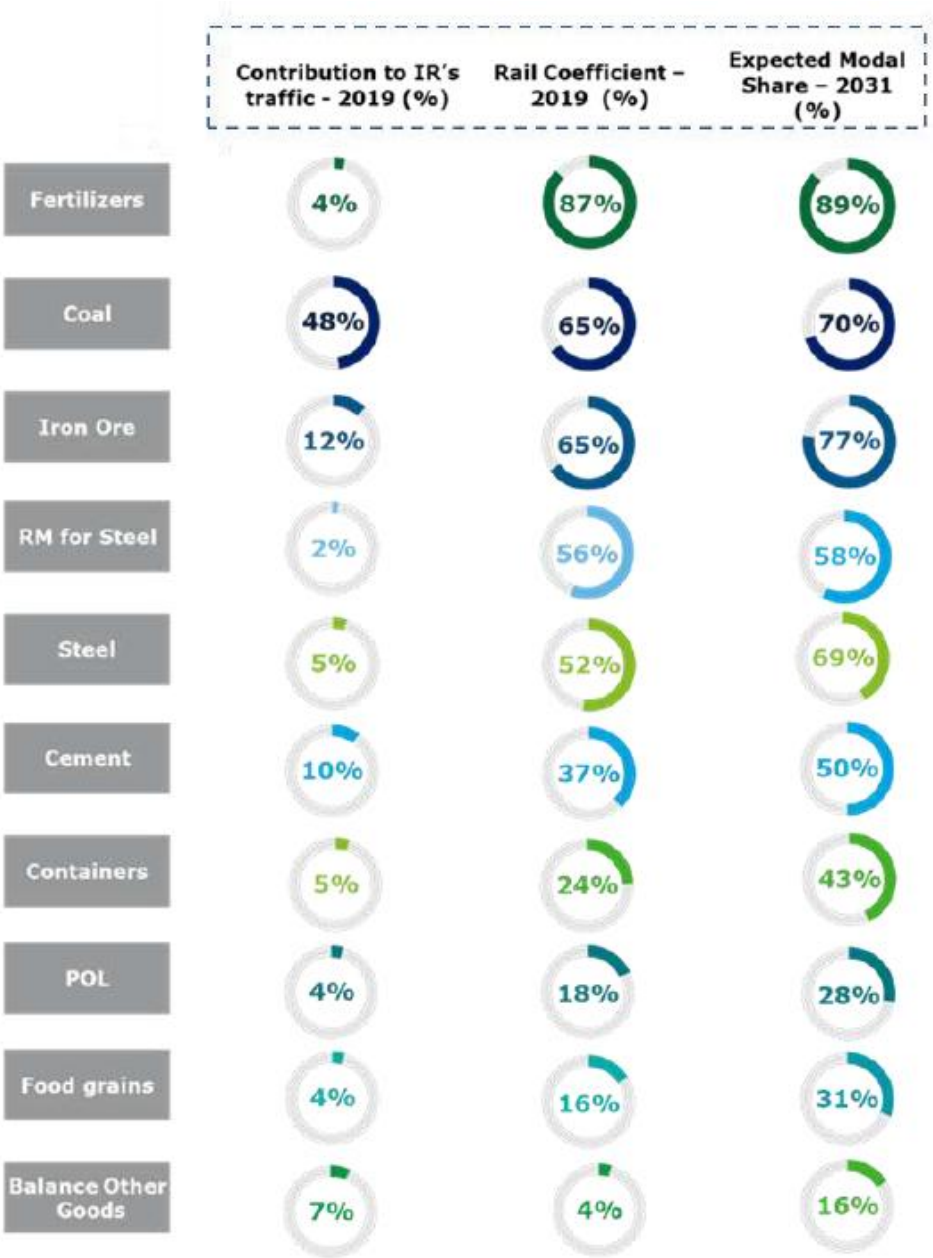
Source: Ministry of Railways, HSIE Research

- Railways intends to reduce tariff by up to 30% on select commodities including BOG, Cement, Containers, Food Grains and RM for Steel. Through price cuts and reduced travel time, it intends to raise rail coefficient - Balance other goods (BOG) from 4% to 16%, cement from 37% to 50%, Containers from 24% to 43% and food grains from 16% to 31%.

The modal share of containers is expected to increase from 24% to 43% by 2031

Similarly, the modal share of BOG is expected to increase to 16% from current levels

Key commodity groups, existing rail share and identification of focus commodities for IR



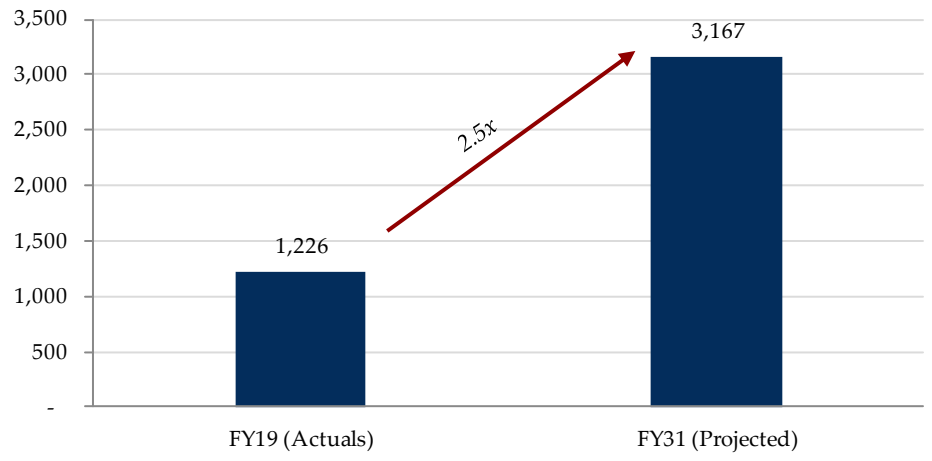
Source: Ministry of Railways, HSIE Research

Derivation of railway's market share targets

- The projected potential growth of freight traffic on rail, as discussed in the NRP demand forecast report, indicates that rail traffic has a potential for almost 2.5x growth over the next decade subject to improved logistics performance on rail.

Rail traffic has a potential for almost 2.5x growth over the next decade

Improved logistics performance shall catalyze growth in rail freight traffic (in mn tonnes)



Source: Ministry of Railways, HSIE Research

- Railways has used a total of four scenarios while considering its market share targets. The study is fairly in-depth and uses reasonable assumptions, in our view. Its base case is a market share target of 44% under the scenario 3C, which is highlighted in the table below.

Comparison of Scenarios

Components	Existing Scenario	Scenario 1: BAU	Scenario 2: Enhancement average speed to 50 kmph	Scenario 3A: Enhancement average speed to 50 kmph with 30% reduced tariff	Scenario 3B: Enhancement of average speed to 50 kmph with 30% less tariff on selected items*	Scenario 3C: Enhancement of average speed to 50 kmph gradually with 30% less tariff on selected commodities	Scenario 4: BAU with tariff reduction by 30%
Operating speed (kmph)	25	25	50	50	50	25-50	25
Railway Tariff	-	BAU	BAU	30% lesser than BAU	30% lesser than BAU on selected items	30% lesser than BAU on selected items	30% lesser than BAU
Daily Run in Road	350	450	450	450	450	450	450
Cost on Road	BAU	BAU	BAU	BAU	BAU	BAU	BAU
Rail Commodity Share (%)	28%	24%	40%	45%	44%	30%-44%	31%

Source: Ministry of Railways, HSIE Research

- (Scenario 1) The present modal share in Rail is 28% but if there is no augmentation in Rail and after Bharatmala Project, the share will come down to 24%.
- (Scenario 2) In case the rail speed is enhanced to 50 Kmph instantly without changing the tariff, the share increases to 40%.
- (Scenario 3A) The share further enhances to 45% in case tariff reduction along with instant speed enhancement to 50 Kmph by 2026 is considered.

- (Scenario 3B) In case the tariff is reduced only on selected commodities which are price sensitive and speed is enhanced instantly to 50 Kmph by 2026, the estimated rail is 44%.
- **(Scenario 3C) Further in case the speed is enhanced gradually with rail speed considered as 25 Kmph in 2021, 30 Kmph in 2026, 35 Kmph in 2031, 40 Kmph in 2041 and 50 Kmph in 2051, the rail share increases gradually and reaches 44% by the year 2051 while in cardinal years it is estimated to be 33% (2026), 39% (2031), 43% (2041) and 44% (2051).**
- (Scenario 4) In the Business-as-Usual Scenario (BAU), there is a reduction in cost by 30%, while rail infrastructure remains the same.
- As highlighted earlier, significant rail share increase is forecasted in containers, BOG, Cement, POL and food grains. These are primarily high value/non-conventional commodities, where rail has a limited presence currently.

Rail share for Scenario 3C

Commodity	2051	2041	2031	2026	2021	Existing
BOG	22%	20%	16%	9%	7%	4%
Cement	51%	51%	50%	48%	46%	37%
Coal*	74%	72%	70%	65%	61%	65%
Container	48%	47%	43%	32%	29%	24%
Fertilizer*	90%	90%	89%	87%	85%	87%
Food grains	32%	32%	31%	28%	28%	16%
Iron Ore*	82%	81%	77%	68%	60%	65%
Pig Iron	70%	69%	69%	66%	64%	49%
POL	48%	40%	28%	17%	15%	18%
Steel RM*	60%	59%	58%	56%	55%	56%
Total Percentage	**44%**	**43%**	**39%**	**33%**	**31%**	**28%**
Point Percent Change	**+16%**	**+15%**	**+11%**	**+5%**	**+3%**	
Tonnes/ day, Scenario 3C	18,863,731	13,857,702	8,676,969	5,742,684	4,108,379	
Million Tonnes/ Year	**6,885**	**5,058**	**3,167**	**2,096**	**1,500**	**1,162**

Source: Ministry of Railways, HSIE Research

Rail commodity forecast by scenario in 2051 (million tonnes)

Commodity in million tonnes per year by Rail (2051)	Present	FY51 (Scenario 3C)	Growth (x)
Containerisable BOG	23	429	18.7
Non-Containerisable BOG	54	990	18.3
Total BOG	**77**	**1,419**	**18.4**
Cement	114	1,079	9.5
Coal	575	1,577	2.7
Container	**54**	**610**	**11.3**
Fertilizer	49	256	5.2
Food grain	45	225	5.0
Iron Ore	137	652	4.8
Pig Iron	40	318	8.0
POL	43	630	14.7
Steel RM	28	120	4.3
Grand Total	**1,162**	**6,885**	**5.9**

Source: Ministry of Railways, HSIE Research

Railways can increase share in the long-distance lead segments

- Total freight movement having leads up to 300 km have increased from 840 MT in 2007-08 to 1829.16 in 2018-19. Total freight movement having leads beyond 300 km has increased from 1486 MT in 2007-08 to 2245 MT in 2018-19. It is pertinent to note that share of Rail in freight movement having leads beyond 300 km has fallen from 51.5% (765 MT) in 2007-08 to 32.4% (727 MT) in 2018-19. However, quantum of freight movement has remained same, but share has fallen due to overall increase in the freight generation clearly stating the issue related to stagnation of supply of railway freight wagons.

Total freight movement having leads beyond 300 km has increased from 1486 MT in 2007-08 to 2245 MT in 2018-19

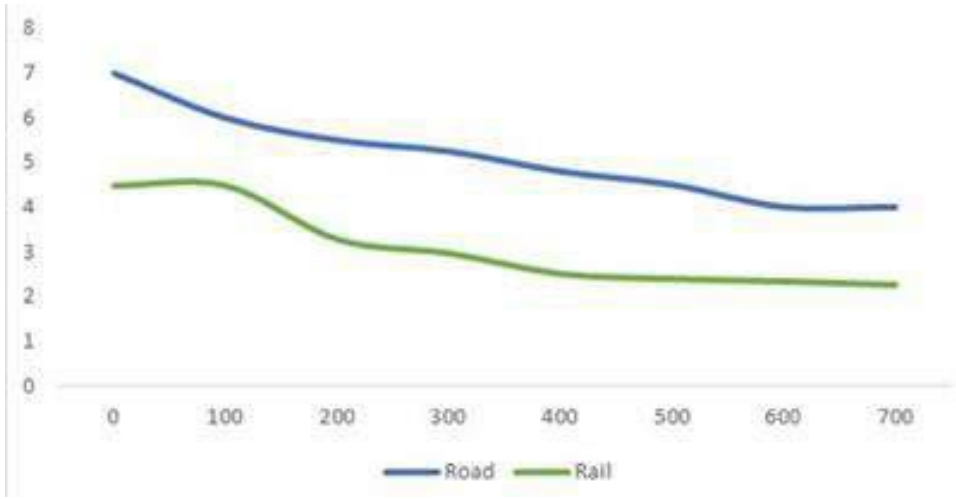
Total freight distribution (million tonnes)

Total Traffic	2017-18	2007-08#
a) Traffic carried by Road Transport	2911.76	1558.87
b) Traffic Carried by Rail	1162.72	768.72
c) Traffic Rail & Road (a+b)	4074.48	2327.59
d) Traffic Road Leads up to 300 km	1393.14	837.89
e) Traffic Rail leads up to 300 km	436.03	2.9
f) Total Traffic leads up to 300 km (d+e)	1829.16	840.79
g) Total Potential Traffic Moving Beyond 300 km		
- Rail	726.69	765.82
- Road	1518.62	720.98
Total	**2245.31**	**1486.8**
Rail Share in Potential Traffic*	32.40%	51.50%
* % of Rail traffic (726.7MT) to total (2245.3MT)		

Source: Ministry of Railways, HSIE Research

- As the logistics costs is lower for railways over longer distances, the IR will likely increase share in this segment.

Logistics cost for bulk commodities- Road vs Rail (Rs/Tkm)



Source: Ministry of Railways, HSIE Research

In the container segment, Railways has aggressive targets to increase share

- For instance, while the average leads for containers is 624kms, that of the rail-based movement is significantly higher at 885kms. In the container segment, Railways has aggressive targets to increase share as highlighted above.

Mode wise average leads by commodity type (2017-18)

S. No	Commodity	Rail	Road	All Modes (Km)
1	Pig Iron	804.5	609.7	741.4
2	RM for Steel	528.8	548.4	537.4
3	Cement	503.7	483.8	491.2
4	Fertilizer	776.4	763.3	774.7
5	Coal	443.3	634.7	509.8
6	POL	624.3	844	804.8
7	Iron Ore	246.8	477	326.9
8	Food grain	1316.2	427.7	568
9	Container	885	539.6	624.2
10	BOG	597.3	480.1	485.2
	Overall	**530.1**	**522.4**	**524.6**

Source: Ministry of Railways, HSIE Research

Impact on road logistics

- We believe that railways will gain market share with the commissioning of the DFC and this trend will accelerate as capacity is further augmented, as highlighted under the NRP. The cost savings under double stacking will be ~20% based on IR's estimates as highlighted below.

Potential cost savings for double stack operations on DFCs – mainly for upper stacked containers

Mundra – Kashipur		
Cost Elements	Cost per FEU (in Rs.)	
Single Stack Operations (C)		
Cost per FEU	57,902	
Double Stack Operations	**Case 1 – Heavy FEU below and light above**	**Case 2 – Only 25 FEUs above**
Haulage Charge to Patli (A)	26,440	29724
THC/TAC	5400	10793
Haulage Patli – Kashipur (B)	10,793	3500
Rake holding cost	5,333	6857
Cost per FEU	47,966	50874
Savings	**17%**	**12%**

Mundra – Patli	
Cost Elements	Cost per FEU (in Rs.)
Single Stack Operations (A)	
Cost per FEU	43933
Double Stack Operations (A)	
Haulage Charge to Patli	26,440
THC/TAC	5400
Rake holding cost	4,000
Cost per FEU	35840
Savings	**19%**

Source: Ministry of Railways, HSIE Research

- In our exhibit below, we highlight that a potential shift of 1M TEUs to rail from the western ports will result in an increase of ~1% in railway-based cargo.
- This will correspondingly impact traffic on roadways, which will also affect the utilisation rates of Medium and Heavy Commercial Vehicles. The current fleet size of MHCVs on road is ~4m vehicles, which will impact 1% of the overall truck fleet.

Potential market share gains by rail post DFC

Container TEUs (nos) [A]	1mn
Total tonnage (@12 T per container) [B]	12mn
Lead distance (kms) [C]	800
BTKM [B*C]	9.6
Total Rail BTKM	731
Increase in railway traffic	1.30%

Source: India Railways, HSIE Research; BTKM- Billion net tonne km

Price targets and stock outlook:

- We believe that rail-based logistic companies will be medium term beneficiaries of the proposed enhancement in Indian Railways. We are positive on the container train operators.
- We raise our TP on CONCOR (ADD) to Rs 500 and Gateway Distriparks (BUY) to Rs 160. We raise our FY22/23E EPS by 8% for both the companies and roll forward our TP timeframe to Mar-22 (from Sep-21). We also increase our multiple on Gateway from 8.5x EV/EBITDA to 9x to factor in the improved demand environment and the company's restructuring initiatives.

Change in estimates and TP

Coverage companies	Old Rating	New Rating	Old TP	New TP ^	Old target multiple	New target multiple	Old EPS			New EPS			% change		
							FY 21E	FY 22E	FY 23E	FY 21E	FY 22E	FY 23E	FY 21E	FY 22E	FY 23E
Container Corporation	ADD	ADD	415	500	22x	22x	10.6	16.2	21.6	11.6	17.5	22.8	9	8	5
Gateway Distriparks #	BUY	BUY	125	160	8.5x Rail business 3.5x CFS business	9x Rail business 3.5x CFS business	2.7	4.5	6.6	3.1	4.9	7.1	11	9	7

Source: Company, HSIE Research, #valued on EV/EBITDA, ^FY23E TP

Valuation summary

	Mcap (Rs bn)	CMP* (Rs/sh)	Reco	TP (Rs)	Adj EPS (Rs/sh)			P/E (x)			RoE (%)			EV/EBITDA (x)		
					FY 21E	FY 22E	FY 23E	FY 21E	FY 22E	FY 23E	FY 21E	FY 22E	FY 23E	FY 21E	FY 22E	FY 23E
LOGISTICS																
Container Corporation	272	446	ADD	500	11.6	17.5	22.8	37.9	25.1	19.3	6.9	10.1	12.4	19.9	14.2	10.9
Gateway Distriparks	13	122	BUY	160	3.1	4.9	7.1	40.0	25.1	17.2	2.8	4.2	6.0	8.1	7.5	6.2

Source: HSIE Research *CMP as of 13th Jan-21

3QFY21E earnings preview

- In our 3Q preview, we believe that these companies will witness an improvement in volumes as compared to 2Q.

	NET SALES (Rs mn)			EBITDA margin (%)			APAT (Rs mn)			Adj. EPS		
	3Q FY21E	*QoQ (%)*	*YoY (%)*	3Q FY21E	*QoQ (bps)*	*YoY (bps)*	3Q FY21E	*QoQ (%)*	*YoY (%)*	3Q FY21E	2Q FY21	3Q FY20
LOGISTICS												
CONCOR	16,422	*9*	*8*	21.0	*17*	*(333)*	2,010	*7*	*15*	3.3	3.1	2.9
Gateway Distriparks	2,966	*13*	*(1)*	25.0	*15*	*475*	168	*295*	*55*	1.5	0.4	1.0

Source: Company, HSIE Research

COMPANY	3QFY21 OUTLOOK	WHAT'S LIKELY	KEY MONITORABLES
Container Corporation	**AVG**	▪ Volumes in 3Q grew by 6/9% YoY/QoQ. We expect sales to grow by 9/8% QoQ/YoY. ▪ EBITDA margin is expected at 21% (-300bps YoY) ▪ We expect PAT to grow by 7/15% QoQ/YoY to Rs 2bn.	▪ Revised timelines on commissioning of the DFC ▪ Update on divestment initiatives by the government
Gateway Distriparks	**AVG**	▪ We expect consolidated revenue to grow by 13% QoQ, -1% YoY. ▪ Operating margin at 25% to expand by 475bps YoY and 15bps QoQ ▪ We expect profit to grow to Rs 168mn (vs. Rs 109mn YoY, Rs 43mn QoQ)	▪ Post fundraising, timelines for merging of subsidiaries ▪ Update on Snowman Logistics stake sale now that the deal with Adani has been called off

Source: HSIE Research

Annexure

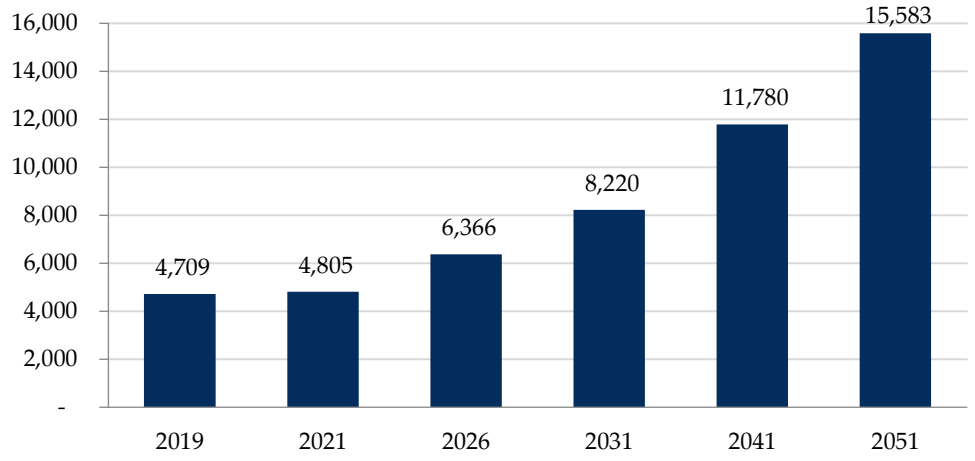
- **Scenario 1:** Business as Usual (BAU): Rail Infrastructure Remain same but includes sanctioned projects such as Eastern and Western DFC, Mumbai Ahmedabad HSR and projects as per Pink Book. Whereas in case of Roads, Project Bharat Mala is considered implemented.
- **Scenario 2:** Enhancement of Average Rail Speed of Freight Trains from 25 Kmph to 50 Kmph.
- **Scenario 3:** Enhancement of Speed from 25 Kmph to 50 Kmph with 30% Reduced Tariff:
  - Implementation of Railway projects corresponds to average speed to 50 Kmph & reducing tariffs by 30% by 2026.
  - Implementation of Railway projects corresponds to average speed to 50 Kmph & reducing tariffs on 4 items by 30% by 2026
  - Implementation of Railway projects corresponds to average speed to 50 Kmph gradually & reducing tariff on 4 items by 30%
    - Year 2021 - 25 Kmph
    - Year 2026 – 30 Kmph
    - Year 2031 – 35 Kmph
    - Year 2041 – 40 Kmph
    - Year 2051 – 50 Kmph
- **Scenario 4:** Business as Usual (BAU) with reduction in cost by 30%: Rail Infrastructure remains the same whereas the cost being charged is reduced by 30%.

Rail commodity forecast for Scenario 3C (million tonnes)

Commodity	Existing	2021	2026	2031	2041	2051
Containerizable BOG	23	42	73	171	292	429
Non-Containerizable BOG	54	96	169	395	674	990
Total BOG	77	138	242	567	966	1,419
Cement	114	185	288	405	686	1,079
Coal	575	646	810	1,050	1,455	1,577
Container	54	90	132	234	374	610
Fertilizer	49	64	87	113	174	256
Foodgrain	45	88	103	127	165	225
Iron Ore	137	132	202	289	435	652
Pig Iron	40	77	108	147	221	318
POL	43	50	84	179	264	630
Steel RM	28	31	42	55	83	120
Total	**1,162**	**1,500**	**2,096**	**3,167**	**4,823**	**6,885**

Source: Ministry of Railways, HSIE Research

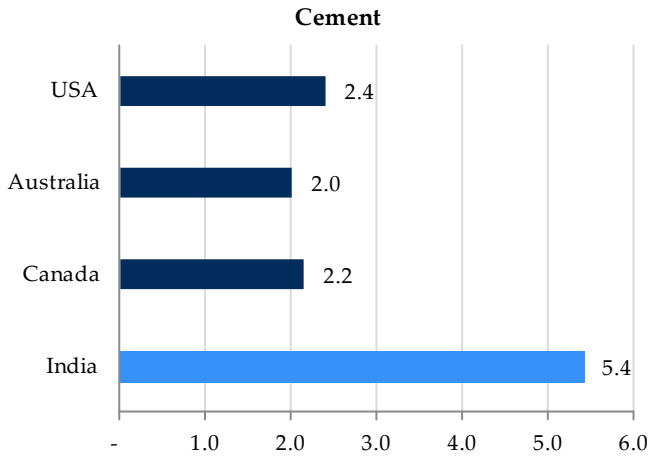
Projected commodity demand (in million tonnes)



Source: Ministry of Railways, HSIE Research

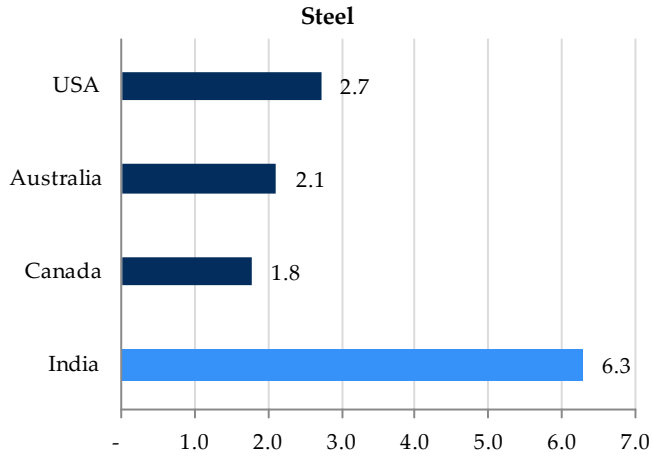
Indian Railways vs Global Peers

IR's revenue/NTKM significantly higher compared to global peers, highlighting high rail freight cost



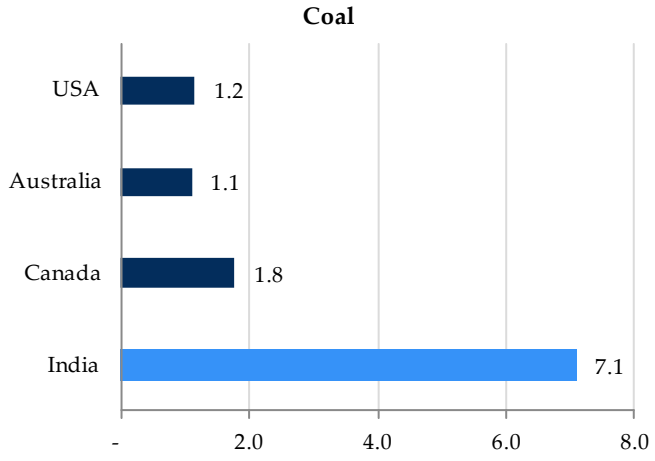
Source: Ministry of Railways, HSIE Research

Revenue/NTKM for Steel, adjusted for purchasing power parity (INR)



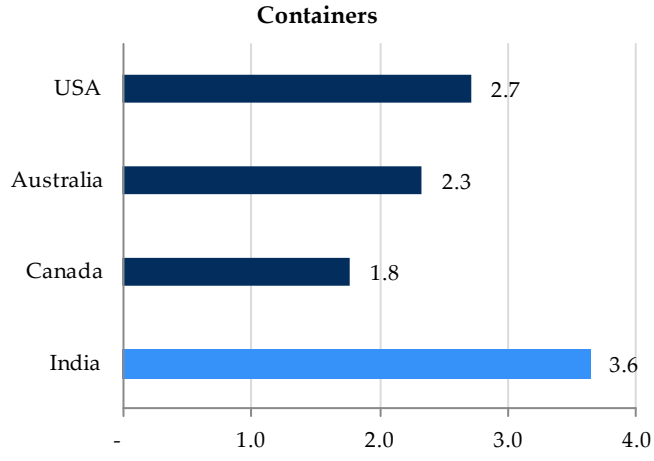
Source: Ministry of Railways, HSIE Research

Revenue/NTKM earned for Coal, adjusted for PPP, FY2018



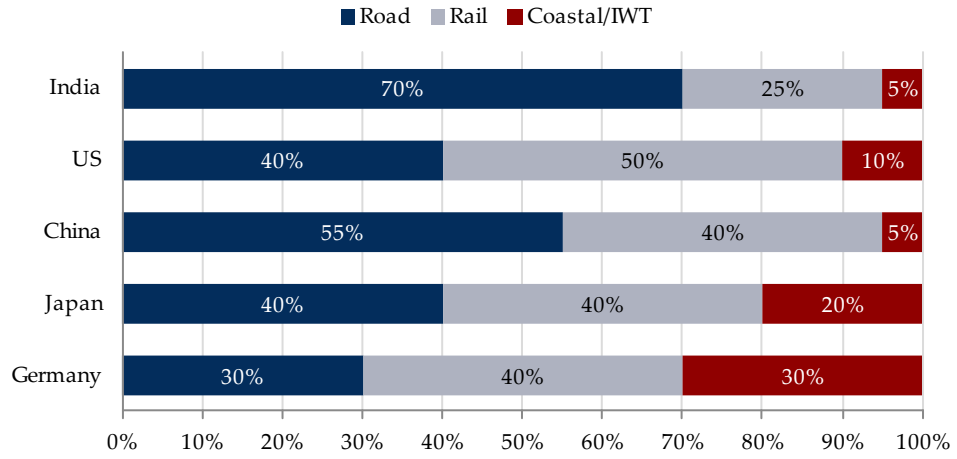
Source: Ministry of Railways, HSIE Research

Revenue/NTKM for Container Freight, adjusted for PPP, FY2018



Source: Ministry of Railways, HSIE Research

Global comparison of containers' modal share

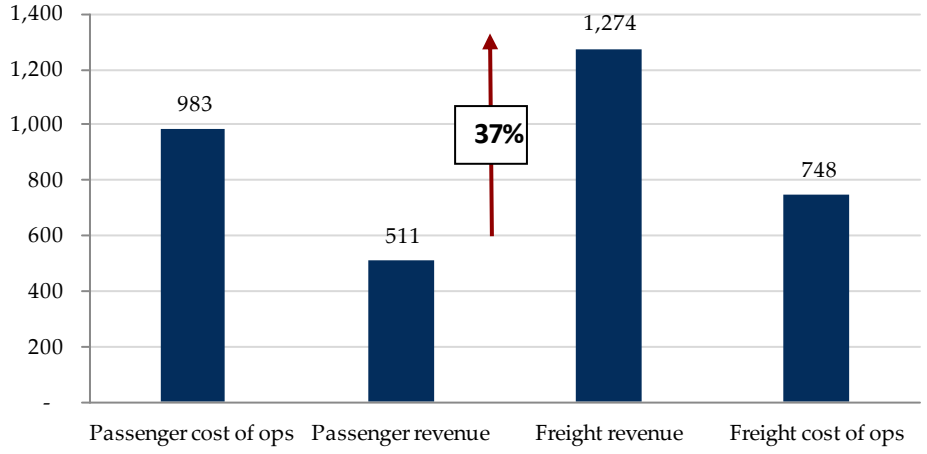


Source: Ministry of Railways, HSIE Research

Pricing Reforms:

- It is estimated that while the operating ratio for IR's freight business in FY19 was 0.59, it was 1.92 for IR's passenger business. This inherent cross-subsidy is contributing to the reason for IR's haulage charges being higher than its global peers even after adjusting for purchasing power parity.

IR Passenger vs Freight Revenue, FY 2019 (Rs bn)



Source: Ministry of Railways, HSIE Research

Direct Grants are used globally to fund passenger service deficits. For instance:

- Russian Railway has increasingly phased out cross subsidisation of passenger operations by freight services. In FY16, Russian Railway received a direct grant of Rb 32.5 bn to compensate for losses by Russian Railways associated with the regulation of tariffs for passenger services.
- In the UK, the government has provided direct grant support of 6.4p for every rail passenger kilometre travelled in Great Britain in 2018-19.

Disclosure:

We, **Aditya Makharia, CA & Mansi Lall, MBA**, 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/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 –YES

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 solely for information of the recipient only. The report must not be used as a singular basis of any investment decision. The views herein are of a general nature and do not consider the risk appetite or the particular circumstances of an individual investor; readers are requested to take professional advice before investing. Nothing in this document should be construed as investment advice. Each recipient of this document should make such investigations as they deem necessary to arrive at an independent evaluation of an investment in securities of the companies referred to in this document (including merits and risks) and should consult their own advisors to determine merits and risks of such investment. 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. Descriptions of any company or companies or their securities mentioned herein are not intended to be complete. HSL is not obliged to update this report for such changes. HSL has the right to make changes and modifications at any time.

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.

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 should not be construed as an invitation or solicitation to do business with HSL. 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 the 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: 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

HDFC securities
Institutional Equities
Unit No. 1602, 16th Floor, Tower A, Peninsula Business Park,
Senapati Bapat Marg, Lower Parel, Mumbai - 400 013
Board: +91-22-6171-7330 www.hdfcsec.com