



Endurance Technologies

BSE SENSEX	S&P CNX
37,115	11,157
Bloomberg	ENDU IN
Equity Shares (m)	141
M.Cap.(INRb)/(USDb)	164.5 / 2.3
52-Week Range (INR)	1579 / 1065
1, 6, 12 Rel. Per (%)	4/-3/-4
12M Avg Val (INR M)	104
Free float (%)	25.0

Financials & Valuations (INR b)

Y/E Mar	2019	2020E	2021E
Net Sales	75.1	85.6	95.5
EBITDA	11.3	13.3	15.1
PAT	5.1	6.0	7.0
EPS (INR)	36.2	42.9	49.4
Gr. (%)	24.5	18.4	15.4
BV/Sh (INR)	182.3	212.3	246.9
RoE (%)	21.5	21.7	21.5
RoCE (%)	18.0	18.8	19.5
P/E (x)	32.3	27.3	23.6
P/BV (x)	6.4	5.5	4.7

Estimate change	\leftarrow
TP change	
Rating change	

CMP: INR1,169 TP: INR1,350 (+15%)

Buy

Outperformance continues; best-ever margins led by incentives, mix

- Consol. revenue grew 9.5% YoY to INR19b (in-line). EBITDA margins expanded 230bp YoY (310bp QoQ) to 17.1% (our est. 14.4%), led by strong margins in India and EU business. Consol. PAT grew 28% YoY to INR1.5b (our est. INR1.2b). FY19 consol. revenue/EBITDA/adj. PAT grew 18%/22%/24%.
- India business revenues grew 8% YoY to INR13.4b (in-line). EBITDA margin expanded 260bp YoY (+340bp QoQ) to 15.5% (our est. 12.9%) led by incentives, decline in RM and better mix. Adj. PAT grew 35% YoY to INR1.1b.
- **EU business** revenues grew 12.5% YoY to INR5.6b (in-line), with CC revenue growing 10.9% YoY. EBITDA margin expanded 130bp YoY (+200bp QoQ) to 20.9%, driven by higher tooling revenues. Higher depreciation restricted PAT growth to 17% YoY at INR384m (our est. INR352m).
- Key highlights from earnings call: (a) In FY19, ENDU received new orders of INR10.3b in India and ~EUR60m in the EU business, taking the total Europe order book to EUR280-290m. (b) Share of proprietary business increased 2pp to ~51% in India. (c) In the castings business, focus was on margin improvement by increasing value-adds. (d) Delay in ABS product is due to the longer testing time under different road conditions. (e) Focus to increase Fonpresmetal EBITDA margins by 2% in FY20 through economies of scale as well as efficiency program. (f) FY20 capex: India INR3b; EU EUR25m.
- Valuation and view: We have maintained FY20/21 EPS, as increase in EBITDA margins by 70bp/50bp was off-set by cut in revenue estimates due to weaker 2W industry outlook. ENDU offers strong growth potential driven by newer products and technology. We believe it is the best proxy play on India's 2W industry growth, as it should continue to outperform 2W volume growth through sustained increase in content and cross-selling. Even the EU business is expected to outperform underlying industry growth due to increasing wallet share of customers. We estimate ENDU's revenue/PAT to grow at ~13%/17% CAGR, despite expected tepid volume growth for the industry. Maintain Buy, with a TP of INR1,350 (27x FY21E EPS).

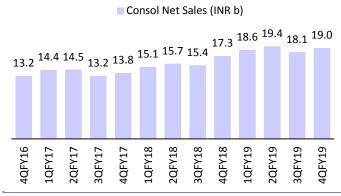
Consolidated – Quarterly

Y/E March	,	FY:	18			FY:	19		FY18	FY19		Var
•									1110	1113		
INR m	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q			4QE	(%)
Net Sales	15,057	15,723	15,386	17,348	18,604	19,367	18,130	19,004	63,514	75,105	19,051	-0.2
YoY Change (%)	4.5	8.6	16.6	25.7	23.6	23.2	17.8	9.5	13.7	18.2	9.8	
RM Cost (% of sales)	57.8	58.1	56.0	58.5	58.6	59.7	58.4	54.9	57.6	57.9	58.6	-370bp
Staff Cost (% of sales)	9.8	8.8	9.5	8.5	8.9	8.0	9.2	8.6	9.1	8.7	8.8	-20bp
Other Exp. (% of sales)	18.1	18.5	19.7	18.2	17.9	17.8	18.4	19.4	18.6	18.4	18.2	120bp
EBITDA	2,139	2,295	2,271	2,573	2,714	2,798	2,530	3,246	9,279	11,288	2,740	18.5
Margins (%)	14.2	14.6	14.8	14.8	14.6	14.4	14.0	17.1	14.6	15.0	14.4	270bp
Depreciation	742	768	798	907	820	921	936	1,085	3,216	3,762	940	
Interest	57	69	47	63	59	55	75	68	235	257	66	
Other Income	56	59	42	77	41	80	93	56	235	270	70	
PBT after EO	1,397	1,517	1,199	1,680	1,876	1,902	1,404	2,149	5,793	7,331	1,804	19.1
Eff. Tax Rate (%)	30.9	34.3	34.8	30.7	33.6	34.2	31.2	30.8	32.6	32.5	32.9	-200bp
Adj. PAT	965	997	957	1,164	1,246	1,252	1,109	1,486	4,089	5,091	1,211	22.8
YoY Change (%)	9.7	11.6	28.8	39.3	29.1	25.6	15.8	27.7	23.8	24.5	4.1	

Jinesh Gandhi – Research analyst (Jinesh@MotilalOswal.com); +91 22 6129 1524

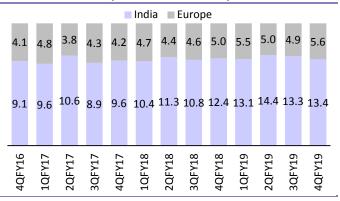
Deep Shah - Research analyst (Deep.S@MotilalOswal.com); +91 22 6129 1533

Exhibit 1: Trend in consolidated revenues



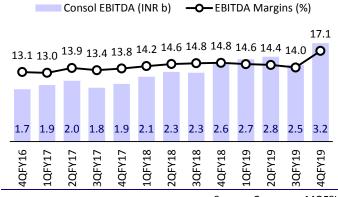
Source: Company, MOFSL

Exhibit 2: Revenue split in India and Europe



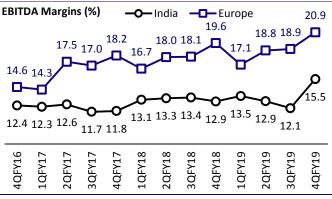
Source: Company, MOFSL

Exhibit 3: Trend in consolidated EBITDA margins



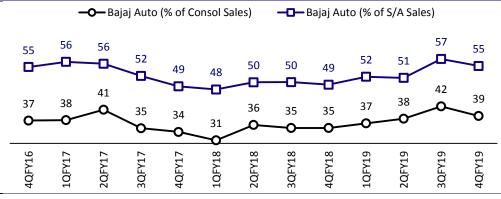
Source: Company, MOFSL

Exhibit 4: EBITDA margin trends in India and Europe



Source: Company, MOFSL

Exhibit 5: Trend in BJAUT' share in consolidated and standalone sales



Source: Company, MOFSL



Key takeaways from management interaction

- In FY19, ENDU received new business of around INR10.3b from Kia, Hyundai, HMSI, HMCL, Yamaha, RE, Tata Motors and TVSL in its standalone business. The new business could also replace some of its existing business.
- In FY19, new order wins in the Europe business was at ~EUR60m, taking the total Europe order book to EUR280-290m; ~35% of the orders were for the EV/hybrid technology.
- The first-ever order from TVSL of INR400m for disc brake assemblies (1,000 sets per day) would commence from 3QFY20. Additionally, suspension, transmission and casting product supplies are under discussion.
- ENDU's 2W suspension plant at Halol commenced supplies to HMCL in Sep'18. Current supply is 2.6k units/day, which should reach 4k units/day in 1QFY20.
- Have also got orders for disc brakes from HMCL; supply should commence next month. CVT is also under testing stage.
- **ABS** tie-up with BWI is progressing well, with an initial capacity of 400k assemblies per annum. The product is facing some delay due to longer time for testing under different road conditions in India.
- Supply of front forks and shock absorbers to HMSI from Karnataka plant will commence from 2QFY20.
- ENDU has purchased land in Vallam to set up a second die-casting and machining plant for supplies to Hyundai, Kia and RE. This would commence production in 3QFY20.
- Revenue from the **replacement market** grew ~13.6% YoY in FY19 to ~INR2.7b while **exports** grew 26% YoY to INR2.7b, led by increased supply of castings to Getrag, KTM and aftermarket.
- ENDU has received incentive from the Maharashtra Government, totaling INR315m in 4QFY19.
- **Fonpresmetal** has EUR7m revenue, EBIT of EUR0.6m and EBITDA margins of ~10%. Focus to increase EBITDA margins by 2% in FY20 through economies of scale as well as efficiency program.
- **Europe:** Other expenses have increased due to Fonpresmetal acquisition (due to the machining process as Fonpresmetal buys from the market v/s ENDU EU's inhouse process). Depreciation has increased due to Fonpresmetal and there has been accelerated depreciation for certain diesel component.
- **FY20 Capex:** INR3b in India and EUR25m for Europe.

Valuation and view

- Given ENDUs strong positioning in the 2W segment, we believe it is the best proxy to play India 2W opportunity with direct play on underlying trends of scooterization and premiumization.
- ENDU offers a strong management, diverse revenue profile, improving technological content, increasing wallet share of customers, and financial discipline.
- ENDU is one of the few auto ancillary companies in India to boast of a truly diversified revenue base, both in terms of product lines as well as customer base, but still offers consistently respectable RoE.
- At the helm is a proven management, as evident in the sustained profitable growth while entering new segments and significant market share gains.

- We believe that the strength in ENDU's business franchisee and its strong management will help the stock continue commanding premium valuation multiples in comparison to most domestic auto ancillary companies.
- In the domestic auto ancillary space, there are only a handful of high-quality, large-scaled, multi-product auto component suppliers. Considering ENDU's size and strong market share in its operating segments, we believe that the stock should command a premium to its domestic peers.
- We have maintained FY20/21 EPS, as increase in EBITDA margins by 70/50bp is off-set by cut in revenue estimates due to weaker 2W industry outlook. We believe ENDU offers strong growth potential driven by newer products and technology. We believe it is the best proxy play on India 2W industry growth, as it will continue to outperform 2W volume growth through sustained increase in content and cross-selling. Even EU business is expected to outperform underlying industry growth due to increasing wallet share of customers. We estimate ENDU's revenue & PAT to grow ~13%/17% CAGR despite expected tepid volume growth for the industry. The stock trades at ~27.3x/23.6x FY20/21 consol. EPS, which is at premium to its auto/auto comp peers due to superior growth visibility. Maintain **Buy**, with a TP of IN1,350 (27x FY21E EPS).

Exhibit 6: Revised estimates (Consol.)

(INR M)		FY20E			FY21E				
	Rev	Old	Chg (%)	Rev	Old	Chg (%)			
Net Sales	85,553	87,195	-1.9	95,548	97,357	-1.9			
EBITDA (%)	15.6	14.9	70bp	15.8	15.3	50bp			
Net Profit	6,028	6,052	-0.4	6,955	7,041	-1.2			
EPS (INR)	42.9	43.0	-0.4	49.4	50.1	-1.2			

Source: MOFSL

Exhibit 7: Comparative valuations

	CMP	Rating	TP	P/E	(x)	EV/EBI	TDA (x)	RoE	(%)	Div Yie	eld (%)	EPS CAGR (%)
Auto OEM's	(INR)*		(INR)	FY19E	FY20E	FY19E	FY20E	FY19E	FY20E	FY19E	FY20E	FY18-20E
Bajaj Auto	2,916	Neutral	3,131	18.2	16.5	13.2	11.1	23.3	23.0	2.0	2.4	9.0
Hero MotoCorp	2,496	Neutral	2,912	14.8	14.2	8.9	8.1	27.5	26.1	3.5	3.6	-2.3
TVS Motor	463	Neutral	480	33.8	26.3	17.0	13.7	21.5	23.5	0.7	0.8	14.1
M&M	611	Buy	793	15.5	14.3	11.8	10.4	14.2	13.1	1.6	1.6	3.7
Maruti Suzuki	6,485	Buy	8,047	26.7	23.9	15.1	13.5	16.3	16.4	1.2	1.9	2.0
Tata Motors	170	Neutral	194	-25.6	15.3	4.5	3.6	-3.1	6.2	0.2	0.2	-27.2
Ashok Leyland	82	Buy	113	12.3	11.8	7.3	5.8	26.4	24.1	3.0	3.1	10.6
Eicher Motors	19,922	Buy	23,500	25.0	23.2	19.5	19.1	27.8	24.4	0.6	0.6	4.8
Escorts	550	Neutral	724	11.2	10.3	9.5	7.9	19.3	17.7	0.4	0.5	21.0
Auto Ancillaries												
Bharat Forge	454	Buy	604	19.1	16.7	11.4	9.9	22.0	21.4	1.1	1.4	21.7
Exide Industries	206	Buy	281	23.3	19.4	12.7	10.7	12.9	14.0	1.1	1.5	15.3
Amara Raja Batteries	625	Buy	864	22.2	17.6	11.1	8.8	15.6	17.2	0.7	0.9	14.3
BOSCH	16,975	Neutral	19,556	32.4	28.1	22.4	18.9	15.5	17.4	1.0	1.2	14.3
Endurance Tech	1,169	Buy	1,350	33.2	26.4	14.9	12.2	20.4	22.0	0.5	0.9	21.7
Motherson Sumi	118	Buy	186	24.4	18.5	8.2	6.2	16.7	19.4	1.0	1.5	13.3
Mahindra CIE	221	Buy	290	15.8	13.0	8.8	7.8	13.3	14.0	0.0	0.0	32.4
CEAT	965	Buy	1,277	15.6	13.6	8.4	7.9	9.6	10.3	1.2	1.3	6.9

Source: MOFSL

15 May 2019

 $Motilal\ Oswal$ Endurance Technologies

Story in Charts

Exhibit 8: Trend in consolidated sales

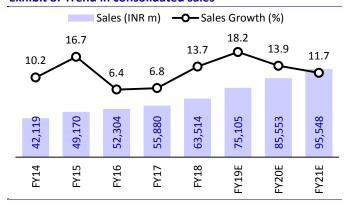


Exhibit 9: Trend in consolidated PAT

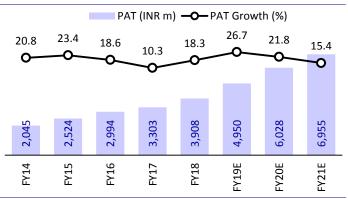


Exhibit 10: Geography-wise sales break-up FY19 (%)

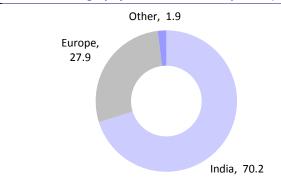


Exhibit 11: Market share in India business (%)

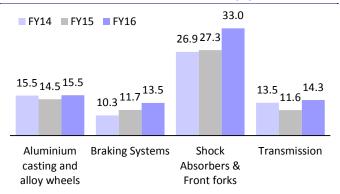


Exhibit 12: Customer-wise break-up (%)

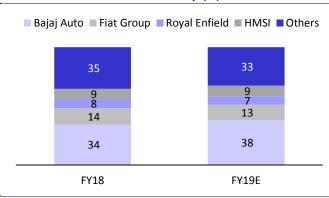
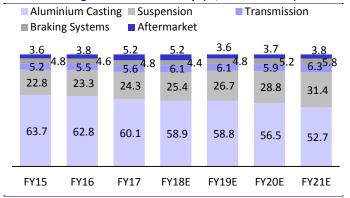


Exhibit 13: Segment-wise break-up (%, consolidated)



Financials and valuations

Consolidated - Income Statement						(INR m)
Y/E March	FY16	FY17	FY18	FY19	FY20E	FY21E
Total Income from Operations	52,304	55,880	63,514	75,105	85,553	95,548
Change (%)	6.4	6.8	13.7	18.2	13.9	11.7
Raw Materials	31,141	32,259	36,609	43,495	49,881	56,120
Employees Cost	4,823	5,455	5,809	6,527	7,030	7,596
Other Expenses	9,544	10,611	11,817	13,795	15,302	16,761
Total Expenditure	45,509	48,325	54,235	63,817	72,213	80,476
% of Sales	87.0	86.5	85.4	85.0	84.4	84.2
EBITDA	6,795	7,555	9,279	11,288	13,340	15,072
Margin (%)	13.0	13.5	14.6	15.0	15.6	15.8
Depreciation	2,432	2,905	3,216	3,762	4,510	5,027
EBIT	4,363	4,650	6,063	7,526	8,830	10,045
Int. and Finance Charges	490	322	235	257	235	212
Other Income	330	319	235	270	345	492
PBT bef. EO Exp.	4,203	4,646	6,062	7,539	8,939	10,325
EO Items	0	0	-269	-208	0	0
PBT after EO Exp.	4,203	4,646	5,793	7,331	8,939	10,325
Total Tax	1,199	1,343	1,886	2,381	2,911	3,369
Tax Rate (%)	28.5	28.9	32.6	32.5	32.6	32.6
Minority Interest	11	0	0	0	0	0
Reported PAT	2,994	3,303	3,908	4,950	6,028	6,955
Adjusted PAT	2,994	3,303	4,089	5,091	6,028	6,955
Change (%)	18.6	10.3	23.8	24.5	18.4	15.4
Margin (%)	5.7	5.9	6.4	6.8	7.0	7.3
Consolidated - Balance Sheet						(INR m)
Y/E March	FY16	FY17	FY18	FY19	FY20E	FY21E
Equity Share Capital	176	1,407	1,407	1,407	1,407	1,407
Preference Capital	0	0	0	0	0	0
Total Reserves	14,322	15,887	20,322	24,240	28,454	33,317
Net Worth	14,498	17,293	21,729	25,647	29,861	34,724
Minority Interest	0	0	0	0	0	0
Total Loans	8,262	6,794	5,586	5,584	4,584	3,584
Deferred Tax Liabilities	-185	-182	17	161	161	161
Capital Employed	22,576	23,905	27,332	31,392	34,606	38,469
Gross Block	35,138	20,052	25,218	32,159	36,409	40,659
Less: Accum. Deprn.	19,136	5,070	8,286	12,048	16,558	21,585
Net Fixed Assets	16,002	14,982	16,932	20,112	19,851	19,074
Goodwill on Consolidation	1 469	1 355	1 577	1 520	1 520	1 520

Net Worth	14,498	17,293	21,729	25,647	29,861	34,724
Minority Interest	0	0	0	0	0	0
Total Loans	8,262	6,794	5,586	5,584	4,584	3,584
Deferred Tax Liabilities	-185	-182	17	161	161	161
Capital Employed	22,576	23,905	27,332	31,392	34,606	38,469
Gross Block	35,138	20,052	25,218	32,159	36,409	40,659
Less: Accum. Deprn.	19,136	5,070	8,286	12,048	16,558	21,585
Net Fixed Assets	16,002	14,982	16,932	20,112	19,851	19,074
Goodwill on Consolidation	1,469	1,355	1,577	1,520	1,520	1,520
Capital WIP	1,034	438	592	1,178	1,178	1,178
Total Investments	482	327	459	361	361	361
Curr. Assets, Loans&Adv.	15,238	17,807	23,852	24,690	30,456	37,287
Inventory	4,099	4,438	4,939	5,400	6,151	6,870
Account Receivables	5,928	7,609	9,688	9,251	10,538	11,770
Cash and Bank Balance	1,674	2,199	5,027	5,379	8,458	12,719
Loans and Advances	3,537	3,561	4,198	4,660	5,308	5,928
Curr. Liability & Prov.	11,650	11,004	16,081	16,468	18,759	20,951
Account Payables	7,385	8,642	11,284	11,735	13,367	14,929
Other Current Liabilities	3,800	1,831	4,409	3,783	4,310	4,813
Provisions	464	531	388	950	1,082	1,209
Net Current Assets	3,588	6,803	7,771	8,222	11,696	16,336
Appl. of Funds	22,576	23,905	27,332	31,392	34,606	38,469

E: MOFSL Estimates

Financials and valuations

Ratios						
Y/E March	FY16	FY17	FY18	FY19	FY20E	FY21E
Basic (INR)						
EPS	21.3	23.5	29.1	36.2	42.9	49.4
Cash EPS	38.6	44.1	51.9	62.9	74.9	85.2
BV/Share	103.1	122.9	154.5	182.3	212.3	246.9
DPS	1.3	2.5	4.0	5.5	10.7	12.4
Payout (%)	7.1	12.8	17.3	18.8	30.1	30.1
Valuation (x)						
P/E	54.9	49.8	40.2	32.3	27.3	23.6
Cash P/E	30.3	26.5	22.5	18.6	15.6	13.7
P/BV	11.3	9.5	7.6	6.4	5.5	4.7
EV/Sales	3.3	3.0	2.6	2.2	1.9	1.6
EV/EBITDA	25.2	22.4	17.8	14.6	12.0	10.3
FCF per share	15.7	11.1	22.4	9.5	41.1	50.3
Return Ratios (%)	15.7	11.1	22.7	5.5	71.1	30.3
RoE	23.0	20.8	21.0	21.5	21.7	21.5
RoCE	15.9	15.1	16.5	18.0	18.8	19.5
RolC	16.7	16.4	19.4	22.2	24.3	27.7
Working Capital Ratios	10.7	10.4	13.4	22.2	24.3	27.7
Fixed Asset Turnover (x)	1.5	2.8	2.5	2.3	2.3	2.3
Asset Turnover (x)	2.3	2.3	2.3	2.4	2.5	2.5
. ,	2.3	2.3	2.5	26	2.5	2.5
Inventory (Days)	41	50	56	45	45	45
Debtor (Days)	52	56	65	57	45 57	57
Creditor (Days)	52	50	05	5/	5/	5/
Leverage Ratio (x) Current Ratio	1.3	1.6	1 -	1 -	1.6	1.0
			1.5	1.5	1.6	1.8
Interest Cover Ratio	8.9	14.4	25.8	29.2	37.5	47.3
Net Debt/Equity	0.4	0.2	0.0	0.0	-0.1	-0.3
Consolidated Cosh Flour Statement						(IND)
Consolidated - Cash Flow Statement			EV4.0	E)/40	EV20E	(INR m)
Y/E March	FY16	FY17	FY18	FY19	FY20E	FY21E
OP/(Loss) before Tax	4,203	4,646	5,793	7,539	8,939	10,325
Depreciation	2,432	2,905	3,216	3,762	4,510	5,027
Interest & Finance Charges	490	289	215	-13	-110	-280
Direct Taxes Paid	-1,050	-1,337	-2,095	-2,381	-2,911	-3,369
(Inc)/Dec in WC	301	-563	-18	-99	-395	-378
CF from Operations	6,376	5,941	7,111	8,808	10,033	11,324
Others	520	-570	310	0	0	0
CF from Operating incl EO	6,896	5,371	7,421	8,808	10,033	11,324
(Inc)/Dec in FA	-4,686	-3,804	-4,264	-7,470	-4,250	-4,250
Free Cash Flow	2,209	1,567	3,157	1,338	5,783	7,074
(Pur)/Sale of Investments	-456	190	-104	98	0	0
CF from Investments	-5,433	-3,607	-4,355	-7,101	-3,905	-3,758
Issue of Shares	0	0	0	0	0	0
Inc/(Dec) in Debt	14	-861	396	-2	-1,000	-1,000
Interest Paid	-486	-299	-208	-257	-235	-212
Dividend Paid	-296	-63	-423	-931	-1,814	-2,093
CF from Fin. Activity	-725	-1,224	-236	-1,190	-3,049	-3,305
Inc/Dec of Cash	737	540	2,830	516	3,079	4,261
Opening Balance	937	1,656	2,196	5,026	5,542	8,621
Closing Balance	1,674	2,196	5,026	5,542	8,621	12,882

NOTES

Explanation of Investment Rating	
Investment Rating	Expected return (over 12-month)
BUY	>=15%
SELL	< - 10%
NEUTRAL	< - 10 % to 15%
UNDER REVIEW	Rating may undergo a change
NOT RATED	We have forward looking estimates for the stock but we refrain from assigning recommendation

*In case the recommendation given by the Research Analyst is inconsistent with the investment rating legend for a continuous period of 30 days, the Research Analyst shall within following 30 days take appropriate measures to make the recommendation consistent with the investment rating legend.

The following Disclosures are being made in compliance with the SEBI Research Analyst Regulations 2014 (herein after referred to as the Regulations).

Motilal Oswal Financial Services Ltd. (MOFSL) is a SEBI Registered Research Analyst having registration no. INH000000412. MOFSL, the Research Entity (RE) as defined in the Regulations, is engaged in the business of providing Stock broking services, Investment Advisory Services, Depository participant services & distribution of various financial products. MOFSL is a subsidiary company of Passionate Investment Management Pvt. Ltd.. (PIMPL). MOFSL is a listed public company, the details in respect of which are available on www.motilaloswal.com. MOFSL (erstwhile Motilal Oswal Securities Limited - MOSL) is registered with the Securities & Exchange Board of India (SEBI) and is a registered Trading Member with National Stock Exchange of India Ltd. (NSE) and Bombay Stock Exchange Limited (BSE), Multi Commodity Exchange of India Limited (MCX) and National Commodity & Derivatives Exchange Limited (NCDEX) for its stock broking activities & is Depository participant with Central Depository Services Limited (CDSL) National Securities Depository Limited (NSDL), NERL, COMRIS and CCRL and is member of Association of Mutual Funds of India (AMFI) for distribution of financial products and Insurance Regulatory & Development Authority of India (IRDA) as Corporate Agent for insurance products. Details of associate entities of Motilal Oswal Financial Services Limited are available on the website at http://onlinereports.motilaloswal.com/Dormant/documents/List%20of%20Associate%20companies.pdf

MOFSL and its associate company(ies), their directors and Research Analyst and their relatives may; (a) from time to time, have a long or short position in, act as principal in, and buy or sell the securities or derivatives thereof of companies mentioned herein. (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; however the same shall have no bearing whatsoever on the specific recommendations made by the analyst(s), as the recommendations made by the analyst(s) are completely independent of the views of the associates of MOFSL even though there might exist an inherent conflict of interest in some of the stocks mentioned in the research report

MOFSL and / or its affiliates do and seek to do business including investment banking with companies covered in its research reports. As a result, the recipients of this report should be aware that MOFSL may have a potential conflict of interest that may affect the objectivity of this report. Compensation of Research Analysts is not based on any specific merchant banking, investment banking or brokerage service transactions. Details of pending Enquiry Proceedings of Motilal Oswal Financial Services Limited are available on the website at alaxy.motilaloswal.com/ResearchAnalyst/PublishViewLitigation.aspx

A graph of daily closing prices of securities is available at www.nseindia.com, www.nseindi MOFSL research activity and therefore it can have an independent view with regards to Subject Company for which Research Team have expressed their views.

Regional Disclosures (outside India)

This report is not directed or intended for distribution to or use by any person or entity resident in a state, country or any jurisdiction, where such distribution, publication, availability or use would be contrary to law, regulation or which would subject MOFSL & its group companies to registration or licensing requirements within such jurisdictions.

This report is distributed in Hong Kong by Motilal Oswal capital Markets (Hong Kong) Private Limited, a licensed corporation (CE AYY-301) licensed and regulated by the Hong Kong Securities and Futures Commission (SFC) pursuant to the Securities and Futures Ordinance (Chapter 571 of the Laws of Hong Kong) "SFO". As per SEBI (Research Analyst Regulations) 2014 Motilal Oswal Securities (SEBI Reg No. INH000000412) has an agreement with Motilal Oswal capital Markets (Hong Kong) Private Limited for distribution of research report in Hong Kong. This report is intended for distribution only to "Professional Investors" as defined in Part I of Schedule 1 to SFO. Any investment or investment activity to which this document relates is only available to professional investor and will be engaged only with professional investors." Nothing here is an offer or solicitation of these securities, products and services in any jurisdiction where their offer or sale is not qualified or exempt from registration. The Indian Analyst(s) who compile this report is/are not located in Hong Kong & are not conducting Research Analysis in Hong Kong.

For U.S.

Motilal Oswal Financial Services Limited (MOFSL) is not a registered broker - dealer under the U.S. Securities Exchange Act of 1934, as amended (the "1934 act") and under applicable state laws in the United States. In addition MOFSL is not a registered investment adviser under the U.S. Investment Advisers Act of 1940, as amended (the "Advisers Act" and together with the 1934 Act, the "Acts), and under applicable state laws in the United States. Accordingly, in the absence of specific exemption under the Acts, any brokerage and investment services provided by MOFSL, including the products and services described herein are not available to or intended for U.S. persons. This report is intended for distribution only to "Major Institutional Investors" as defined by Rule 15a-6(b)(4) of the Exchange Act and interpretations thereof by SEC (henceforth referred to as "major institutional investors"). This document must not be acted on or relied on by persons who are not major institutional investors. Any investment or investment activity to which this document relates is only available to major institutional investors and will be engaged in only with major institutional investors. In reliance on the exemption from registration provided by Rule 15a-6 of the U.S. Securities Exchange Act of 1934, as amended (the "Exchange Act") and interpretations thereof by the U.S. Securities and Exchange Commission ("SEC") in order to conduct business with Institutional Investors based in the U.S., MOFSL has entered into a chaperoning agreement with a U.S. registered broker-dealer, Motilal Oswal Securities International Private Limited. ("MOSIPL"). Any business interaction pursuant to this report will have to be executed within the provisions of this chaperoning agreement.

The Research Analysts contributing to the report may not be registered /qualified as research analyst with FINRA. Such research analyst may not be associated persons of the U.S. registered broker-dealer, MOSIPL, and therefore, may not be subject to NASD rule 2711 and NYSE Rule 472 restrictions on communication with a subject company, public appearances and trading securities held by a research analyst account.

In Singapore, this report is being distributed by Motilal Oswal Capital Markets Singapore Pte Ltd ("MOCMSPL") (Co.Reg. NO. 201129401Z) which is a holder of a capital markets services license and an exempt financial adviser in Singapore As per the approved agreement under Paragraph 9 of Third Schedule of Securities and Futures Act (CAP 289) and Paragraph 11 of First Schedule of Financial Advisors Act (CAP 110) provided to MOCMSPL by Monetary Authority of Singapore. Persons in Singapore should contact MOCMSPL in respect of any matter arising from, or in connection with this report/publication/communication. This report is distributed solely to persons who qualify as "Institutional Investors", of which some of whom may consist of "accredited" institutional investors as defined in section 4A(1) of the Securities and Futures Act, Chapter 289 of Singapore ("the SFA"). Accordingly, if a Singapore person is not or ceases to be such an institutional investor, such Singapore Person must immediately discontinue any use of this Report and inform MOCMSPL.

Specific Disclosures

- MOSL, Research Analyst and/or his relatives does not have financial interest in the subject company, as they do not have equity holdings in the subject company.
- MOSL, Research Analyst and/or his relatives do not have actual/beneficial ownership of 1% or more securities in the subject company
- MOSL, Research Analyst and/or his relatives have not received compensation/other benefits from the subject company in the past 12 months MOSL, Research Analyst and/or his relatives do not have material conflict of interest in the subject company at the time of publication of research report
- Research Analyst has not served as director/officer/employee in the subject company MOSL has not acted as a manager or co-manager of public offering of securities of the subject company in past 12 months
- MOSL has not received compensation for investment banking/ merchant banking/brokerage services from the subject company in the past 12 months
- MOSL has not received compensation for other than investment banking/merchant banking/brokerage services from the subject company in the past 12 months
- MOSL has not received any compensation or other benefits from third party in connection with the research report
- 10 MOSL has not engaged in market making activity for the subject company

15 May 2019

The associates of MOFSL may have:

- financial interest in the subject company
- actual/beneficial ownership of 1% or more securities in the subject company
- received compensation/other benefits from the subject company in the past 12 months
- other potential conflict of interests with respect to any recommendation and other related information and opinions.; however the same shall have no bearing whatsoever on the specific recommendations made by the analyst(s), as the recommendations made by the analyst(s) are completely independent of the views of the associates of MOFSL even though there might exist an inherent conflict of interest in some of the stocks mentioned in the research report.
- acted as a manager or co-manager of public offering of securities of the subject company in past 12 months
- 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)
- received compensation from the subject company in the past 12 months for investment banking / merchant banking / brokerage services or from other than said services.

The associates of MOFSL has not received any compensation or other benefits from third party in connection with the research report

Above disclosures include beneficial holdings lying in demat account of MOFSL which are opened for proprietary investments only. While calculating beneficial holdings, It does not consider demat accounts which are opened in name of MOFSL for other purposes (i.e holding client securities, collaterals, error trades etc.). MOFSL also earns DP income from clients which are not considered in above disclosures.

Analyst Certification

The views expressed in this research report accurately reflect the personal views of the analyst(s) about the subject securities or issues, and no part of the compensation of the research analyst(s) was, is, or will be directly or indirectly related to the specific recommendations and views expressed by research analyst(s) in this report.

Terms & Conditions:

This report has been prepared by MOFSL and is meant for sole use by the recipient and not for circulation. The report and information contained herein is strictly confidential and may not be altered in any way, transmitted to, copied or distributed, in part or in whole, to any other person or to the media or reproduced in any form, without prior written consent of MOFSL. The report is based on the facts, figures and information that are considered true, correct, reliable and accurate. The intent of this report is not recommendatory in nature. The information is obtained from publicly available media or other 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. The report is prepared solely for informational purpose and does not constitute an offer document or solicitation of offer to buy or sell or subscribe for securities or other financial instruments for the clients. Though disseminated to all the customers simultaneously, not all customers may receive this report at the same time. MOFSL will not treat recipients as customers by virtue of their receiving this report.

Disclaimer:

The report and information contained herein is strictly confidential and meant solely for the selected recipient and may not be altered in any way, transmitted to, copied or distributed, in part or in whole, to any other person or to the media or reproduced in any form, without prior written consent. This report and information herein is solely for informational purpose and may not be used or considered as an offer document or solicitation of offer to buy or sell or subscribe for securities or other financial instruments. Nothing in this report constitutes investment, legal, accounting and tax advice or a representation that any investment or strategy is suitable or appropriate to your specific circumstances. The securities discussed and opinions expressed in this report may not be suitable for all investors, who must make their own investment decisions, based on their own investment objectives, financial positions and needs of specific recipient. This may not be taken in substitution for the exercise of independent judgment by any recipient. Each recipient of this document should make such investigations as it deems necessary to arrive at an independent evaluation of an investment in the securities of companies referred to in this document (including the merits and risks involved), and should consult its own advisors to determine the merits and risks of such an investment. The investment discussed or views expressed may not be suitable for all investors. Certain transactions -including those involving futures, options, another derivative products as well as non-investment grade securities - involve substantial risk and are not suitable for all investors. No representation or warranty, express or implied, is made as to the accuracy, completeness or fairness of the information and opinions contained in this document. The Disclosures of Interest Statement incorporated in this document is provided solely to enhance the transparency and should not be treated as endorsement of the views expressed in the report. This information is subject to change without any prior notice. The Company reserves the right to make modifications and alternations to this statement as may be required from time to time without any prior approval. MOFSL, its associates, their directors and the employees may from time to time, effect or have effected an own account transaction in, or deal as principal or agent in or for the securities mentioned in this document. They may perform or seek to perform investment banking or other services for, or solicit investment banking or other business from, any company referred to in this report. Each of these entities functions as a separate, distinct and independent of each other. The recipient should take this into account before interpreting the document. This report has been prepared on the basis of information that is already available in publicly accessible media or developed through analysis of MOFSL. The views expressed are those of the analyst, and the Company may or may not subscribe to all the views expressed therein. This document is being supplied to you solely for your information and may not be reproduced, redistributed or passed on, directly or indirectly, to any other person or published, copied, in whole or in part, for any purpose. 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 law, regulation or which would subject MOFSL 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 document may come are required to inform themselves of and to observe such restriction. Neither the Firm, not its directors, employees, agents or representatives shall be liable for any damages whether direct or indirect, incidental, special or consequential including lost revenue or lost profits that may arise from or in connection with the use of the information. The person accessing this information specifically agrees to exempt MOFSL or any of its affiliates or employees from, any and all responsibility/liability arising from such misuse and agrees not to hold MOFSL or any of its affiliates or employees responsible for any such misuse and further agrees to hold MOFSL or any of its affiliates or employees free and harmless from all losses, costs, damages, expenses that may be suffered by the person accessing this information due to any errors and delays.

Registered Office Address: Motilal Oswal Tower, Rahimtullah Sayani Road, Opposite Parel ST Depot, Prabhadevi, Mumbai-400025; Tel No.: 022 71934200/ 022-71934263; Website www.motilaloswal.com.CIN no.: L67190MH2005PLC153397.Correspondence Office Address: Palm Spring Centre, 2nd Floor, Palm Court Complex, New Link Road, Malad(West), Mumbai-400 064. Tel No: 022 7188 1000.

Registration Nos.: Motilal Oswal Financial Services Limited (MOFSL)*: INZ000158836(BSE/NSE/MCX/NCDEX); CDSL and NSDL: IN-DP-16-2015; Research Analyst: INH000000412. AMFI: ARN - 146822; Investment Adviser: INA000007100; Insurance Corporate Agent: CA0579;PMS:INP000006712. Motilal Oswal Asset Management Company Ltd. (MOAMC): PMS (Registration No.: INP000000670); PMS and Mutual Funds are offered through MOAMC which is group company of MOFSL. Motilal Oswal Wealth Management Ltd. (MOWML): PMS (Registration No.: INP0000004409) is offered through MOWML, which is a group company of MOFSL. Motilal Oswal Financial Services Limited is a distributor of Mutual Funds, PMS, Fixed Deposit, Bond, NCDs,Insurance Products and IPOs.Real Estate is offered through Motilal Oswal Real Estate Investment Advisors II Pvt. Ltd. which is a group company of MOFSL. Private Equity is offered through Motilal Oswal Private Equity Investment Advisors Pvt. Ltd which is a group company of MOFSL. Research & Advisory services is backed by proper research. Please read the Risk Disclosure Document prescribed by the Stock Exchanges carefully before investing. There is no assurance or guarantee of the returns. Investment in securities market is subject to market risk, read all the related documents carefully before investing. Details of Compliance Officer: Name: Neeraj Agarwal, Email ID: na@motilaloswal.com, Contact No.:022-71881085.

* MOSL has been amalgamated with Motilal Oswal Financial Services Limited (MOFSL) w.e.f August 21, 2018 pursuant to order dated July 30, 2018 issued by Hon'ble National Company Law Tribunal, Mumbai Bench.