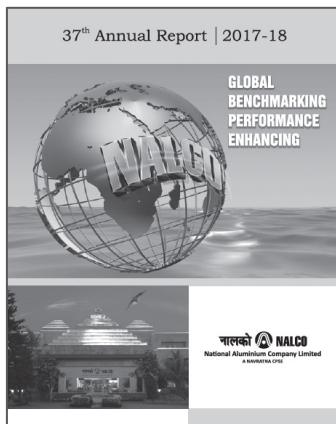


BSE SENSEX
 36,305

S&P CNX
 10,967

CMP: INR66
TP: INR107 (+65%)
Buy

Stock Info

Bloomberg	NACL IN
Equity Shares (m)	1,933
M.Cap.(INRb)/(USD\$b)	125.4 / 1.7
52-Week Range (INR)	98 / 57
1, 6, 12 Rel. Per (%)	-5/-14/-29
12M Avg Val (INR m)	731
Free float (%)	43.8

Financials Snapshot (INR b)

Y/E Mar	2018	2019E	2020E
Net Sales	95.1	117.8	116.5
EBITDA	16.8	33.1	28.4
PAT	9.9	20.7	17.8
EPS (INR)	5.1	10.7	9.2
Gr. (%)	37.0	110.5	-14.3
BV/Sh (INR)	54.3	58.3	60.3
RoE (%)	9.5	19.1	15.5
RoCE (%)	12.9	25.7	20.9
P/E (x)	12.9	6.1	7.1
P/BV (x)	1.2	1.1	1.1

Shareholding pattern (%)

As On	Jun-18	Mar-18	Jun-17
Promoter	56.2	60.2	65.4
DII	24.0	21.2	19.1
FII	7.1	6.4	5.6
Others	12.8	12.2	10.0

FII Includes depository receipts

Annual Report Analysis
Wages eroding its strategic advantages; valuations attractive

We analyzed Nalco's FY18 annual report, key takeaways:

- Revenue from sale of metal and alumina increased 26% YoY to INR93.7b driven by 21% increase in LME, partially offset by 4% appreciation of currency and 11% /3% increase in sales volumes for metal/alumina.
- Nalco realized a premium over the LME of USD57/t on metal exports and USD196/t in the domestic market. Alumina realization was up 26% to USD370/t.
- Nalco has advantage of captive bauxite mines, coal linkage and logistics due to strategic locations. However, its wage bill keeps growing unfettered every year without corresponding improvement in productivity. Employee wages now account for more than USD500/t in metal CoP (cost of production), which is the highest in the world. Although, total headcount declined 2% to 6,776, average recurring annual wages per employee increased 32% to INR2.9m – highest in Indian metal and mining industry.
- CoP of alumina increased by INR1794/t to INR14,417/t on an increase in input cost and wage hike. INR appreciation by 4% accentuated the impact in USD term. CoP increased by USD35/t to USD224/t.
- Despite operating leverage due to a 10% increase in metal production, CoP of metal increased by INR16,235 to INR140,999/t (USD2187). Variable cost and wage hike were the key drivers, which offset marginal gains in manufacturing fixed expenses. Apart from the inflation in alumina CoP, Carbon, power and wage hike were the key drivers.
- Consolidated EBITDA increased 55% to INR17b. Alumina remains the key driver of EBITDA. Cash flow after working capital changes was stable at INR14.7b. Increase in EBITDA by INR6b was offset by higher taxes (INR2.6b), and swing in working capital changes (INR1.4b), etc. Cash flows from investing activities were negative INR5b due to INR8.4b capex offset by interest and dividend income. Nalco stepped up dividend payout by 32% to INR11b and capex by 8%, yet net cash surplus remained flat at INR34b.
- Nalco has increased bauxite production by 3% on opening of a new block at south of Panchpatmali mine. This will help in improving alumina production. Nalco has also made some progress in Pottangi bauxite mine and Utkal D coal mine, which will help in growing earnings a few years down.
- Nalco has also started work on 1mtpa expansion of alumina refinery at a capex of INR55.4b. The real benefit should be visible only after commencement of Pottangi.
- We have changed INR/USD assumption by 7%, which has been partially offset by reduction in LME assumption. As a result, estimate for EBITDA has increased by 16%/12% to INR33.1b/28.4b for FY19/FY20E. Stock is trading at attractive valuations i.e. EV/EBITDA of 3.4x/FY20E and P/E of ~7x/FY20E. We value the stock at INR107/share based on 5.5xEV/EBITDA for FY20E.

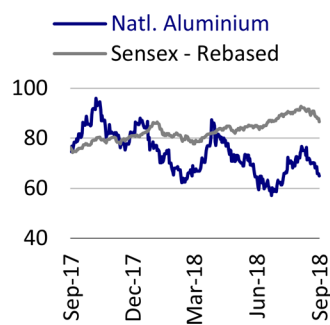
Sanjay Jain – Research Analyst (SanjayJain@MotilalOswal.com); +91 22 6129 1523

Dhruv Muchhal – Research Analyst (Dhruv.Muchhal@MotilalOswal.com); +91 22 6129 1549

Investors are advised to refer through important disclosures made at the last page of the Research Report.

 Motilal Oswal research is available on www.motilaloswal.com/Institutional-Equities, Bloomberg, Thomson Reuters, Factset and S&P Capital.

Stock Performance (1-year)



Revenue Analysis

Volume growth and LME drives up Revenue by 26%

Revenue from sale of metal and alumina increased 26% YoY to INR93.7b, driven by 21% increase in LME, partially offset by 4% appreciation of currency and 11% /3% increase in sales volume for metal/alumina.

- Average metal NSR (net sales realization) increased 15.4% to INR135,549/t in exports and 14% to INR144,479/t in the domestic market. The premium in domestic NSR shrunk 3% to INR8,930/t
- Nalco realized a premium over LME of USD57/t on metal exports and USD196/t in the domestic market. Higher premium in domestic market is driven by import duty, cost of transportation, regional premium and value addition.
- Alumina prices increased 21% to INR23,868/t (+26% to USD370/t)

Exhibit 1: Revenue analysis

	INR Million						
	FY12	FY13	FY14	FY15	FY16	FY17	FY18
Revenue	69,269	72,472	70,243	77,706	71,565	74,385	93,762
YoY (%)	9	5	-3	11	-8	4	26
Alumina	15,428	17,960	25,663	25,706	23,182	25,684	31,952
YoY (%)	37	16	43	0	-10	11	24
Exports	14,203	16,869	24,808	24,702	21,983	24,430	30,474
Domestic	1,224	1,091	856	1,004	1,199	1,253	1,478
Aluminium	53,830	54,420	44,068	51,370	47,828	47,936	60,916
YoY (%)	3	1	-19	17	-7	0	27
Exports	11,483	17,236	12,385	8,371	10,486	11,820	10,281
Domestic	42,348	37,184	31,682	42,999	37,342	36,116	50,635
Others	11	92	512	630	555	766	894
Qty. (tonnes)							
Alumina	8,42,829	9,84,741	13,42,800	12,24,633	12,19,925	12,94,906	13,37,419
YoY (%)	23	17	36	-9	0	6	3
Exports	7,92,552	9,44,117	13,09,473	11,84,595	11,74,224	12,43,103	12,76,775
YoY (%)	24	19	39	-10	-1	6	3
Domestic	50,253	40,605	33,288	40,048	45,702	51,797	60,641
YoY (%)	9	-19	-18	20	14	13	17
Aluminium	4,15,916	4,03,149	3,19,633	3,26,040	3,72,480	3,85,523	4,26,291
YoY (%)	-5	-3	-21	2	14	4	11
Exports	98,399	1,44,161	1,01,243	60,752	94,671	1,00,591	75,847
YoY (%)	0	47	-30	-40	56	6	-25
Domestic	3,17,517	2,58,941	2,18,420	2,65,328	2,77,753	2,84,926	3,50,469
YoY (%)	-7	-18	-16	21	5	3	23
NSR (INR/t)							
Alumina	18,305	18,238	19,112	20,991	19,003	19,834	23,890
YoY (%)	12	0	5	10	-9	4	20
Exports	17,921	17,868	18,945	20,853	18,721	19,653	23,868
YoY (%)	12	0	6	10	-10	5	21
Domestic	24,365	26,856	25,712	25,075	26,240	24,196	24,371
YoY (%)	8	10	-4	-2	5	-8	1
Aluminium	1,29,426	1,34,987	1,37,869	1,57,556	1,28,405	1,24,339	1,42,898
YoY (%)	9	4	2	14	-19	-3	15
Exports	1,16,695	1,19,559	1,22,331	1,37,788	1,10,763	1,17,501	1,35,549
YoY (%)	10	2	2	13	-20	6	15
Premium over LME (USD/t)	162	220	248	367	98	64	57
Domestic	1,33,371	1,43,600	1,45,053	1,62,058	1,34,444	1,26,756	1,44,479
YoY (%)	9	8	1	12	-17	-6	14
Premium over LME (USD/t)	516	661	624	764	459	202	196

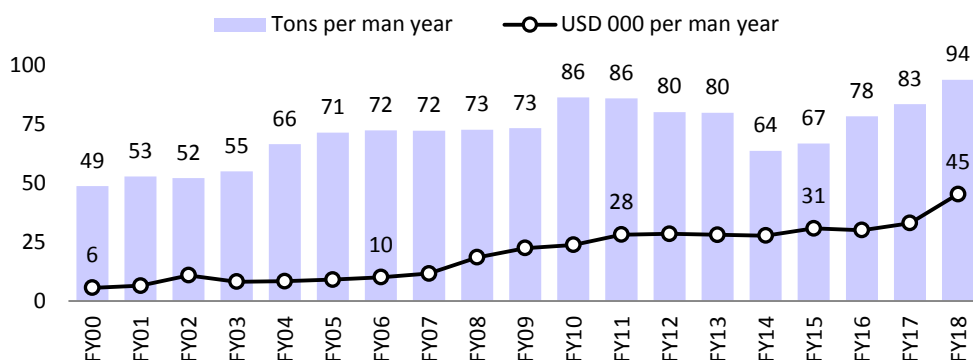
Source: MOSL, Company

Cost of production Analysis

Key drivers - wage hike, state duties and raw materials

We analyzed the cost of production (CoP) of alumina and metal on best effort basis. It is easy to allocate variable to alumina and metal, based on application. However, the fixed cost is split assuming that 33% is attributable to alumina refinery and bauxite mining, while rest 67% is attributable to smelters and captive power plants. We have also removed INR2.8b towards hike in gratuity from employee cost, which is non-recurring. Although total headcount declined 2% to 6,776, average recurring wages increased 32% to INR2.9m per annum.

Exhibit 2: Wages inflation is out of control



Source: MOSL, Company

Alumina – CoP increased by USD35/t USD224

CoP of alumina increased by INR1,794/t to INR14,417/t on an increase in input cost and wage hike. INR appreciation by 4% accentuated the impact in USD terms. CoP increased by USD35/t to USD224/t.

Exhibit 3: Alumina - cost of production (INR/t)

Y/E March	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Caustic Soda	1,218	1,736	1,492	2,196	2,594	2,969	2,898	2,997	3,225	3,778
Coal	1,104	1,146	1,151	1,382	1,613	1,891	1,676	1,974	2,122	2,265
Fuel Oil	2,181	1,921	2,317	3,151	3,307	3,306	2,887	1,762	1,855	2,105
Lime	160	181	152	165	224	222	199	210	212	214
Power	369	368	388	390	398	398	388	388	388	388
Variable cost (A)	5,032	5,353	5,500	7,283	8,136	8,786	8,047	7,331	7,801	8,749
USD/t	109	113	121	155	149	145	132	112	116	136
Mfg Expenses	1,324	1,766	2,020	2,356	2,299	2,607	2,612	2,518	2,407	2,567
Employee Costs	1,634	1,781	2,153	2,024	2,113	2,135	2,457	2,363	2,416	3,102
Fixed Cost (B)	2,958	3,547	4,173	4,380	4,413	4,741	5,068	4,881	4,823	5,669
USD/t	64	75	92	93	81	78	83	75	72	88
CoP (A+B)	7,990	8,900	9,672	11,663	12,549	13,527	13,115	12,212	12,624	14,417
INR/USD	46.0	47.5	45.6	47.1	54.5	60.5	61.1	65.5	67.1	64.5
USD/t	174	188	212	248	230	224	215	186	188	224

Note: We have allocated 33% of fixed-cost to alumina refinery and bauxite mining

Source: MOSL, Company

Variable cost increased by INR947/t (USD19) to INR8749 (USD136)

- Cost of caustic soda per ton of alumina increased by INR553/t to INR3,778/t as average cost of caustic soda increased by 28% to INR37,698/t while specific consumption declined 9% to 100kg/t. Caustic soda specific consumption reduced despite an increase in specific consumption of bauxite from 3.25x to 3.34x.
- Coal cost increased by INR142 to INR2,265/t of alumina. Specific consumption of coal declined 1% to 647kg/t of alumina.
- Fuel oil cost increased by INR250 to INR2,105.

Fixed cost increased by INR846 (USD16) to INR5,669 (USD88).

- Cost of employee increased by INR686 to INR3,102/t of alumina.
- Other expenses increased by INR160/t of alumina.

Aluminum – minor benefit of operating leverage, but major impact of input cost inflation and wage hike

CoP increased by USD327 to USD2,187/t

Despite operating leverage due to a 10% increase in metal production, CoP increased by INR16,235 to INR140,999/t. Variable cost and wage hike were the key drivers, which offset marginal gains in manufacturing fixed expenses. Apart from the inflation in alumina CoP, carbon, power and wage hike were the key drivers.

- Cost of C.P.Coke increased by INR2,532 to INR9,487/t. Average cost increased 37% to ~USD400/t. Current spot prices are ranging between USD450-500/t, which means more cost inflation can be expected in FY19.
- There was reduction in manufacturing expenses by IN703/t due to operating leverage, but the wage hike had a major impact of INR4,576.
- Cost of Power increased by INR5,960/t to INR39,867/t due to an increase in coal prices. Specific consumption of coal in power plants improved ~4% to 0.78kg/kwh.

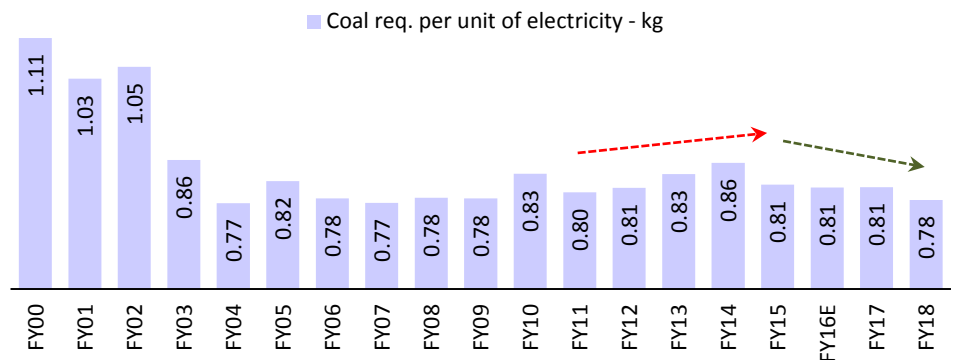
Exhibit 4: Metal - cost of production (INR/t)

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Alumina	15,421	17,177	18,668	22,509	24,219	26,108	25,313	23,568	24,364	27,825
C.P.Coke	8,323	7,294	7,549	10,370	9,744	8,468	8,637	8,135	6,955	9,487
C.T.Pitch	2,369	2,064	2,397	2,912	4,057	3,386	3,363	2,553	2,610	3,003
Al Flouride	1,821	1,178	1,057	1,510	1,773	1,453	1,202	1,363	1,550	1,473
Fuel Oil	2,240	1,736	1,996	2,810	2,896	2,312	2,047	1,277	1,542	1,674
Power Smelter	17,544	19,619	23,669	28,517	31,504	29,062	26,942	29,180	33,907	39,867
Others	667	649	647	522	787	879	813	801	759	721
Variable cost (A)	48,384	49,716	55,982	69,150	74,981	71,669	68,317	66,877	71,687	84,050
USD/t	1,052	1,048	1,229	1,468	1,377	1,184	1,119	1,021	1,068	1,304
Mfg Expenses	11,436	12,988	14,016	19,539	20,855	32,188	30,011	26,839	26,488	25,785
Employee Costs	14,120	13,099	14,938	16,779	19,166	26,363	28,226	25,185	26,588	31,164
Fixed Cost (B)	25,556	26,087	28,954	36,318	40,021	58,551	58,238	52,024	53,076	56,948
USD/t	556	550	636	771	735	967	954	794	791	883
CoP (A+B)	73,940	75,804	84,936	1,05,468	1,15,001	1,30,221	1,26,555	1,18,901	1,24,763	1,40,999
INR/USD	46.0	47.5	45.6	47.1	54.5	60.5	61.1	65.5	67.1	64.5
USD/t	1,608	1,597	1,864	2,239	2,112	2,152	2,072	1,815	1,859	2,187

Note: We have allocated 67% of fixed cost to smelters and captive power plants

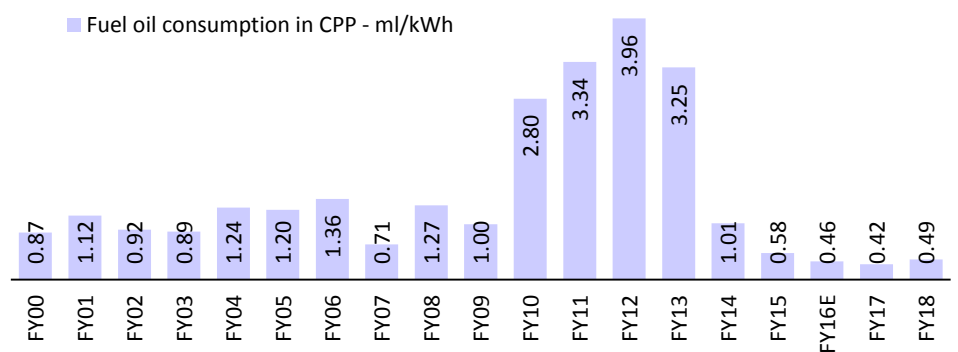
Source: MOSL, Company

Exhibit 5: Specific consumption of coal has been improving



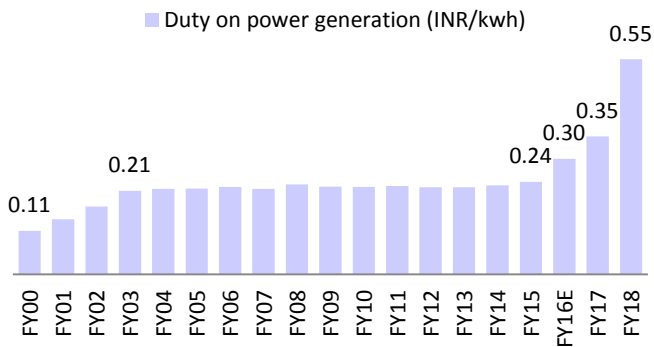
Source: MOSL, Company

Exhibit 6: Specific consumption of oil increased marginally



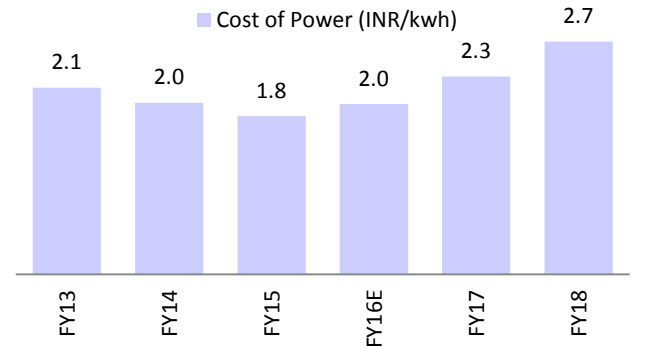
Source: MOSL, Company

Exhibit 7: Duty on captive power consumption hiked again



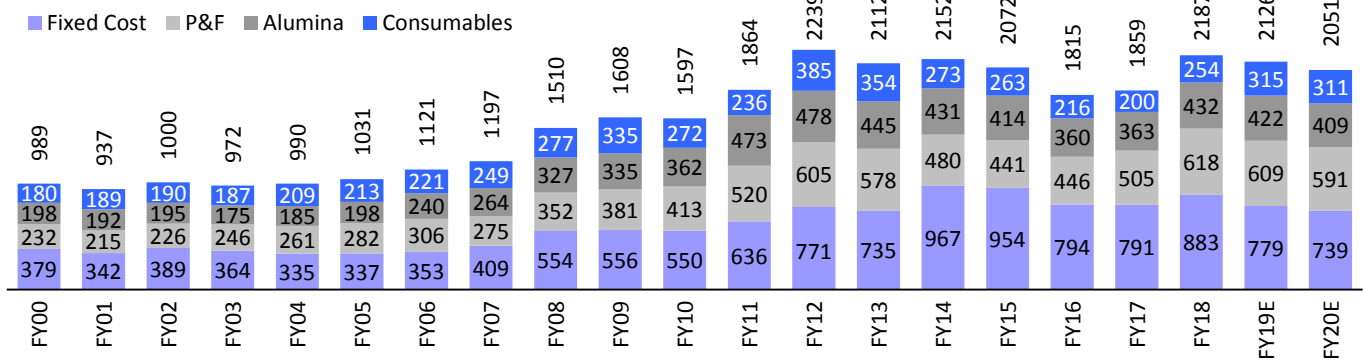
Source: Company, MOSL

Exhibit 8: Cost of power rising again



Source: Company, MOSL

Exhibit 9: Aluminum's cost of production (USD/t)



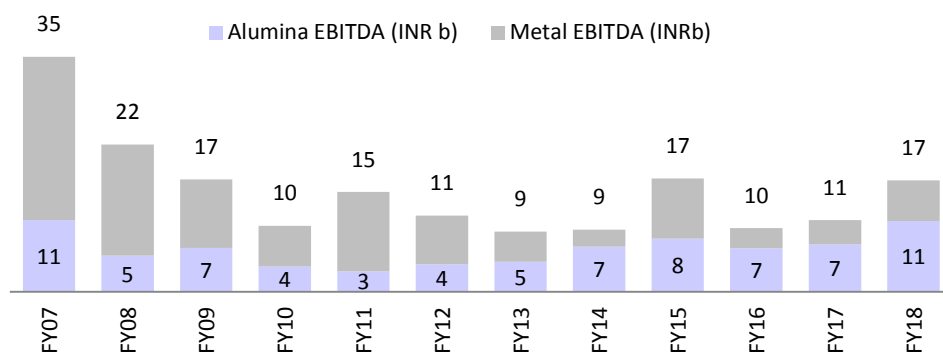
Source: MOSL, Company

EBITDA increased 55%

Alumina remains the key driver

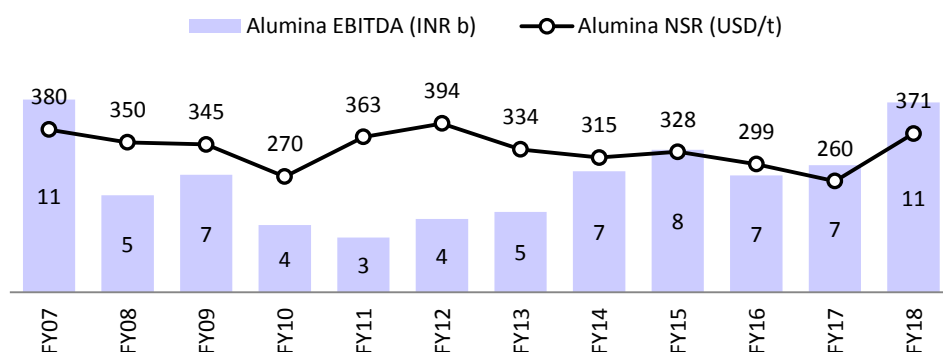
Consolidated EBITDA increased 55% to INR17b. Alumina remains the key driver of EBITDA. Margins in metal production are thin due to a continuous rise in cost of production, driven by cost of coal and wage hikes.

Exhibit 10: Consolidated EBITDA increased 55% to INR17b



Source: MOSL, Company

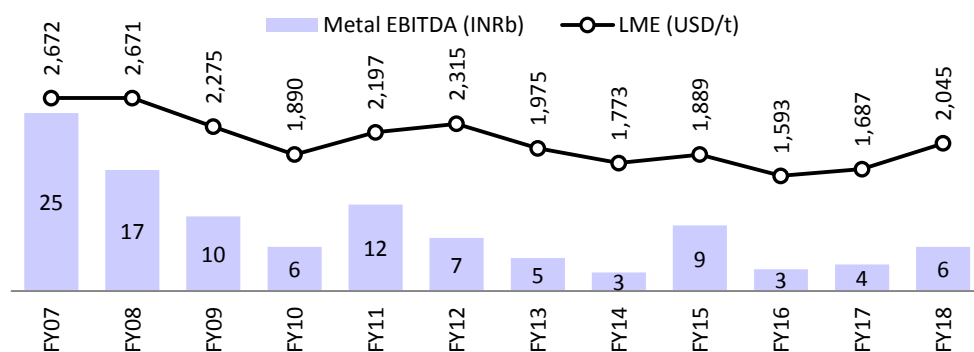
Exhibit 11: Alumina EBITDA increased 49% to INR11b



Source: MOSL, Company

Continuously rising CoP has eroded metal EBITDA

Exhibit 12: Metal EBITDA increased 68% to INR6b



Source: MOSL, Company

Balance sheet and cash flow Analysis

Return ratios are looking up

Depreciation was stable; Adjusted PAT increased 37% to INR9.9b

Depreciation was stable at INR4.8b, though gross block increased by INR4.5b to INR85b. Capex during the year was INR8.4b on cash flow basis. CWIP increased by INR3.5b to INR9b. Reported PAT increased 79% to INR13.4b, which included one-off write backs of INR8.4b towards water charges, DMF, etc. and non-recurring expense of INR2.8b towards hike in cap for gratuity. Adjusted PAT increased 37% to INR9.9b.

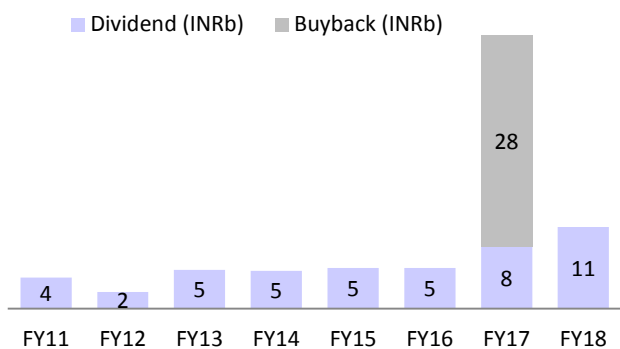
Operating cash flow did not grow despite 55% increase in EBITDA

Cash flow after working capital changes was stable at INR14.7b. Increase in EBITDA by INR6b was offset by higher taxes (INR2.6b), swing in working capital changes (INR1.4b) etc.

Investment in projects increasing

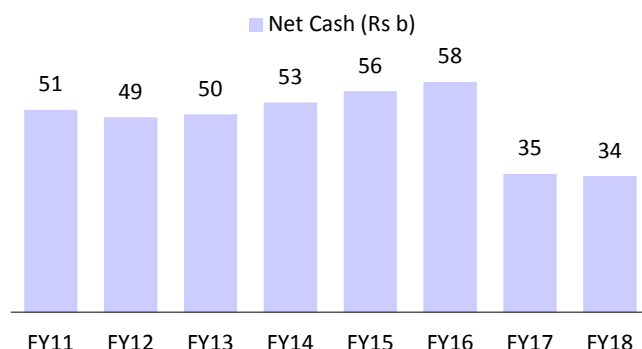
Cash flows from investing activities were at negative INR5b due to INR8.4b capex offset by interest and dividend income.

Exhibit 13: Despite high return to shareholders



Source: Company, MOSL

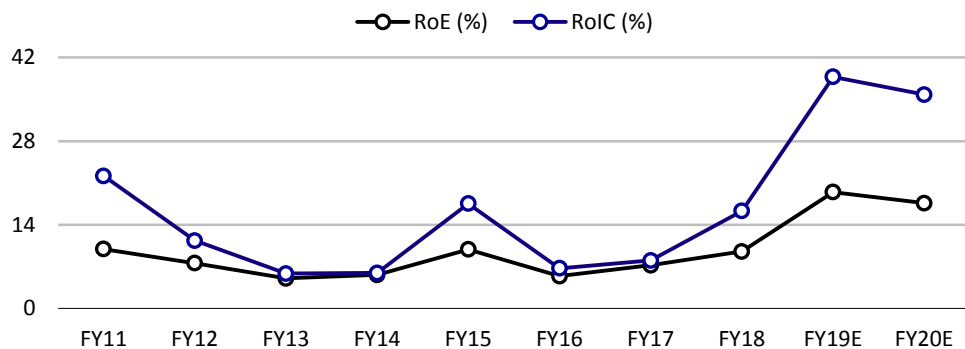
Exhibit 14: Net cash remains high



Source: Company, MOSL

With significant improvement in profitability, return ratios have improved significantly.

Exhibit 15: Return ratios



Note: Book value excludes goodwill

Source: MOSL, Company

Capex stepped up

Work on alumina refinery expansion has started

Bauxite mining capacity increased

- Nalco has access to high quality bauxite from its captive mines of Panchpatmali. Central and North block together have a capacity of 6.85mtpa. The life of the leases has been extended to 16 November 2032.
- Nalco has also opened South block of Panchpatmali on 22 May 2017. The lease has a 315ktpa limit and the lease is valid till 19 July 2029.
- Nalco is also working on starting mining at another bauxite mine. Pottangi has reserves of 75mt spread over 698 hectare. Nalco has accepted terms and conditions and has submitted mining plan on 28 May 2018.

Coal mining may start in 2HFY20

Nalco has been allotted Utkal D&E coal mining blocks on a nomination basis, a couple of years ago. So far, Nalco has been able to execute land deed (in May 2017) and approval of ToR (issued in October 2017) for D block. Transfer of statutory clearances is in process. Mecon has been appointed as consultant for selecting MDO. Nalco expects to start mining in 2HFY20.

Work has started on 1mtpa expansion of alumina refinery

Nalco has started work on expanding capacity of alumina refinery by 1mtpa at a capex of INR55.4b.

- Appointment of consultants: ThyssenKrupp for the project; MN Dastur for steam and power plants.
- RioTintoAlcan has completed basic engineering.
- 12% of detailed engineering done. Ordering of long delivery items started; soil investigation started in December 2017.

Other capex

- INR4.83b capex to be incurred at South block to feed in interim; ultimately Pottangi will supply bauxite.
- Wind Power: 25.5MW (to 224MW) at Capex of INR1.63b

Nalco incurred a capex of INR10.8b (INR8.4b cash out flow) during FY18, which is a significant increase over the last five-year average of INR5.7b. We are modeling capex of INR11b each in FY19 and FY20 cash flow projections.

Valuations are attractive

Upside in alumina production on additional bauxite from South block

Nalco is the key beneficiary of strong alumina pricing and depreciating Indian currency as most of its cost of production is fixed in INR. Only 10-15% of its cost of production is incurred in USD or is linked to USD pricing. We have changed currency assumption by +7% to INR73.4/USD and LME by -7% to USD2,000. We have kept alumina price assumption unchanged at USD450/t. As the bauxite production has increased during FY18 on opening of new block at Panchpatmali, we expect alumina refinery to squeeze another 56kt production from the existing refinery (Production of alumina was robust at 583kt in 1QFY19 though there has been some production loss in 2Q). As a result, estimate for EBITDA has increased by 16%/12% to INR33.1b/28.4b for FY19/FY20E.

Exhibit 16: Key changes in earnings and assumptions

Financials & Valuation (INR b)					Old		Change (%)		
	Y/E March	2017	2018	2019E	2020E	2019E	2020E	2019E	2020E
Sales		75.4	95.1	117.8	116.5	111.0	111.7		
EBITDA		10.8	16.8	33.1	28.4	28.4	25.4	16	12
NP		7.2	9.9	20.7	17.8	17.6	15.8		
Adj. EPS (INR)		3.7	5.1	10.7	9.2	9.1	8.2	18	13
EPS Gr(%)		37.9	37.0	110.5	-14.3	80.7	-10.4		
BV/Sh. (INR)		52.8	54.3	58.3	60.3	65.0	71.1		
RoE (%)		7.2	9.5	19.1	15.5	14.8	12.0		
RoCE (%)		7.9	12.9	25.7	20.9	20.0	16.2		
Payout (%)		110.4	81.5	64.6	77.6	22.9	25.5		
Key Assumption									
USD/INR		67.1	64.5	70.7	73.4	68.1	68.5	4	7
LME (USD/T)		1,687	2,045	2,100	2,000	2,175	2,150	-3	-7
Alumina (USD/T)		260	371	503	450	478	450	5	

Source: MOSL

We have also increased dividend per share to INR6/share each for FY19 and FY20E v/s INR4.7/share in FY18, which has reduced the outstanding cash balance in our estimates and has offset the benefit of higher earnings in equity value calculations. We value the stock at INR107/share based on 5.5xEV/EBITDA for FY20E. Stock has been trading at attractive valuations i.e. EV/EBITDA of 3.4x FY20E and P/E of ~7x FY20E

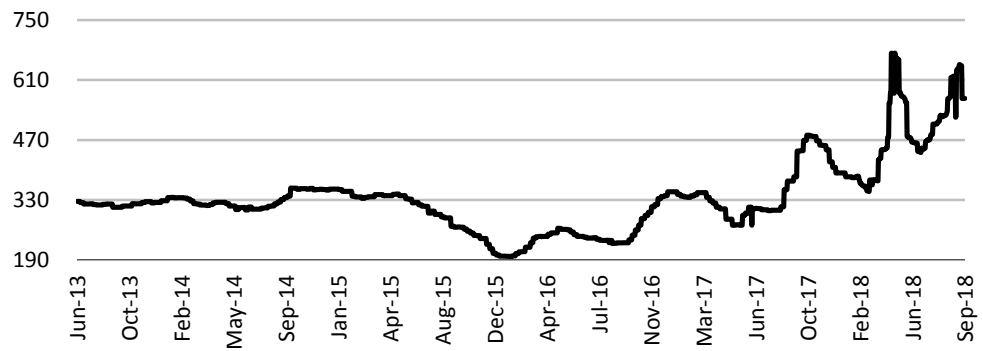
Exhibit 17: Equity value calculations

							INR Million	
	FY14	FY15	FY16	FY17	FY18	FY19E	FY20E	
EBITDA	9,342	17,060	9,595	10,797	16,783	33,111	28,420	
EV/EBITDA (x)						5.5	5.5	
Target EV						1,82,110	1,56,310	
add: CWIP	7,687	5,497	6,877	5,660	9,152	14,152	19,152	
add: cash surplus	40,483	55,780	51,692	35,084	33,619	32,648	30,542	
Equity Value				40,744	42,771	2,28,910	2,06,004	
Target Price						118	107	

Source: MOSL

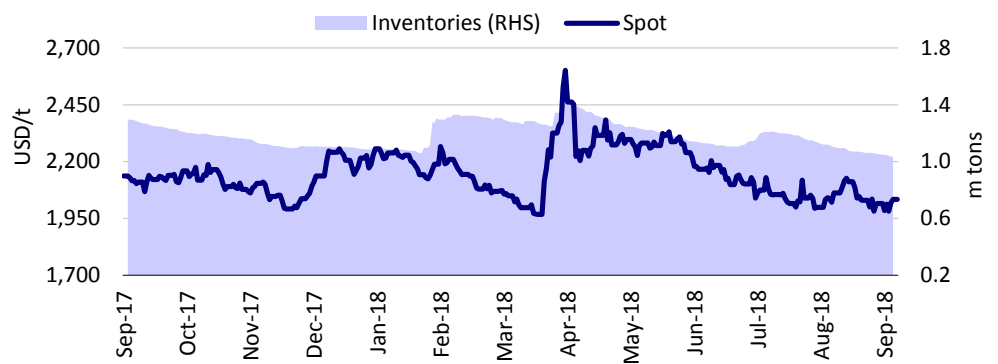
Alumina prices are trading at significant premium to USD450/t assumption

Exhibit 18: Alumina – USD/t



Source: MOSL, Bloomberg

Exhibit 19: LME and inventories



Source: MOSL, Bloomberg

Financials and Valuations

Income Statement							(INR Million)	
Y/E Mar	2013	2014	2015	2016	2017	2018	2019E	2020E
Net Sales	69,165	67,809	73,828	68,170	75,430	95,094	1,17,783	1,16,518
Change (%)	4.6	-2.0	8.9	-7.7	10.7	26.1	23.9	-1.1
EBITDA	9,069	9,342	17,060	9,595	10,797	16,783	33,111	28,420
EBITDA Margin (%)	13.1	13.8	23.1	14.1	14.3	17.6	28.1	24.4
Depreciation	5,054	5,247	4,137	4,261	4,804	4,804	4,829	4,838
EBIT	4,014	4,095	12,924	5,333	5,993	11,979	28,282	23,582
Interest	75	0	0	33	27	20	6	0
Other Income	5,111	5,577	6,726	6,052	4,075	3,008	2,732	2,814
Extraordinary items	0	-494	1,484	-535	402	5,421	910	0
PBT	9,050	9,178	21,134	10,818	10,442	20,388	31,918	26,397
Tax	3,122	2,755	7,916	4,015	2,962	6,964	10,566	8,616
Tax Rate (%)	34.5	30.0	37.5	37.1	28.4	34.2	33.1	32.6
Min. Int. & Assoc. Share	0	0	0	0	0	0	0	0
Reported PAT	5,928	6,424	13,219	6,803	7,480	13,424	21,352	17,781
Adjusted PAT	5,928	6,769	12,290	7,139	7,193	9,855	20,743	17,781
Change (%)	-31.5	14.2	81.6	-41.9	0.8	37.0	110.5	-14.3

Balance Sheet							(INR Million)	
Y/E Mar	2013	2014	2015	2016	2017	2018	2019E	2020E
Share Capital	12,886	12,886	12,886	12,886	9,665	9,665	9,665	9,665
Reserves	1,06,438	1,08,338	1,15,087	1,16,191	92,387	95,384	1,02,934	1,06,914
Net Worth	1,19,325	1,21,225	1,27,973	1,29,077	1,02,052	1,05,048	1,12,599	1,16,579
Debt	0	0	0	0	511	450	450	450
Deferred Tax	9,031	9,101	11,053	11,101	12,456	11,515	11,515	11,515
Total Capital Employed	1,28,356	1,30,326	1,39,026	1,40,178	1,15,018	1,17,013	1,24,563	1,28,543
Gross Fixed Assets	1,41,750	1,48,581	1,52,847	1,55,035	80,489	85,022	91,022	97,022
Less: Acc Depreciation	75,461	80,662	86,393	90,360	9,044	13,627	18,456	23,294
Net Fixed Assets	66,289	67,919	66,454	64,675	71,444	71,395	72,565	73,728
Capital WIP	10,019	7,687	5,497	6,614	5,660	9,152	14,152	19,152
Investments	14,901	12,450	10	11	389	1,176	1,176	1,176
Current Assets	72,061	77,428	89,815	93,891	67,517	64,415	68,284	65,970
Inventory	13,806	11,737	11,656	11,270	11,559	11,941	16,135	15,961
Debtors	1,430	2,436	1,208	2,352	1,843	2,581	3,227	3,192
Cash & Bank	35,044	40,483	55,780	58,095	35,084	33,619	32,648	30,542
Loans & Adv, Others	21,781	22,773	21,171	22,173	19,031	16,274	16,274	16,274
Curr Liabs & Provns	34,914	35,159	22,751	25,012	29,992	29,126	31,614	31,482
Curr. Liabilities	31,201	31,505	18,461	20,001	8,641	9,774	12,262	12,131
Provisions	3,713	3,655	4,290	5,011	21,351	19,352	19,352	19,352
Net Current Assets	37,147	42,269	67,064	68,878	37,525	35,290	36,670	34,487
Total Assets	1,28,356	1,30,326	1,39,026	1,40,178	1,15,018	1,17,013	1,24,563	1,28,543

Financials and Valuations

Ratios

Y/E Mar	2013	2014	2015	2016	2017	2018	2019E	2020E
Basic (INR)								
EPS	2.3	2.6	4.8	2.7	3.7	5.1	10.7	9.2
Cash EPS	4.3	4.5	6.7	4.5	6.4	9.4	13.5	11.7
Book Value	46.3	47.0	49.7	50.1	52.8	54.3	58.3	60.3
DPS	1.3	1.5	1.5	1.8	2.8	4.7	6.0	6.0
Payout (incl. Div. Tax.)	63.6	80.2	38.3	74.2	110.4	81.5	64.6	77.6
Valuation(x)								
P/E	28.6	25.0	13.8	24.3	17.7	12.9	6.1	7.1
Cash P/E	15.4	14.5	9.8	14.7	10.3	7.0	4.9	5.6
Price / Book Value	1.4	1.4	1.3	1.3	1.2	1.2	1.1	1.1
EV/Sales	1.7	1.7	1.5	1.6	1.2	1.0	0.8	0.8
EV/EBITDA	13.2	12.5	6.7	11.9	8.5	5.5	2.8	3.4
Dividend Yield (%)	1.9	2.3	2.3	2.7	4.3	7.2	9.1	9.1
Profitability Ratios (%)								
RoE	5.0	5.6	9.9	5.4	7.2	9.5	19.1	15.5
RoCE	7.2	7.5	14.6	7.5	7.9	12.9	25.7	20.9
RoIC	5.8	5.9	17.5	6.7	8.0	16.3	37.8	30.6
Turnover Ratios (%)								
Asset Turnover (x)	0.5	0.5	0.5	0.5	0.7	0.8	0.9	0.9
Debtors (No. of Days)	8	13	6	13	9	10	10	10
Inventory (No. of Days)	73	63	58	60	56	46	50	50
Leverage Ratios (%)								
Net Debt/Equity (x)	-0.3	-0.3	-0.4	-0.5	-0.3	-0.3	-0.3	-0.3

Cash Flow Statement

(INR Million)

Y/E Mar	2013	2014	2015	2016	2017	2018	2019E	2020E
Adjusted EBITDA	9,069	9,342	17,060	9,595	10,797	16,783	33,111	28,420
Non cash opr. exp (inc)	5,036	5,083	8,211	5,674	3,646	8,409	3,636	2,814
(Inc)/Dec in Wkg. Cap.	-726	3,379	-9,925	796	1,217	-178	-2,351	76
Tax Paid	-4,351	-3,596	-4,915	-3,614	-2,184	-4,825	-10,566	-8,616
Other operating activities	-266	-4,395	-5,227	-4,012	884	-5,524	6	0
CF from Op. Activity	8,762	9,813	5,205	8,438	14,359	14,666	23,836	22,695
(Inc)/Dec in FA & CWIP	-6,489	-6,187	-3,031	-5,456	-7,781	-8,374	-11,000	-11,000
Free cash flows	2,272	3,627	2,173	2,982	6,578	6,292	12,836	11,695
(Pur)/Sale of Invt	-7,358	2,450	12,440	-1	10,178	1,718	0	0
Others	731	4,517	5,749	4,773	2,795	1,522	0	0
CF from Inv. Activity	-13,116	781	15,157	-683	5,191	-5,134	-11,000	-11,000
Inc/(Dec) in Net Worth	0	0	0	0	-28,407	0	0	0
Inc / (Dec) in Debt	0	0	0	0	511	-61	0	0
Interest Paid	-75	0	0	-12	-4	-1	-6	0
Divd Paid (incl Tax) & Others	-2,211	-5,155	-5,065	-5,427	-8,259	-10,934	-13,801	-13,801
CF from Fin. Activity	-2,285	-5,155	-5,065	-5,440	-36,159	-10,997	-13,807	-13,801
Inc/(Dec) in Cash	-6,640	5,439	15,297	2,316	-16,608	-1,465	-971	-2,106
Add: Opening Balance	41,684	35,044	40,483	55,780	51,692	35,084	33,619	32,648
Closing Balance	35,044	40,483	55,780	58,095	35,084	33,619	32,648	30,542

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 becomes inconsistent with the investment rating legend, the Research Analyst shall within 28 days of the inconsistency, take appropriate measures to make the recommendation consistent with the investment rating legend.

Disclosures

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

Motilal Oswal Securities Ltd. (MOSL)* is a SEBI Registered Research Analyst having registration no. INH000000412. MOSL, 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. MOSL is a subsidiary company of Motilal Oswal Financial Service Ltd. (MOFSL). MOFSL is a listed public company, the details in respect of which are available on www.motilalosalwal.com. 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 (MCX) & National Commodity & Derivatives Exchange Ltd. (NCDEX) for its stock broking activities & is Depository participant with Central Depository Services Limited (CDSL) & National Securities Depository Limited (NSDL) and is member of Association of Mutual Funds of India (AMFI) for distribution of financial products. Details of associate entities of Motilal Oswal Securities Limited are available on the website at <http://online-reports.motilalosalwal.com/Dormant/documents/List%20of%20Associate%20companies.pdf>

MOSL 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 MOSL even though there might exist an inherent conflict of interest in some of the stocks mentioned in the research report

MOSL 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 MOSL 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 Securities Limited are available on the website at <https://galaxy.motilalosalwal.com/ResearchAnalyst/PublishViewLitigation.aspx>

A graph of daily closing prices of securities is available at www.nseindia.com, www.bseindia.com. Research Analyst views on Subject Company may vary based on Fundamental research and Technical Research. Proprietary trading desk of MOSL or its associates maintains arm's length distance with Research Team as all the activities are segregated from MOSL 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 MOSL & its group companies to registration or licensing requirements within such jurisdictions.

For Hong Kong:

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 Securities Limited (MOSL) 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 MOSL 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 MOSL, 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., MOSL 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.

For Singapore

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

- 1 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.
- 2 MOSL, Research Analyst and/or his relatives do not have actual/beneficial ownership of 1% or more securities in the subject company
- 3 MOSL, Research Analyst and/or his relatives have not received compensation/other benefits from the subject company in the past 12 months
- 4 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
- 5 Research Analyst has not served as director/officer/employee in the subject company
- 6 MOSL has not acted as a manager or co-manager of public offering of securities of the subject company in past 12 months
- 7 MOSL has not received compensation for investment banking/ merchant banking/brokerage services from the subject company in the past 12 months
- 8 MOSL has not received compensation for other than investment banking/merchant banking/brokerage services from the subject company in the past 12 months
- 9 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

The associates of MOSL 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 MOSL 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 MOSL 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 MOSL which are opened for proprietary investments only. While calculating beneficial holdings, It does not consider demat accounts which are opened in name of MOSL for other purposes (i.e holding client securities, collaterals, error trades etc.). MOSL 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 MOSL 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 MOSL. 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. MOSL 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. MOSL, 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 MOSL. 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 MOSL 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 MOSL or any of its affiliates or employees from, any and all responsibility/liability arising from such misuse and agrees not to hold MOSL or any of its affiliates or employees responsible for any such misuse and further agrees to hold MOSL 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.: 022-3980 4263; www.motilaloswal.com. Correspondence Address: Palm Spring Centre, 2nd Floor, Palm Court Complex, New Link Road, Malad (West), Mumbai- 400 064. Tel No: 022 3080 1000. Compliance Officer: Neeraj Agarwal, Email Id: na@motilaloswal.com, Contact No.:022-38281085.

Registration details: MOSL: SEBI Registration: INZ000158836 (BSE/NSE/MCX/NCDEX); CDSL: IN-DP-16-2015; NSDL: IN-DP-NSDL-152-2000; Research Analyst: INH000000412. AMFI: ARN 17397. Investment Adviser: INA000007100. Motilal Oswal Asset Management Company Ltd. (MOAMC): PMS (Registration No.: INP000000670) offers PMS and Mutual Funds products. Motilal Oswal Wealth Management Ltd. (MOWML): PMS (Registration No.: INP000004409) offers wealth management solutions. *Motilal Oswal Securities Ltd. is a distributor of Mutual Funds, PMS, Fixed Deposit, Bond, NCDs, Insurance and IPO products. *Motilal Oswal Real Estate Investment Advisors II Pvt. Ltd. offers Real Estate products. * Motilal Oswal Private Equity Investment Advisors Pvt. Ltd. offers Private Equity products.

* 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. The existing registration no(s) of MOSL would be used until receipt of new MOFSL registration numbers.