

# **Hindalco**

BSE SENSEX	S&P CNX
35,388	10,741
Bloomberg	HNDL IN
Equity Shares (m)	2,245
M.Cap.(INRb)/(USDb)	538.8 / 7.9
52-Week Range (INR)	284 / 185
1, 6, 12 Rel. Per (%)	-3/-13/6
Avg Val, INRm/ Vol m	2462.0
Free float (%)	65.3
·	

### Financials & Valuations (INR b)

Y/E Mar	2018	2019E	2020E
Net Sales	1,152	1,230	1,254
EBITDA	138.2	151.7	160.0
PAT	42.1	58.1	65.2
EPS (INR)	18.9	26.1	29.3
Gr. (%)	120.5	38.2	12.1
BV/Sh (INR)	166.1	171.5	199.6
RoE (%)	12.8	15.5	15.8
RoCE (%)	8.3	9.9	11.2
P/E (x)	12.7	9.2	8.2
P/BV (x)	1.4	1.4	1.2

Estimate change	$\longleftrightarrow$
TP change	<b>←→</b>
Rating change	<b>←→</b>

CMP: INR240 TP: INR371(+55%) Buy

## Margin expansion in aluminum drives beat

FCF generation to continue even after Capex step up on high IRR projects Hindalco standalone (S/A) EBITDA of INR12.6b (-4% QoQ) was 17% higher than estimate due to higher realization and lower-than-expected increase in cost in aluminum. EBITDA including Utkal increased 3% QoQ to INR16b, ahead of est. of INR15.2b on expansion in margin in aluminum. S/A PAT was down 22% QoQ to INR3.8b (est. INR2.7b) on lower other income and higher depreciation.

- Aluminum EBITDA (incl. Utkal) increased 9% QoQ to INR12.7b (est. INR11.7b).
   EBITDA per ton increased 11% QoQ to USD615/t.
- Copper EBITDA declined 16% QoQ to INR3.3b (est. INR3.5b) as the base was lifted by hedge accounting. Sales increased 6% QoQ to 108kt (est. 95kt).
- For FY18, consolidated EBITDA and adj. PAT increased 11% to INR138b and 120% YoY to INR42.1b respectively. Net debt reduced by INR42b YoY to INR423b, primarily at Novelis.

### Focus on high IRR projects; FCF generation to continue; Maintain Buy

- Aluminum CoP has peaked, while realization is expected to improve on higher LME. Copper production will be impacted in 1Q due to maintenance shutdown, but the outlook is positive with increase in sulfuric acid and DAP prices.
- Hindalco maintains its focus on high IRR projects i.e. expansion of Utkal Alumina and downstream projects in India and autolines at Novelis. Despite step up in capex to INR47b, we expect Hindalco to generate FCF. We value the stock at INR371/share based on 6.5xEV/EBITDA, value for CWIP at book and investments at 20% discount. Stock is trading at attractive valuations of 5.4xEV/EBITDA on FY20E. Maintain BUY

### Quarterly Performance (standalone) - INR m

Y/E March		FY1	.7			FY:	18		FY17	FY18		vs Est
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	<b>4Q</b>			4Q	(%)
Aluminium (sales, kt)	291	320	310	328	299	329	325	321	1,249	1,274	333	-4
Copper (sales, kt)	62	106	97	114	105	93	102	108	379	408	95	14
Exchange USD/INR	67.0	67.0	67.4	67.0	64.5	65.0	64.8	64.3	67.1	64.7	64.3	
Avg LME Aluminium (USD/T)	1,570	1,619	1,710	1,851	1,909	2,009	2,097	2,162	1,687	2,044	2,162	
Net Sales	75,973	90,123	93,136	110,261	97,700	103,082	110,228	116,810	369,366	427,980	109,137	7
Change (YoY %)	-11.4	1.0	14.3	27.2	28.6	14.4	18.4	5.9	7.6	15.9	-1.0	
EBITDA	11,325	11,564	11,852	13,472	11,477	13,899	13,117	12,575	48,135	51,241	10,703	17
As % of Net Sales	14.9	12.8	12.7	12.2	11.7	13.5	11.9	10.8			9.8	
Interest	5,996	5,943	5,879	5,411	4,878	4,836	4,828	4,464	23,229	19,005	4,353	3
Depreciation	3,382	3,516	3,580	3,802	3,792	3,804	3,822	4,598	14,280	16,173	3,806	21
Other Income	2,184	3,364	2,200	2,226	2,563	1,872	2,994	2,049	10,052	9,478	1,594	29
PBT (before EO item)	4,131	5,469	4,593	6,485	5,371	7,131	7,460	5,562	20,679	25,540	4,139	34
Extra-ordinary Income	-2	857		-3	-1,044	-1,055	-1,153		852	-3,252		
PBT (after EO item)	4,129	6,326	4,593	6,482	4,327	6,076	6,307	5,562	21,531	22,288	4,139	34
Total Tax	1,189	1,929	1,390	1,457	1,431	2,146	2,552	1,793	5,964	7,923	1,159	
% Tax	28.8	35.3	30.2	22.5	26.6	30.1	34.2	32.2	27.7	35.5	28.0	
Reported PAT	2,941	4,397	3,204	5,025	2,896	3,930	3,755	3,769	15,567	14,365	2,980	27
Adjusted PAT	2,987	3,954	3,204	4,689	3,462	4,596	4,808	3,769	14,951	16,461	2,692	40
Novelis adj. EBITDA (USDm)	268	270	255	292	289	302	305	319	1,085	1,215	319	

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

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

## Other highlights for the quarter:

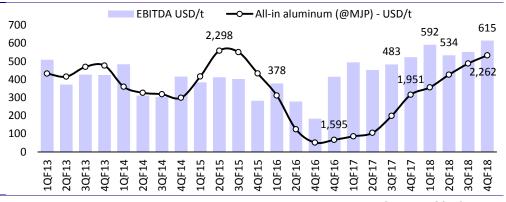
- Aluminum (India + Utkal): Aluminum realization increased ~USD140 QoQ to USD2,544/t. Derived cost of production, considering Utkal at transfer price increased, USD127 QoQ to USD2,158/t and considering Utkal at cost increased USD78 QoQ to USD1,992/t. EBITDA including Utkal increased USD63 QoQ to USD615/t on higher LME. Coal cost was unchanged QoQ, even as Coal India increased prices, due to better linkage mix. Overall CoP increased 6% QoQ, which was lower than expected
- Copper: Production increased 4% QoQ to 105kt. Sales increased 6% QoQ to 108kt. EBITDA was down 16% QoQ to INR3.3b on a stronger base and weak TcRcs.
- Depreciation cost increase 20% QoQ to INR4.6b due to one-time stripping cost of INR650m, adjusted for which depreciation was largely in-line.
- Other income declined 32% QoQ to INR2b.

**Exhibit 1: Quarterly Performance (INR m)** 

Y/E March		FY:	17			FY1	L8		FY17	FY18		vs Est
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q			4QE	(%)
Net Sales	223,651	242,156	242,878	279,714	269,091	284,021	309,465	313,406	1,001,838	1,151,717	314,511	0
EBITDA	29,403	30,526	29,642	34,859	32,411	34,931	34,744	35,942	124,359	138,204	35,273	2
Novelis	17,956	18,090	17,187	19,564	18,631	19,630	19,764	20,524	72,804	78,552	20,157	2
India	12,275	13,264	13,282	16,122	14,387	15,909	15,587	16,025	54,865	62,081	15,260	5
Aluminium	9,646	9,691	10,088	11,493	11,412	11,409	11,627	12,694	40,839	47,314	11,725	8
USD/t	495	452	483	523	592	534	552	615	488	572	548	12
Standalone	8,696	7,991	8,658	8,843	8,502	9,399	9,157	9,244	34,109	36,474	7,205	28
Utkal Alumina	950	1,700	1,430	2,650	2,910	2,010	2,470	3,450	6,730	10,840	4,520	-24
Copper S/A	2,629	3,573	3,195	4,629	2,975	4,499	3,961	3,331	14,026	14,766	3,535	-6
US cent/lb	28.7	22.8	22.2	27.5	19.9	33.8	27.2	21.7	25.0	25.4	26	
Int. Seg	-828	-828	-828	-828	-607	-607	-607	-607	-3,310	-2,429	-144	
adj. PAT	3,192	4,896	2,962	7,305	9,797	10,267	12,925	11,830	19,069	42,088	10,308	15

Source: MOSL, Company

Exhibit 2: Aluminum (incl. Utkal) EBITDA and all-in LME



Source: MOSL, Company



## **Conference call highlights**

**Demand:** Domestic demand for both aluminum and copper is improving after a weak 1H which was impacted by GST and demonetization.

- Imports and local premiums: Local premiums in domestic market in aluminum are at discount to benchmarks due to over-supply in the market. Moreover, imports continue to remain high with ~50% of the market. Imports are mainly from FTA countries. The domestic aluminum association is engaging with the government to curb the risk of further increase in imports after recent trade measures by US. It is proposing quantitative import restrictions so as to also impact imports from FTA countries.
- Aluminum hedging: For FY19, ~28% of the volumes are hedged at USD2,100/t and ~12% at USD2,270/t. The outlook in LME is positive so it will not be hedging further. For FY20, plan is to hedge ~30% of the volumes by September/October 2018 and keep the remaining volumes open.
- Cost of production in aluminum: Cost of production increased 6% QoQ in Q4. Coal cost was however unchanged QoQ, despite Coal India increasing prices, due to better mix of linkage coal volumes and better GCV. The flat trend in coal cost remains even in April and May. Cost of production has peaked and aluminum prices are expected to increase, driving positive outlook on aluminum margins.
- Upstream aluminum expansion: At current LME, the IRR on a brownfield aluminum expansion at Mahan/Aditya is less than the cost of capital for the company. Domestic coal supply remains uncertain. Better visibility on coal supply and cost will be required for any brownfield expansion. It would require investment of ~INR90b for a 360kt brownfield expansion.
- Copper value-add mix to increase: The rod mill was commissioned as per schedule in 4QFY18. Value-add margin is USD200/t and rod volumes will be higher by ~90kt in FY19 with full ramp-up in FY20.
- Copper business outlook: Q1 will be impacted by maintenance shutdown for ~30-45days. However, full year volumes are likely to be similar to FY18, but with a higher value-add mix. Benefit of the new rod mill will accrue from Q3 onwards. Copper business is expected to do a quarterly EBITDA of INR35-37b, with upside potential from higher sulphuric and DAP realization.
- **Capex:** in India will increase to INR16b in FY19 from INR11b in FY18 on Utkal debottlenecking and other downstream expansion.

# Novelis: strong 4Q; net debt down INR44b in FY18

### Valuations attractive; Re-iterate BUY

- Strong 4QFY18 in-line: Novelis delivered its best ever quarterly adj. EBITDA of USD319m. An increase of 9% YoY (+5% QoQ) was driven by higher volumes, improved product mix, operating efficiencies, favorable scrap spreads, which was partially offset by lower beverage can (BC) pricing. EBITDA/t increased 7% YoY (+3% QoQ) to USD396.
- INR44b debt reduction in FY18: Adj. EBITDA increased 12% YoY to USD1.2b. FCF increased 12% YoY to USD406m, which excludes USD314m from sale of stake in Korean rolling mill to Kobe steel. Net debt declined by INR672m (~INR44b) YoY to USD3.6b implying net debt/EBITDA of slightly less than 3x.

Investing in high IRR projects: Novelis has doubled capex to USD450m for FY19E to capitalize on growth opportunities in auto space in the US and China. There will be another ~USD245m cash flow for buying out finishing line at Sierre, Switzerland. Yet, we believe net debt will be stable. Novelis' guidance is at 4x ceiling for net debt/EBITDA ratio in case of acquisition.

■ Robust outlook and stable net debt in FY19: We believe Novelis continues to leverage its first mover advantage in autos. Share of autos has increased by 11pp in four years to 20% in FY18. We expect EBITDA to increase further to USD1.3b in FY20E on continued improvement in mix, volume growth and end of margin pressure in BC pricing. Expansion of spreads between metal & scrap prices pose upside risk.

Exhibit 3: Novelis performance - USD m

Y/E March		FY17	7			FY18	3		FY17	FY18		vs Est
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q			4QE	(%)
Sales (000 tons)	755	773	750	789	785	802	796	805	3,067	3,188	813	-1
Change (YoY %)	-1.7	-1.9	-3.7	0.1	4.0	3.8	6.1	2.0	-1.8	3.9	3.0	
Net Sales	2,296	2,361	2,313	2,621	2,669	2,794	3,085	3,066	9,591	11,614	3,202	-4
Change (YoY %)	-12.8	-4.9	-1.7	9.1	16.2	18.3	33.4	17.0	-2.8	21.1	22.2	
EBITDA (adjusted)	268	270	255	292	289	302	305	319	1,085	1,215	313	2
Change (YoY %)	25.8	14.4	7.1	5.4	7.8	11.9	19.6	9.2	12.6	12.0	7.3	
EBITDA per ton (USD)	355	349	340	370	368	377	383	396	354	381	386	3
Interest	80	79	65	59	62	62	62	60	283	246	61	-2
Depreciation	89	90	88	93	90	91	86	87	360	354	88	-1
PBT (before EO item)	99	101	102	140	137	149	157	172	442	615	164	5
Extra-ordinary Income	(39)	(163)	9	(52)	7	274	(32)	(9)	(245)	240	-	
PBT (after EO item)	60	-62	111	88	144	423	125	163	197	855	164	-1
Total Tax	36	27	47	41	43	116	20	54	151	233	49	10
% Tax	60.0	-43.5	42.3	46.6	29.9	27.4	16.0	33.1	76.6	27.3	30.0	
Reported PAT	24	-89	63	47	101	307	121	112	45	609	115	
Adjusted PAT	63	74	56	99	94	83	121	121	292	369	115	5

Source: MOSL, Company

### **Novelis conference call highlights**

- Capex is increased to USD450m (FY18: USD226m) for FY19, representing USD200m for maintenance and remaining for growth.
- It is evaluating a new auto line in China given the growth opportunity. Novelis has first mover advantage in China.
- Aluminum scrap spreads in US continue to remain strong in 1QFY19. The recent ban on import of aluminum scrap from US by China will provide further support to scrap spreads.
- Pricing pressure in beverage can portfolio is now behind.
- Operating at almost full capacity. Working on debottlenecking opportunities to enhance capacity in the near-to-medium term.
- Working capital increased in FY18 due to higher aluminum prices. For every ~USD100/t increase in LME, the working capital increases by ~USD50m. Working capital is likely to increase further in FY19 as LME remains high.
- The recent disruption in the aluminum market and resultantly higher aluminum prices has not impacted demand for Novelis. Novelis is largely immune to the price volatility given its hedged operating model. Rusal supplies represent just ~3% of its aluminum requirement. The use of scrap, representing ~50% of the input mix, further hedges Novelis from the volatility and uncertainty in the metal market.

 Over the last couple of years the customer reject rates have reduced by half and customer satisfaction has increased by 33%.

### Market outlook

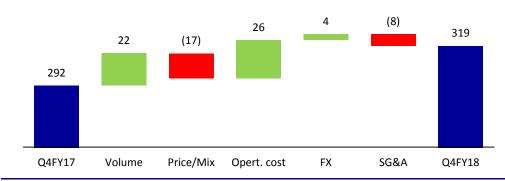
- Beverage cans: Market size is expected to increase from 5.6mt in 2017 to 6.2mt by 2020 and 6.8mt by 2025. Growth in demand for beverage cans will be driven by developing economies. Novelis remain committed to its existing beverage cans market.
- Automotive: Market size is expected to increase from 1.4mt in 2017 to 2.2mt by 2020 and 3.8mt by 2025, as share of aluminum in autos increase. Novelis is looking at growth opportunities in the automotive market.
- Specialties: Market size is expected to increase from 12.5mt in 2017 to 13.6mt by 2020 and 16.4mt by 2025.

## **Regional performance**

- North America: Shipments grew 1% YoY to 273kt. EBITDA margin is up 15% YoY to USD451/t as it continues to benefit from mix and incrementally from higher scrap spreads. EBITDA increased 17% YoY to USD123m.
- **Europe**: Shipments were flat YoY at 237kt. Margins increased 5% YoY to USD258/t. EBITDA was up 5% YoY to USD61m.
- Asia: Shipments were flat at 174kt. Margins increased 39% YoY to USD247/t. EBITDA increased 39% YoY to USD43m.
- **South America**: Shipments grew by 9% YoY to 136kt. EBITDA margin declined 14% YoY to USD691/t on a strong base. EBITDA declined 7% YoY to USD94m.

Higher volumes and operating efficiencies drive strong adj. EBITDA growth.

Exhibit 4: EBITDA bridge (Q4FY18) – USD m



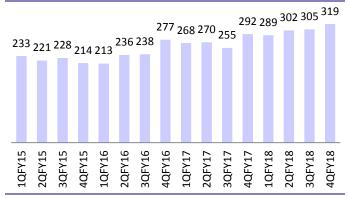
Source: MOSL, Company

Exhibit 5: EBITDA bridge (FY18) - USD m



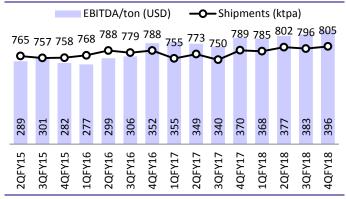
Source: MOSL, Company

### Exhibit 6: Adjusted EBITDA (USD m) was USD319m



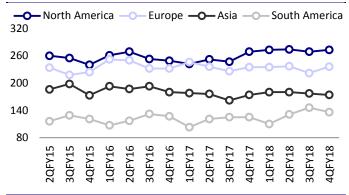
Source: MOSL, Company

Exhibit 7: Record shipments (kt) and EBITDA/t



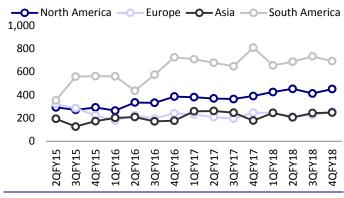
Source: MOSL, Company

Exhibit 8: FRP shipments (kt) increased in NA & SA (kt)



Source: MOSL, Company

Exhibit 9: EBITDA/t improved (USD/t)



Source: MOSL, Company

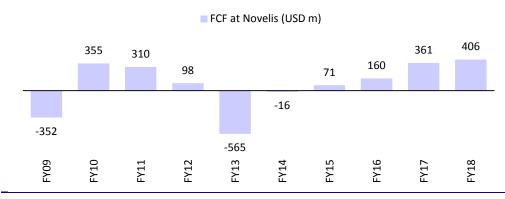
Scrap spreads in US are favorable.

Exhibit 10: Aluminum scrap spreads - USD lb



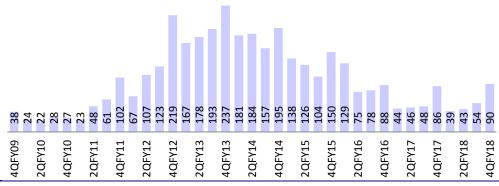
Source: MOSL, Company

Exhibit 11: FCF (USDm)



Source: MOSL, Company

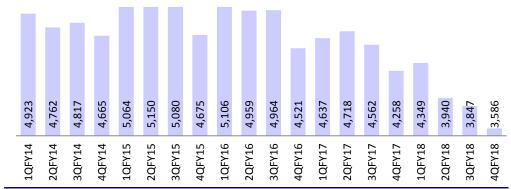
Exhibit 12: Capex (USDm)



Source: MOSL, Company

Sharp reduction in net debt, despite increase in working capital

Exhibit 13: Net debt (USD m)



Source: Company, MOSL

**Exhibit 14: Target price derivation** 

Y/E March	2016	2017	2018	2019E	2020E
EBITDA	86,542	124,359	138,204	151,726	160,000
EV/EBTIDAx			6.5	6.5	6.5
Target EV			898,324	986,222	1,039,999
Net Debt	553,792	465,385	423,705	387,760	332,359
EQ = (EV-net Debt)			474,619	598,462	707,640
A. INR/share(EQ)			213	269	318
CWIP			20,629	42,346	64,998
AA. INR/share (CWIP)			9	19	29
Investments (quoted)			68,340	68,340	68,340
B. INR/share (invest)			31	31	31
C.discount factor (%)			20	20	20
Eq. Value (A+AA+B*(1-C%))			247	312	371
Assumptions					
USD/INR		67.1	64.7	65.0	65.0
LME		1,687	2,044	2,250	2,250

Source: MOSL, Company

**Exhibit 15: Metals valuation** 

	Dating	Rating Price			EPS		P/E	(x)	EV/EBI	TDA (x)	P/E	3(x)
	Kating	(INR)	(USD M)	FY18E	FY19E	FY20E	FY19E	FY20E	FY19E	FY20E	FY19E	FY20E
Steel												
Tata Steel	Neutral	622	8,964	71.9	90.0	68.2	6.9	9.1	5.3	7.2	1.1	1.0
JSW Steel	Buy	337	12,071	23.3	30.4	30.5	11.1	11.1	7.5	7.7	2.4	2.0
JSPL	Buy	254	3,444	-8.5	6.2	10.2	40.9	24.8	7.1	6.4	0.8	0.8
SAIL	Sell	74	4,522	-0.9	4.3	6.5	17.1	11.4	9.5	7.1	0.8	0.8
Non-Ferrous												
Hindalco	Buy	240	7,353	18.9	26.1	29.3	9.2	8.2	6.1	5.4	1.4	1.2
Nalco	Buy	75	2,875	4.3	9.9	10.2	7.6	7.3	3.7	3.3	1.3	1.1
Vedanta	Buy	279	12,252	21.3	28.3	35.3	9.8	7.9	5.6	4.6	9.8	7.9
Rain Ind.*	Buy	237	1,181	23.7	35.2	39.8	6.7	5.9	5.2	4.5	1.6	1.3
Mining												
Coal India	Buy	265	24,802	18.5	26.8	31.1	9.9	8.5	5.3	4.6	6.0	5.6
Hindustan Zinc	Neutral	298	18,669	21.1	26.8	30.6	11.1	9.7	6.7	5.5	11.1	9.7
NMDC	Buy	116	6,799	13.6	14.0	14.7	8.3	7.9	5.0	4.8	1.4	1.3

Source: MOSL, Company

# **Financials and Valuations**

Net Sales         801,928         876,955         1,042,811         987,589         1,001,838         1,151,717         1,229           Change (%)         -0.8         9.4         18.9         -5.3         1.4         15.0           EBITDA         80,584         82,863         89,446         86,542         124,359         138,204         15.0	(INR Million) 019E 2020E 0,686 1,254,318 6.8 2.0 0,726 160,000 12.3 12.8 0,851 45,320 0,875 114,679
Change (%)       -0.8       9.4       18.9       -5.3       1.4       15.0         EBITDA       80,584       82,863       89,446       86,542       124,359       138,204       15.0	6.8 2.0 ,726 160,000 12.3 12.8 ,851 45,320
EBITDA 80,584 82,863 89,446 86,542 124,359 138,204 153	., <b>726 160,000</b> 12.3 12.8 45,320
	12.3 12.8 ,851 45,320
EDITO A Marrier (0/)	,851 45,320
EBITDA Margin (%) 10.0 9.4 8.6 8.8 12.4 12.0	
Depreciation 28,611 35,528 35,906 43,468 44,572 45,062 44	,875 114,679
EBIT 51,973 47,335 53,540 43,074 79,786 93,141 100	,
Interest 20,791 27,016 41,784 51,338 57,424 39,107 36	,960 33,496
Other Income 10,122 10,172 11,047 11,888 11,110 10,046 5	,812 4,067
Extraordinary items -2,216 -3,960 -19,401 -5,765 -76 17,742	0 0
PBT 39,088 26,531 3,402 -2,141 33,395 81,821 75	,728 85,250
Tax 8,857 5,249 2,564 4,984 14,326 20,742 17	,336 19,812
Tax Rate (%) 22.7 19.8 75.4 -232.8 42.9 25.4	22.9 23.2
Min. Int. & Assoc. Share -38 -468 -7,704 -6,223 77 1,250	251 251
Reported PAT 30,269 21,750 8,542 -902 18,992 59,829 58	,140 65,187
Adjusted PAT 32,485 25,710 27,943 4,863 19,069 42,088 58	,140 65,187
Change (%) -4.4 -20.9 8.7 -82.6 292.1 120.7	38.1 12.1
Balance Sheet	(INR Million)
	)19E 2020E
	,227 2,227
·	,056 613,730
	,283 615,957
Minority Interest 17,593 17,805 9,561 3,813 62 86	-45 -45
·	,666 384,102
	,391 25,158
Total Capital Employed 974,633 1,102,555 1,102,448 1,105,603 1,118,333 1,123,254 1,030	
Gross Fixed Assets 482,107 748,947 887,802 1,057,871 1,040,510 1,082,644 1,080	
	,039 500,360
Net Fixed Assets 260,852 481,586 587,986 679,377 675,518 672,590 624	,978 605,907
Goodwill on consolidation 160,497 169,371 165,651 177,353 171,350 178,294 171	,350 171,350
Capital WIP 338,311 230,593 141,113 42,138 18,139 20,629 42	,346 64,998
Investments 15,962 23,381 23,216 47,488 62,057 68,778 61	,554 61,303
	,390 475,753
Inventory 143,317 166,943 184,511 167,873 182,914 216,314 222	,038 226,488
Debtors 89,523 92,348 91,864 79,184 82,748 99,598 103	,694 105,770
Cash & Bank 105,771 117,121 119,289 120,962 172,129 119,612 62	,906 51,743
	,752 91,752
Curr Liabs & Provns 231,263 277,263 315,011 305,857 338,275 346,884 350	,323 354,140
Net Current Assets 199,011 197,626 184,484 159,247 191,269 182,962 130	,068 121,613
Total Assets 974,633 1,102,555 1,102,448 1,105,603 1,118,333 1,123,254 1,030	,295 1,025,171

# **Financials and Valuations**

Ratios								
Y/E Mar	2013	2014	2015	2016	2017	2018	2019E	2020E
Basic (INR)								
EPS	17.0	12.5	13.5	2.4	8.6	18.9	26.1	29.3
Cash EPS	30.7	27.5	17.8	17.7	28.6	47.6	46.4	49.7
Book Value	100.7	114.6	105.4	111.6	129.9	166.1	171.5	199.6
DPS	1.4	1.0	1.0	1.0	1.1	1.4	1.4	1.4
Payout (incl. Div. Tax.)	9.7	9.4	8.6	49.3	15.0	8.7	6.3	5.6
Valuation(x)								
P/E	14.1	19.3	17.7	101.1	28.0	12.7	9.2	8.2
Cash P/E	7.8	8.7	13.5	13.5	8.4	5.0	5.2	4.8
Price / Book Value	2.4	2.1	2.3	2.2	1.8	1.4	1.4	1.2
EV/EBITDA	11.5	12.4	11.9	12.1	8.0	6.9	6.1	5.4
Dividend Yield (%)	0.6	0.4	0.4	0.4	0.5	0.6	0.6	0.6
Profitability Ratios (%)								
RoE	18.0	11.6	12.3	2.2	7.4	12.8	15.5	15.8
RoCE	5.9	4.6	4.9	3.9	7.3	8.3	9.9	11.2
RoIC (pre-tax)	10.7	7.6	6.9	5.0	9.1	10.5	12.0	13.4
Turnover Ratios (%)								
Asset Turnover (x)	0.8	0.8	0.9	0.9	0.9	1.0	1.2	1.2
Debtors (No. of Days)	41	38	32	29	30	32	31	31
Inventory (No. of Days)	65	69	65	62	67	69	66	66
Creditors (No. of Days)	44	54	54	56	65	65	57	57
Leverage Ratios (%)								
Net Debt/Equity (x)	2.4	2.2	2.6	2.4	1.6	1.1	1.0	0.7
Cash Flow Statement	2012	2014	2015	2016	2017	2010		NR Million
Y/E Mar	2013	2014	2015	2016	2017	2018	2019E	2020E
Adjusted EBITDA	80,584	82,863	89,446	86,542	124,359	138,204	151,726	160,000
Non cash opr. exp (inc)	1,410	-4,821	-5,872	1,543	3,622	766	1,135	1,135
(Inc)/Dec in Wkg. Cap.	-38,740	9,623	-863	41,083	6,691	-41,848	-6,175	-2,709
Tax Paid	-13,478	-9,586	-11,280	-12,291	-7,797	-15,855	-19,142	-21,046
Other operating activities	0	0	0	0	0	0	0	0
CF from Op. Activity	29,776	78,079	71,431	116,877	126,875	81,267	127,545	137,381
(Inc)/Dec in FA & CWIP	-118,711	-94,236	-59,776	-42,452	-29,376	-27,751	-64,795	-48,902
Free cash flows	-88,936	-16,156	11,655	74,426	97,499	53,517	62,751	88,479
(Pur)/Sale of Invt	10,729	10,910	15,680	7,234	1,491	10,046	5,812	4,067
Others	-357	1,672	-796	8,632	7,701	20,365	0	0
CF from Inv. Activity	-108,340	-81,655	-44,892	-26,586	-20,185	2,660	-58,982	-44,835
Inc/(Dec) in Net Worth	128	16,305	47	1	33,141	0	0	0
Inc / (Dec) in Debt	143,356	48,689	28,323	-36,003	-25,430	-92,511	-85,872	-66,564
Interest Paid	-36,728	-46,919	-50,253	-50,057	-60,754	-39,107	-36,960	-33,496
Divd Paid (incl Tax) & Others	-3,977	-3,149	-2,488	-2,558	-2,479	-3,648	-3,648	-3,648
CF from Fin. Activity	102,779	14,926	-24,371	-88,619	-55,523	-135,267	-126,480	-103,708
Inc/(Dec) in Cash	24,215	11,351	2,168	1,673	51,167	-51,339	-57,917	-11,163
Add: Opening Balance	81,556	105,771	117,121	119,289	120,962	172,129	119,612	62,906
Closing Balance	105,771	117,121	119,289	120,962	172,129	120,790	61,695	51,743

## 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

ndation 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 inve

### 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. IMP000000412. 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 <a href="https://www.motilaloswal.com">www.motilaloswal.com</a>. MOSL is registered with the Securities & Exchange Board of India (SEBI) and is a registered Trading Member with National Stock Exchange of India Ltd. (MSE) and Bombay Stock Exchange Limited (BSE), Metropolitan Stock Exchange Of India Ltd. (MSE) for its stock broking activities & is Depository participant with Central Depository Services Limited (CDSL), & National Securities Depository Limited (MSDL) and is member of Association of MSDL in the MSDL i Mutual Funds of India (AMFI) for distribution of financial products. Details of associate entities of Motifal Oswal Securities Limited are available on the website at http://onlinereports.motifalo

MOSL, it's associates, Research Analyst or their relative may have any financial interest in the subject company, MOSL and/or its associates and/or Research Analyst may have beneficial ownership of 1% or more securities in the subject company at the end of the month immediately preceding the date of publication of the Research Report. 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 recommendation and other 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. Research Analyst may have served as director/officer, etc. in the subject company in the last 12 month period. MOSL and/or its associates may have received any compensation from the subject company in the past 12 months.

In the last 12 months period ending on the last day of the month immediately preceding the date of publication of this research report. MOSL or any of its associates may have:

- ast 12 months period ending on the last day of the month immediately preceding the date of publication or inis research report, MUSL or any or its associates may have managed or co-managed public offering of securities from subject company of this research report, received compensation for investment banking or merchant banking or brokerage services from subject company of this research report, received compensation for products or services other than investment banking or merchant banking or brokerage services from the subject company of this research report. Subject Company may have been a client of MOSL or its associates during twelve months preceding the date of distribution of the research report.

MOSL and it's associates have not received any compensation or other benefits from the subject company or third party in connection with the research report. To enhance transparency, MOSL has incorporated a Disclosure of Interest Statement in this document. This should, however, not be treated as endorsement of the views expressed in the 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

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.

### 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.

### Disclosure of Interest Statement Hindalco Analyst ownership of the stock No

A graph of daily closing prices of securities is available at <a href="www.nseindia.com">www.nseindia.com</a>, <a href="www.nseindia.co

### Regional Disclosures (outside India)

This report is not directed or intended 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 Moltial Oswal Securities (SEBI Reg No. INH000000412) has an agreement with Moltial Oswal apital 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.

Motital 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 investinent advises in under the D.S. investinent Advises is dut of 1940, as afmeded (for Washes). Act and objected within 1944 M.d. in under application state above interest state laws 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., MOSI, has entered into a chaperoning agreement with a U.S. registered broker-dealer, Motifal 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.

### 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 unclosing the means and issass moves expressed may not be studied in an investion. Certain investions, including those involving futures, options, another derivative products as well as non-investment means and issass of such an investions. In 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, effected an own account transaction in, or deal as principal or agent in or for the securities mentioned in this document. They approval was prior 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 information and may not be reproduced, redistributed or passed on, directly or information and may not be reproduced, redistributed or passed on, directly or information and may not be reproduced, redistributed or passed on, directly or information and may not be reproduced, redistributed or passed on, directly or information and may not be reproduced, redistributed or passed on, directly or information and may not be reproduced, redistributed or passed on, directly or information and may not be reproduced, redistributed or passed on, directly or information and may not be reproduced, redistributed or passed on, directly 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 MOŚL 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 of group entities: 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.IRDA Corporate Agent-CA0541. Motilial Oswal Asset Management Company Ltd. (MOAMC): PMS (Registration No.: INP0000004409) 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 Commodities Broker Pvt. Ltd. offers Commodities 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