MOTILAL OSWAL

Hindalco

BSE Sensex	S&P CNX
19,561	5,923

Bloomberg	HNDL IN
Equity Shares (m)	1,990.0
M.Cap. (INR b)/(USD b)	222.9/4.1
52-Week Range (INR)	165/100
1,6,12 Rel. Perf. (%)	-11/-17/-37

Financials & Valuation (INR b)

Y/E March	2013E	2014E	2015E
Sales	807.0	840.8	915.1
EBITDA	81.4	99.5	107.9
NP	33.6	39.7	39.5
Adj. EPS (INR)	16.9	20.0	19.9
EPS Gr(%)	-1.2	18.3	-0.5
BV/Sh. (INR)	98.1	116.3	134.4
RoE (%)	18.4	18.6	15.8
RoCE (%)	6.9	8.0	8.0
Payout (%)	10.4	8.8	8.8
Valuations			
P/E (x)	6.6	5.6	5.6
P/BV	1.1	1.0	0.8
EV/EBITDA (x)	7.8	6.5	5.7
Div. Yield (%)	1.3	1.3	1.3

CMP: INR112 **TP: INR175** **Buy**

- Hindalco's standalone (S/A) EBITDA increased 13% QoQ to INR5.8b, in line with est of INR6b. Aluminum segment EBITDA fell short of est due to pressure on product premium, however was offset by better operating performance of copper segment, helped by better TcRc margins despite lower acid prices.
- Adj PAT increased 21% QoQ to INR4.3b due to higher EBITDA and other income partially offset by higher interest cost. Interest expense increased sharply to INR1.7b due to the recently-raised INR60b NCD.
- **Novelis:** Adjusted EBITDA was at USD185m, below est of USD252m, due to higher-than-expected loss of volumes on implementation of ERP system in North America and pressure on margins. ERP system implementation knocked off USD39m from the adjusted EBITDA. Including this, adjusted EBITDA would have been USD224m (USD345/t) v/s est of USD252m (USD350/t).
- **Novelis:** Barring auto segment, the margin pressure is visible across all segments due to slowdown in European and Chinese demand. Novelis is trying to mitigate the pressure on margins by effective cost management, increased recycling (+5pp YoY to 44%), and growth in high margin businesses of auto segment in North America and CAN business in Brazil.
- We expect capex to peak for Hindalco in FY13, with a total estimated consolidated capex of USD2.5b across all its projects. Mahan and Utkal alumina projects in India and Novelis' projects will start generating cash flows in FY14. Hence, we expect deleveraging of balance sheet to start in FY14.
- We have cut FY13E/FY14E/FY15E EPS by 12%/4%/13% to factor lower margins in Novelis and lower volumes in standalone operations. SOTP is cut by 6% to INR175. Stock is trading at FY15E EV/EBITDA of 5.7x. Maintain **Buy**.

Quarterly Performance (Standalone) (INR Million)

Y/E March	FY12				FY13				FY12	FY13E	FY13	vs Est
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4QE			3QE	(%)
Alumina (Production, kt)	335	332	343	345	335	328	326	365	1,355	1,354	355	-8
Aluminium (sales, kt)	131	129	147	149	124	127	135	145	556	530	135	0
Copper (sales, kt)	73	75	84	94	71	73	82	90	325	316	86	-5
Net Sales	60,309	62,719	66,470	76,471	60,279	61,635	68,717	76,562	265,968	267,194	69,662	-1
EBITDA	8,671	6,692	7,149	8,648	4,631	5,153	5,821	7,284	31,160	22,889	6,021	-3
As % of Net Sales	14.4	10.7	10.8	11.3	7.7	8.4	8.5	9.5	11.7	8.6	8.6	
EBITDA - Aluminium	6,761	4,758	4,532	5,258	3,415	2,609	3,110	4,862	21,309	13,997	3719	-16
EBITDA-Copper	1,909	1,935	2,618	3,390	1,216	2,544	2,711	2,422	9,851	8,892	2,302	18
Interest	667	675	793	801	815	279	1,690	1,500	2,936	4,283	290	483
Depreciation	1,754	1,741	1,747	1,658	1,705	1,728	1,884	1,824	6,900	7,139	1,782	6
Other Income	1,779	1,761	901	1,605	3,014	1,324	3,181	1,637	6,046	9,156	919	246
PBT (after EO item)	8,029	6,037	5,509	7,794	5,126	4,471	5,428	5,597	27,370	20,622	4,868	12
Total Tax	1,589	1,012	1,002	1,395	878	882	1,093	1,175	4,998	4,029	1,022	7
% Tax	19.8	16.8	18.2	17.9	17.1	19.7	20.1	21.0	18.3	19.5	21.0	-4.1
Adjusted PAT	6,440	5,025	4,507	6,400	4,248	3,589	4,335	4,422	22,372	16,594	3,846	13
Novelis Shipments (kt)	767	720	648	703	722	719	647	750	2,838	2,838	720	-10
Novelis adj. EBITDA (USDm	306	301	213	233	259	277	185	259	1,053	980	252	-27
Consolidated Financials												
Net Sales	199,487	193,373	191,934	207,190	199,157	197,013	194,302	216,514	808,214	807,025	200,915	-3
EBITDA	23,637	21,634	19,288	21,611	20,023	21,803	17,114	22,533	81,897	81,426	20,943	-18
Consolidated adj. PAT	11,772	10,784	7,519	10,141	8,741	8,977	5,912	8,756	33,970	33,573	8,128	-27

E: MOSL Estimates

Sanjay Jain (SanjayJain@MotilalOswal.com); +9122 39825412

Pavas Pethia (Pavas.Pethia@MotilalOswal.com); +9122 39825413

Standalone: EBITDA in-line (copper did better offsetting aluminum); Interest expense and other income were higher

- EBITDA increased 13% QoQ to INR5.8b, in line with est of INR6b driven by 19% growth in aluminum EBITDA to INR3.1b and 7% growth in copper EBITDA to INR2.7b. Aluminum segment EBITDA fell short of estimate due to pressure on product premium, however was offset by better operating performance of copper segment, helped by better TcRc margins despite lower acid prices.
- Net sales increased 11% QoQ to INR68.7b driven by 5% growth in aluminum segment and 15% growth in copper segment
- Adj PAT increased 21% QoQ to INR4.3b due to higher EBITDA and other income partially offset by higher interest cost.
- Other income too increased sharply to INR3.2b, which included INR1.44b due to write-back of various MTM provisions made in the past.
- Utkal alumina and Mahan smelters are now close to commissioning. Hirakud FRP mill has already rolled the first slab. Hindalco has invested a total of INR270b (INR22.7b in 3QFY13) in all Indian projects so far, which is still reflecting in CWIP on the balance sheet.
- Interest expense increased sharply to INR1.7b due to INR60b of debt raised through NCD. Although this money has been raised to fund projects, yet the interest charge will not be capitalized because it is being treated as equity rather than debt in respective projects. This however is immaterial from the point of view of consolidated interest cost for the company.

Copper: margins stable as better TcRc offset lower acid realization

- Copper segment revenue's 15% growth was driven by 12% growth in sales volumes to 82kt. Production of copper increased 8% QoQ to 84kt.
- EBIT increased 8% QoQ to INR2.25b due to corresponding increase in the volumes. EBIT was flat QoQ at 23.1USc/lb. Slightly better TcRc offset significantly lower acid realization.

Aluminum: production is returning to full capacity; product premiums under pressure

- Aluminum segment revenue increased by 5% QoQ to INR24.9b driven by 6% growth in sales volume to 135kt. Production increased by 9% to 139kt due to normalization of smelter after set back in operations during 1HFY13.
- The average realization declined 1% QoQ due to pressure on regional premiums.
- We were expecting 2% growth in realization because average LME was higher by 4%, while the exchange rate was 2% lower. The realization of alumina and rolled product declined 3% QoQ and ingots by 1% QoQ.
- EBIT increased 22% QoQ to INR2.06b due to 6% growth in volumes and 18% growth in EBIT/ton to USD283.
- Cost of production of primary metal is estimated to have increased by 2% to USD1,883/ton.

Hindalco Aluminium Business (INR m)

	1QFY12	2QFY12	3QFY12	4QFY12	1QFY13	2QFY13	3QFY13	4QFY13E
Segmental Revenue	20,931	22,132	22,362	24,986	20,626	21,049	22,155	24,872
less: Alumina	1,660	2,020	1,980	2,170	2,930	2,160	2,170	2,170
(a) Revenue (only Aluminium products)	19,271	20,112	20,382	22,816	17,696	18,889	19,985	22,702
Sales (000 tons)	131	129	147	149	124	127	135	145
Realization (INR/ton)	147,110	155,907	138,652	152,942	142,862	148,732	148,584	156,565
EBITDA	6,761	4,758	4,532	5,258	3,415	2,609	3,110	4,862
Less: Alumina EBITDA (50% mar.assumed)	830	1,010	990	1,085	1,465	1,080	1,085	1,085
(b) EBITDA (only Aluminium products)	5,931	3,748	3,542	4,173	1,950	1,529	2,025	3,777
Costs (a - b)	13,340	16,364	16,840	18,643	15,745	17,360	17,960	18,925
Aluminium costs (INR/ton)	101,833	126,854	114,559	124,968	127,116	136,692	133,528	130,517
USD/INR	44.7	45.4	51.0	50.2	54.5	55.5	54.2	54.0
LME (USD/ton)	2,598	2,398	2,090	2,175	1,978	1,918	2,011	2,100
Aluminium costs (USD/ton)	**2,276**	**2,794**	**2,246**	**2,491**	**2,332**	**2,463**	**2,466**	**2,417**
Realization (USD/ton)	3,288	3,434	2,719	3,049	2,621	2,680	2,744	2,899
Product premium over LME	690	1,036	629	874	643	762	733	799
EBITDA per ton (USD)	**1,012**	**640**	**472**	**558**	**289**	**217**	**278**	**482**
~ COP (LME - EBITDA/t +150)	**1,736**	**1,908**	**1,768**	**1,767**	**1,839**	**1,851**	**1,883**	**1,768**

Source: Company, MOSL

Project Status (India)

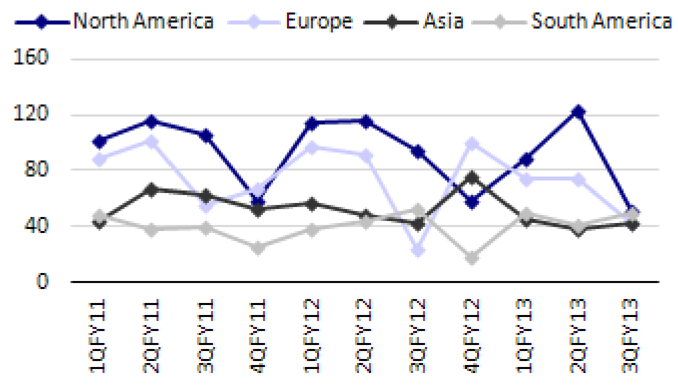
- Hindalco has invested a total of INR270b (INR22.7b in 3QFY13) in all Indian projects so far, which is still sitting in CWIP on the balance sheet. Net debt (standalone) is now at INR150b (up INR9.6b QoQ).
- Utkal alumina and Mahan smelters are now close to commissioning. The trial runs are expected within couple of months. The phased commissioning is expected during 1QFY14 on expected line. Hirakud FRP mill has already rolled first slab. Other equipments like scalper, soaking pit and slitter commenced trial runs.

Novelis 3QFY13: below estimates; pricing pressure visible; growth in high margin business is positive

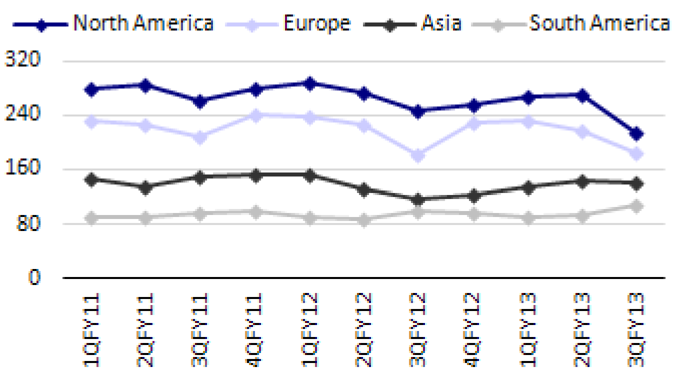
- Novelis' adjusted EBITDA at USD185m, below est. of USD252m due to higher than expected loss of volumes on implementation of ERP system in North America and pressure on margins.
- ERP system implementation knocked-off USD39m from the adjusted EBITDA. Including this, the adjusted EBITDA would have been USD224m (USD345/t) vs est. of USD252m (USD350/t).
- In addition, unfavorable pricing dynamics in several regions, higher metal input costs in North America, and incremental project start-up costs associated with its global expansions affected margins.
- FRP Shipments were flat YoY at 647kt i.e. 10% lower than est. of 720kt. Volumes were affected due to higher than expected impact of implementation of ERP system in North America and season pattern in demand.
- Novelis invested heavily during the quarter with a total CapEx of USD193m (USD538m in 9mFY13). CapEx guidance has been increased from USD600-650m to USD750 for FY13 as some of the CapEx for European recycling facilities has been up fronted to benefit from incentives in project cost. Although FY14 exact CapEx guidance has not been firmed up, yet the overall spend will decline YoY. Free cash flows were negative USD309m during the quarter due to CapEx, half yearly interest payment of USD107m on bonds, and working capital increase.

- Barring auto segment, the margin pressure is visible across all segments due to slow down in European and Chinese demand. Novelis is trying to mitigate the pressure on margins by effective cost management, increased recycling (+5pp YoY to 44%), and growth in high margin businesses of auto segment in North America and CAN business in Brazil. During FY14, recently commissioned Pinda FRP plant and expected commissioning of new 200kt auto line in Oswego, USA will drive volumes and margins. Further, 350ktpa Korean FRP mill expansion will drive volumes in FY15.
- We are cutting FY13 EBITDA by 7.3% to USD980m to factor lower EBITDA in 3QFY13. Also, we have cut margins by USD5 to USD345/t in subsequent quarters.

Segment Adj. EBITDA (USD m)



Segment volumes (KT)



Source: Company, MOSL

North America: ERP implementation affected volumes; new auto line in middle of 2013 will drive volume and margins

- Segment EBITDA declined 46% YoY to USD94m due to higher than anticipated impact on volumes by ERP implementation in two plants and reduced benefit from scrap and metal mix. Volumes decline 14% YoY. After adjustment for ERP lost volume, shipments declined 4% due to loss of one customer. ERP alone contributed USD40m loss of business opportunity during the quarter.
- The performance is expected to improve in subsequent quarters because the ERP implementation related issues are already behind as production has normalized in December and January.
- Auto segment continues to witness strong demand and margins, which will continue to counter the effect of some margin pressure seen in other market segments. In middle of 2013, 200ktpa Oswego auto unit will be commissioned, which will provide both margins and volumes.

South America: best ever quarterly volumes but margins were lower; new Pinda mill will drive volumes in FY14 and FY15

- Segment EBITDA was down 4% YoY to USD50m due to pricing pressure, product mix, adverse exchange rate and higher SGA partially offset by lower costs.
- Registered highest quarterly CAN sales volumes of 107kt (+ 7% YoY).
- EBITDA per ton was USD467/t (+5% QoQ, -10% YoY).

- 220ktpa Pinda FRP mill at CapEx of USD325m was commissioned in December 2012. The mill will be ramped up gradually during FY14-15 along with growth in demand in the region.

Europe: relevant volumes up 8%; some margin pressure

- Segment EBITDA increased 75% YoY to USD42m driven by 2% higher volumes. EBITDA per ton increased 72% YoY (-34% QoQ) to USD226.
- Excluding the lost volume due to sale of 3 foil units earlier, the volumes were higher by 8%. There was net benefit of USD15m YoY (+USD23m for volume + USD8m for costs - USD16 for lower conversion premium and product mix). There was pricing pressure on specialties products.
- Conversion cost was favorable due to higher utilization of scrap and higher discount thereon, which was partially offset by higher wages.

Asia: Chinese competition is gaining metal cost advantage; Increased recycling is partially offsetting the impact on margins

- Segment EBITDA declined 2% YoY to USD42m due to pricing pressure despite 20% higher volumes. EBITDA per ton declined 18% YoY (+9% QoQ) to USD300.
- Slower Chinese demand growth led to pricing pressure. The reversal of arbitrage between LME and SHFE coupled with higher Japanese physical premiums has increased the relative cost of buying metal w.r.t. Chinese FRP producers leading to pricing pressure. This was partially offset by higher recycling and favorable discounts.
- 265ktpa Yeongju recycling plant became operational in October 2012 and is likely to result in significant mitigation of reversal of SHFE vs LME arbitrage.
- 355ktpa FRP expansion in Korea is expected to be commissioned by end of 2013, which will drive volumes in FY15.

Quarterly Performance (Novelis) (USD Million)

Y/E March	FY12				FY13				FY12	FY13E	vs Est	
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4QE			3QE	(%)
Sales (000 tons)	767	720	648	703	722	719	647	750	2,838	2,838	720	-10
Change (YoY %)	2.8	-2.3	-9.4	-8.8	-5.9	-0.1	-0.2	6.7	-4.4		11.1	
Net Sales	3,113	2,880	2,462	2,608	2,550	2,441	2,321	2,594	11,063	9,906	2,426	-4
Change (YoY %)	22.9	14.1	-3.8	-11.9	-18.1	-15.2	-5.7	-0.6	4.6	-10.5	-1.5	
EBITDA (adjusted)	306	301	213	233	259	277	185	259	1,053	980	252	-27
Change (YoY %)	16.3	3.4	-10.5	-16.8	-15.4	-8.0	-13.1	11.1	-1.8	-7.0	18.3	
As % of Net Sales	9.8	10.5	8.7	8.9	10.2	11.3	8.0	10.0	9.5	9.9	10.4	
EBITDA per ton (USD)	399	418	329	331	359	385	286	345	371	345	350	-18
Interest	73	73	71	73	73	72	74	74	290	293	72	3
Depreciation	89	81	79	80	73	69	76	75	329	293	75	1
PBT (before EO item)	144	147	63	80	113	136	35	110	434	394	105	-67
Extra-ordinary Income	(8)	(24)	(84)	(189)	(1)	(49)	(21)	-	(305)	(71)	-	
PBT (after EO item)	136	123	-21	-109	112	87	14	110	129	323	105	-87
Total Tax	59	-7	-10	-3	21	37	11	33	39	102	32	-65
% Tax	43.4	-5.7	47.6	2.8	18.8	42.5	78.6	30.0	30.2	31.6	30.0	
PAT before minority	77	130	-11	-106	91	50	3	77	90	221	74	-96
Minority interest	15	10	1	1		1			27	1		
Reported PAT	62	120	-12	-107	91	49	3	77	63	220	74	-96
Adjusted PAT	116	124	56	72	77	92	24	75	368	268	74	-68

E: MOSL Estimates

Target price calculations

EBITDA	107,935
EV/EBTIDA (x)	5.0
Target EV	539,673
Net Debt	397,031
EQ = (EV-net Debt)	142,642
A. INR/share(EQ)	72
CWIP	190,638
B. INR/share (CWIP)	96
C. discount factor (%)	12
D. Invest. (quoted)	47,630
E. INR/share (invest.)	24
F.discount factor (%)	20
TP (A+B*(1-C%)+E*(1-F%))	**175**

Source: MOSL

Valuation and view

- We expect CapEx to peak for Hindalco in FY13 with a total estimated consolidated CapEx of USD2.5b across all its projects. Mahan and Utkal Alumina projects in India and Novelis' projects will start generating cash flows in FY14. As a result, we expect deleveraging of balance sheet to start in FY14.
- We have cut FY13/FY14/FY15 EPS by 12%/4%/13% to factor lower margins in Novelis and lower volumes in standalone operations. The SOTP is cut by 6% to INR175. The stock is trading at FY15 EV/EBITDA of 5.7x. Maintain **Buy**.

Hindalco: an investment profile

Company description

Hindalco Industries (HNDL) is the largest aluminum producer in India and has captive bauxite mines from which it sources ~67% of requirements for its 1.5mtpa alumina refinery. Company also has a 0.54mtpa smelting capacity and is the largest maker of flat rolled aluminum products in India. After turning Novelis around in 2010, HNDL is focusing on tripling its aluminum production capacity in India in the next three years through brownfield and greenfield projects. Its copper smelting capacity of 500ktpa is the largest in Asia.

Key investment arguments

- Company's new smelting capacities are coming up near energy sources and alumina facilities are near bauxite mines, thus ensuring low cost of production.
- We expect Novelis to deliver strong earnings growth, given its focus on high margin business, expansions in key markets and continued efforts to improve operating efficiencies across locations.

Key investment risks

- An unexpected fall in aluminum prices, sluggish growth in developed countries and further delays in expansion activities could adversely impact earnings.

Recent developments

- Hirakud FRP mill has rolled out first slab. Other equipments like scalper, soaking pit and slitter had commenced trial runs.

Valuation and view

- The stock is trading at FY15E EV/EBITDA of 5.7x. Maintain **Buy**.

Sector view

- Aluminum prices have risen 4% QoQ, while spot premium has shot up to all-time high levels. Weak LME and high operating cost resulted in shutdowns of 2-3mt of smelter capacities globally. Hence, LME prices are expected to improve from the current levels. We factor aluminum prices of USD2,100/t in FY14E.

Comparative valuations

		Hindalco	Nalco	Sesa -Sterlite
P/E (x)	FY13E	6.6	22.5	4.4
	FY14E	5.6	15.6	5.1
P/BV (x)	FY13E	1.1	1.0	0.7
	FY14E	1.0	1.0	0.6
EV/Sales (x)	FY13E	0.8	1.2	1.3
	FY14E	0.8	1.2	1.3
EV/EBITDA (x)	FY13E	7.8	10.3	5.4
	FY14E	6.5	7.6	5.0

EPS: MOSL forecast v/s consensus (INR)

	MOSL forecast	Consensus forecast	Variation (%)
FY13	16.9	15.1	11.6
FY14	20.0	16.2	23.8

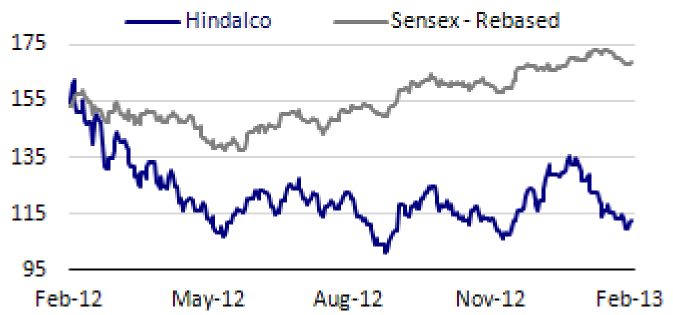
Target price and recommendation

Current Price (INR)	Target Price (INR)	Upside (%)	Reco.
112	175	56.3	Buy

Shareholding Pattern (%)

	Dec-12	Sep-12	Dec-11
Promoter	32.1	32.1	32.1
Domestic Inst	14.7	14.8	15.5
Foreign	37.8	37.3	37.1
Others	15.5	15.9	15.3

Stock performance (1 year)



Financials and Valuation

Income Statement (Consolidated) (INR Million)

Y/E March	2012	2013E	2014E	2015E
Net sales	808,214	807,025	840,785	915,071
Change (%)	12.1	-0.1	4.2	8.8
Total Expenses	726,316	725,599	741,331	807,137
EBITDA	81,897	81,426	99,454	107,935
% of Net Sales	10.1	10.1	11.8	11.8
Depn. & Amortization	28,699	25,312	29,057	33,603
EBIT	53,199	56,114	70,396	74,331
Net Interest	17,579	20,263	24,648	29,860
Other income	7,831	9,697	7,265	8,625
PBT before EO	43,450	45,549	53,013	53,096
EO income		-3,872		
PBT after EO	43,450	41,677	53,013	53,096
Current tax	7,862	8,211	9,238	8,514
Deffered tax		2,650	2,983	3,993
Tax	7,862	10,861	12,220	12,507
Rate (%)	18.1	26.1	23.1	23.6
Reported PAT	35,587	30,816	40,793	40,589
Minority interests	2,113	1,144	1,089	1,089
Share of asso.	496	29	29	29
Adjusted PAT	33,970	33,573	39,733	39,529
Change (%)	-2.9	-1.2	18.3	-0.5

Balance Sheet (INR Million)

Y/E March	2012	2013E	2014E	2015E
Share Capital	1,991	1,991	1,991	1,991
Reserves	317,123	343,330	379,569	415,604
Net Worth	319,113	345,320	381,560	417,595
Minority Interest	17,091	18,235	19,324	20,414
Total Loans	410,419	450,419	460,419	470,421
Deferred Tax Liability	36,050	38,700	41,683	45,676
Capital Employed	782,673	852,674	902,985	954,105
Gross Block	428,945	480,162	619,062	719,162
Less: Accum. Deprn.	186,608	211,919	240,977	274,580
Net Fixed Assets	242,338	268,243	378,085	444,582
Goodwill on consolidati	150,097	150,097	150,097	150,097
Capital WIP	227,981	312,467	248,360	190,638
Investments	17,483	17,483	17,483	17,483
Curr. Assets	376,124	337,204	346,943	399,400
Inventory	132,460	132,943	140,111	151,689
Account Receivables	80,172	81,792	84,605	92,384
Cash and Bank Balance	81,556	40,532	40,289	73,390
Others	81,937	81,937	81,937	81,937
Curr. Liability & Prov.	231,350	232,819	237,982	248,095
Account Payables	110,522	111,991	117,154	127,267
Provisions & Others	120,828	120,828	120,828	120,828
Net Current Assets	144,775	104,384	108,961	151,305
Appl. of Funds	782,673	852,674	902,985	954,105

E: MOSL Estimates

Ratios

Y/E March	2012	2013E	2014E	2015E
Basic (INR)				
EPS	17.1	16.9	20.0	19.9
Cash EPS	32.3	28.2	35.1	37.3
BV/Share (adj.)	84.9	98.1	116.3	134.4
DPS	1.5	1.5	1.5	1.5
Payout (%)	10.3	10.4	8.8	8.8
Valuation (x)				
P/E	6.6	6.6	5.6	5.6
Cash P/E	3.5	4.0	3.2	3.0
P/BV	1.3	1.1	1.0	0.8
EV/Sales	0.7	0.8	0.8	0.7
EV/EBITDA	6.7	7.8	6.5	5.7
Dividend Yield (%)	1.3	1.3	1.3	1.3
Return Ratios (%)				
EBITDA Margins (%)	10.1	10.1	11.8	11.8
Net Profit Margins (%)	4.2	4.2	4.7	4.3
RoE	20.3	18.4	18.6	15.8
RoCE (pre-tax)	7.5	6.9	8.0	8.0
RoIC (pre-tax)	11.7	12.0	13.0	11.7
Working Capital Ratios				
Fixed Asset Turnover (x)	1.9	1.7	1.4	1.3
Asset Turnover (x)	1.0	0.9	0.9	1.0
Debtor (Days)	36.2	37.0	36.7	36.8
Inventory (Days)	59.8	60.1	60.8	60.5
Payable (Days)	49.9	50.7	50.9	50.8
Leverage Ratio (x)				
Current Ratio	1.6	1.4	1.5	1.6
Interest Cover Ratio	3.0	2.8	2.9	2.5
Debt/Equity	1.9	2.1	1.8	1.5

Cash Flow Statement (INR Million)

Y/E March	2012	2013E	2014E	2015E
EBITDA	81,897	81,426	99,454	107,935
Non - cash expense	14,415	-3872		
tax paid	-10,901	-8,211	-9,238	-8,514
Change in working Capit	-9,322	-634	-4,818	-9,244
CF from Op. Activity	76,090	68,710	85,398	90,177
(Inc)/Dec in FA + CWIP	-124,007	-135,703	-74,793	-42,379
(Pur)/Sale of Investment	-13,277	9,726	7,294	8,654
Others	-5,660			
CF from Inv. Activity	-142,945	-125,977	-67,499	-33,725
Equity raised/(repaid)	10,861			
Debt raised/(repaid)	89,511	40,000	10,000	10,002
Interest	-28,531	-20,263	-24,648	-29,860
Dividend (incl. tax)	-4,110	-3,494	-3,494	-3,494
CF from Fin. Activity	67,731	16,244	-18,142	-23,351
(Inc)/Dec in Cash	876	-41,024	-242	33,100
Add: Opening Balance	80,680	81,556	40,532	40,289
Closing Balance	81,556	40,532	40,289	73,390

N O T E S

Disclosures

This report is for personal information of the authorized recipient and does not construe to be any investment, legal or taxation advice to you. This research report does not constitute an offer, invitation or inducement to invest in securities or other investments and Motilal Oswal Securities Limited (hereinafter referred as MOSt) is not soliciting any action based upon it. This report is not for public distribution and has been furnished to you solely for your information and should not be reproduced or redistributed to any other person in any form.

Unauthorized disclosure, use, dissemination or copying (either whole or partial) of this information, is prohibited. The person accessing this information specifically agrees to exempt MOSt or any of its affiliates or employees from, any and all responsibility/liability arising from such misuse and agrees not to hold MOSt or any of its affiliates or employees responsible for any such misuse and further agrees to hold MOSt 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.

The information contained herein is based on publicly available data or other sources believed to be reliable. While we would endeavour to update the information herein on reasonable basis, MOSt and/or its affiliates are under no obligation to update the information. Also there may be regulatory, compliance, or other reasons that may prevent MOSt and/or its affiliates from doing so. MOSt or any of its affiliates or employees shall not be in any way responsible and liable for any loss or damage that may arise to any person from any inadvertent error in the information contained in this report . MOSt or any of its affiliates or employees do not provide, at any time, any express or implied warranty of any kind, regarding any matter pertaining to this report, including without limitation the implied warranties of merchantability, fitness for a particular purpose, and non-infringement. The recipients of this report should rely on their own investigations.

This report is intended for distribution to institutional investors. Recipients who are not institutional investors should seek advice of their independent financial advisor prior to taking any investment decision based on this report or for any necessary explanation of its contents.

MOSt and/or its affiliates and/or employees may have interests/positions, financial or otherwise in the securities mentioned in this report. To enhance transparency, MOSt 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.

Disclosure of Interest Statement	Hindalco
1. Analyst ownership of the stock	No
2. Group/Directors ownership of the stock	No
3. Broking relationship with company covered	No
4. Investment Banking relationship with company covered	No

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. The research analysts, strategists, or research associates principally responsible for preparation of MOSt research receive compensation based upon various factors, including quality of research, investor client feedback, stock picking, competitive factors and firm revenues.

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 MOSt & its group companies to registration or licensing requirements within such jurisdictions.

For U.K.

This report is intended for distribution only to persons having professional experience in matters relating to investments as described in Article 19 of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (referred to as "investment professionals"). This document must not be acted on or relied on by persons who are not investment professionals. Any investment or investment activity to which this document relates is only available to investment professionals and will be engaged in only with such persons.

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

Motilal Oswal Capital Markets Singapore Pte Limited is acting as an exempt financial advisor under section 23(1)(f) of the Financial Advisers Act(FAA) read with regulation 17(1)(d) of the Financial Advisors Regulations and is a subsidiary of Motilal Oswal Securities Limited in India. This research is distributed in Singapore by Motilal Oswal Capital Markets Singapore Pte Limited and it is only directed in Singapore to accredited investors, as defined in the Financial Advisers Regulations and the Securities and Futures Act (Chapter 289), as amended from time to time.

In respect of any matter arising from or in connection with the research you could contact the following representatives of Motilal Oswal Capital Markets Singapore Pte Limited:

Nihar Oza
Email: niharoza.sg@motilaloswal.com
Contact: (+65) 68189232

Kadambari Balachandran
Email : kadambari.balachandran@motilaloswal.com
Contact: (+65) 68189233 / 65249115

Office address: 21 (Suite 31), 16 Collyer Quay, Singapore 049318

Motilal Oswal

Motilal Oswal Securities Ltd

Motilal Oswal Tower, Level 9, Sayani Road, Prabhadevi, Mumbai 400 025
Phone: +91 22 3982 5500 E-mail: reports@motilaloswal.com