INDIA RESEARCH

24 November 2009

BSE Sensex: 17131

Company update

# Hindalco Industries

Rs133

OUTPERFORMER

## *End of tunnel*

Mkt Cap: Rs256bn; US$5.3bn

It's time to revisit Hindalco Industries (Hindalco). The wheel is turning for Novelis; demand seems to be returning as key clients emit improving business confidence while the loss-making price ceiling and derivative contracts too are due to expire by December 2009. With improving operational cash flows, Novelis would cease to be a drain on parent balance sheet. In India, large greenfield projects have picked up pace and offer huge volume growth potential with capacity slated to increase ~3.5x by FY14. Though adjusted gearing would remain high, we believe the worst is behind though any hiccup in the ongoing recovery in developed markets is a key risk to Novelis's profitability. Upgrading the stock to Outperformer.

**Novelis – the wheel is turning:** Key clients of Novelis (Rexam, Crown, Ball, etc) have indicated gradual return of demand. Novelis has also witnessed significant margin expansion of late (US$228 normalized EBITDA/tonne in H1FY10 vs US$163 in FY09), led by higher utilization. Going forward, we expect significant improvement in operating cash flows with working capital release and as the loss making price-ceiling and derivative contracts expire by December 2009.

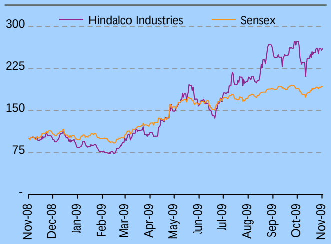
**Volume visibility emerges in domestic operations:** Large greenfield expansions in India are finally witnessing considerable progress. Around 2/3rd of projected investments at Utkal Alumina and half the investments at Mahan Aluminium projects have already been committed; the projects are expected to be commissioned by FY12. Led by three large greenfield projects, domestic aluminium smelting capacity is slated to increase ~3.5x by FY14. Notably, the capacities are expected to be extremely cost-competitive in view of captive raw material (bauxite and coal) sources.

Though gearing would remain high, stock offers upside: Adjusted gearing is likely to remain high (1.5x as of March 2011). However, we see limited downside risk to valuation multiples in view of an improving business environment and the recent fund raising, which would also dissipate apprehensions on Hindalco's ability to fund its expansion plans. Given the emerging long-term growth visibility and that the worst behind for Novelis, we upgrade the stock to Outperformer with a 12-month price target of Rs156.

**Stock data**

| | |
|---|---|
| Reuters | HALC.BO |
| Bloomberg | HNDL IN |
| 1-yr high/low (Rs) | 144 / 36.8 |
| 1-yr avg daily volumes (m) | 14.21 |
| Free Float (%) | 63.9 |

**Price performance**




**Performance (%)**

| | 3-mth | 6-mth | 1-yr | 3-yr |
|---|---|---|---|---|
| Hindalco | 24.1 | 75.0 | 160.0 | (24.4) |
| Sensex | 9.6 | 23.4 | 92.4 | 25.0 |

Key valuation metrics

| Year to 31 March | FY07 | FY08 | FY09 | FY10E | FY11E |
|---|---|---|---|---|---|
| Net sales (Rs m) | 193,161 | 600,128 | 656,252 | 596,028 | 567,841 |
| Adj. net profit (Rs m) | 26,870 | 24,032 | 5,206 | 25,402 | 19,552 |
| Shares in issue (m) | 1,043 | 1,226 | 1,483 | 1,781 | 1,925 |
| Reported EPS (Rs) | 25.8 | 19.6 | 3.5 | 14.3 | 10.2 |
| Adj. EPS (Rs)* | 25.8 | 19.6 | 3.5 | 12.3 | 8.3 |
| PE (x) | 5.2 | 6.8 | 43.5 | 10.1 | 13.1 |
| Price/ Book (x) | 1.0 | 0.9 | 1.3 | 1.1 | 1.1 |
| EV/ EBITDA (x) | 3.6 | 6.6 | 16.3 | 6.8 | 7.6 |
| RoE (%) | 23.1 | 14.7 | 2.9 | 12.6 | 8.3 |
| RoCE (%) | 17.6 | 10.5 | (0.1) | 9.6 | 7.2 |

** includes interest cost from AV Minerals*

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# INVESTMENT ARGUMENT

We had turned negative on Hindalco post its acquisition of Novelis two years ago due to (i) sub-optimal return on capital invested for acquisition vis-à-vis opportunities in India; (ii) balance sheet stretch undertaken for the acquisition; (iii) valuation premium; and (iv) impact of price-ceiling and loss making derivative contracts on near-term cashflows. However, these concerns are now giving way. The aforesaid contracts expire by Q4FY10, which would offer respite on cash flows. In India, progress on large greenfield projects enhances volume growth visibility in the long term. Also, Hindalco has recently raised US$600m of equity which, along with an improving business environment, would limit downside risk to multiples and dissipate apprehensions on Hindalco's ability to fund expansion plans. With emerging long-term growth visibility, we believe Hindalco deserves to trade at a premium to peers. We upgrade the stock to Outperformer with a price target of Rs156/share.

## NOVELIS: PAIN POINTS EASING

We see demand traction on a large portion of Novelis's product segments on the back of various macroeconomic indicators and improving business confidence at key customers. Also, expiry of loss making price-ceiling and derivative contracts will improve operating cash flows for Novelis.

### ❑ Demand visibility – improving at the margin

*Macroeconomic indicators and commentary from end-users indicate that the worst is over for Novelis*

Novelis, given its high exposure to developed markets (74% of revenues from USA and Europe in 2007), saw extremely sluggish demand over the last two years led by the drastic slowdown for end-user industries. In the aftermath of demand slowdown, we expect overall shipments for Novelis to drop 12% in FY10, to 2.76m tonnes, from the peak of 2008. However, based on various macroeconomic indicators and outlook/ commentary from end-product users, the worst seems to be over and there appears to be some traction on at least 80% of the company's product segments.

The following exhibit highlights comments from Rexam, one of the largest customers of Novelis (accounting for 16% of overall revenues), and Ball, another can manufacturer. Novelis has also recently stated that demand from beverage and food can shipments, which represent ~50% of its rolled products business, has stabilized and is only moderately below historical levels. We also believe that ~20% of Novelis's total shipments are related to non-cyclical or defensive end-user industries represented by packaging/ foils and lithographic segments. Shipments to foil/ packaging sectors cater primarily to food and pharmaceutical industries – where demand has been steady to increasing. Moreover, 3% of Novelis's shipments cater to lithographic products which find end-use in print shops and printing houses for printing books, magazines, etc.

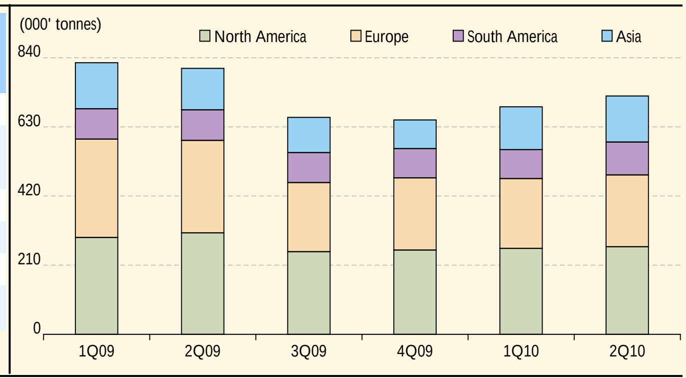
*To account for improved demand visibility, we have upgraded our FY10 and FY11 shipment estimates for Novelis*

For Q2FY10, Novelis's shipments grew 7%qoq to 0.69m tonnes with volume growth across geographies. Notably, South American and European geographies registered double-digit growth for the quarter. To account for the improved demand visibility, we have upgraded our FY10 and FY11 shipment estimates for Novelis to 2.76m tonnes and 2.86m tonnes respectively.

### Exhibit 1: Novelis – tonnage distribution

| Shipment matrix (%) | America | | Europe | Asia | Total |
|---|---|---|---|---|---|
| | North | South | | | |
| Beverage cans | 23.4 | 8.1 | 8.1 | 5.4 | 45.0 |
| Construction/ Industrials | 2.9 | 1.3 | 10.4 | 3.4 | 18.0 |
| Foil/ Packaging | 4.6 | 0.7 | 6.8 | 4.9 | 17.0 |
| Transport | 3.2 | 1.0 | 4.5 | 0.3 | 9.0 |
| Lithographic | 1.5 | 0.3 | 1.1 | 0.2 | 3.0 |
| Others | 2.0 | 2.0 | 2.0 | 2.0 | 8.0 |

### Novelis – improving demand visibility




*Source: Company, IDFC-SSKI Research*

## ❑ Beverage Cans

***Outlook provided by BALL in 2QCY09 Results***

*"Seasonal volume trends in our packaging segments are improving, though volumes for the first half of 2009 were below 2008 levels, and we expect continued improvement over the balance of the year"*

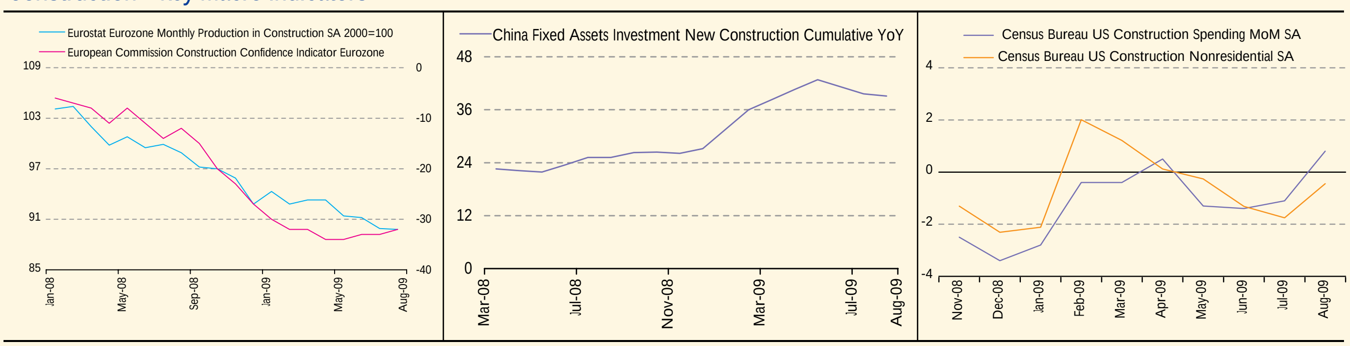
***Comments by REXAM in 2QCY09 results***

**North America** - back to long term trend: *"The beverage can market in North America stabilised to a more normal long term trend …"*

**South America** - maintains growth trajectory: *"Beverage Can South America delivered strong volume development driven by good growth in Brazil and Chile where consumer behaviour has been largely unaffected by the global economic downturn."*

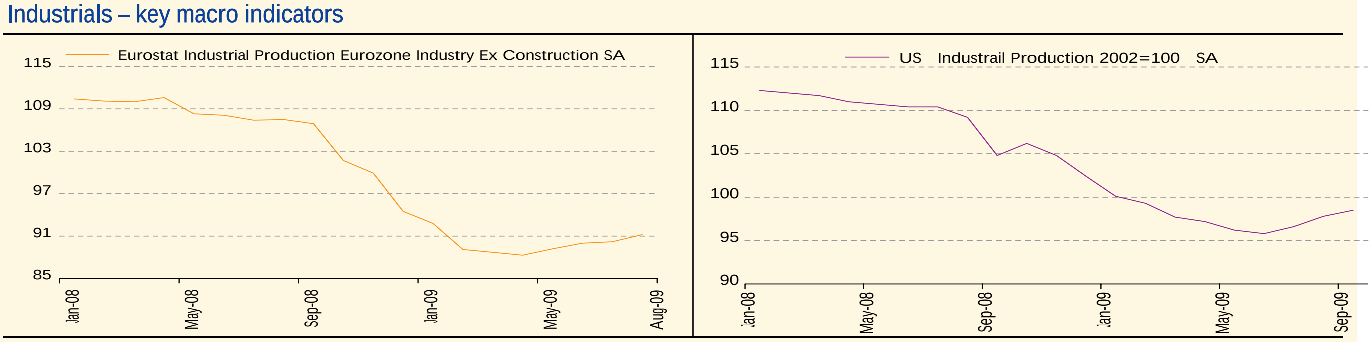
**Europe** - *"Industry volumes in the beverage can market in Europe were weaker than expected … with various regions displaying a range of characteristics."*

### Construction – key macro indicators




*Source: Bloomberg, IDFC-SSKI Research*

### Industrials – key macro indicators




*Source: Bloomberg, IDFC-SSKI Research*

## ❑ Loss-making price-ceiling & derivative contracts to expire by Q4FY10

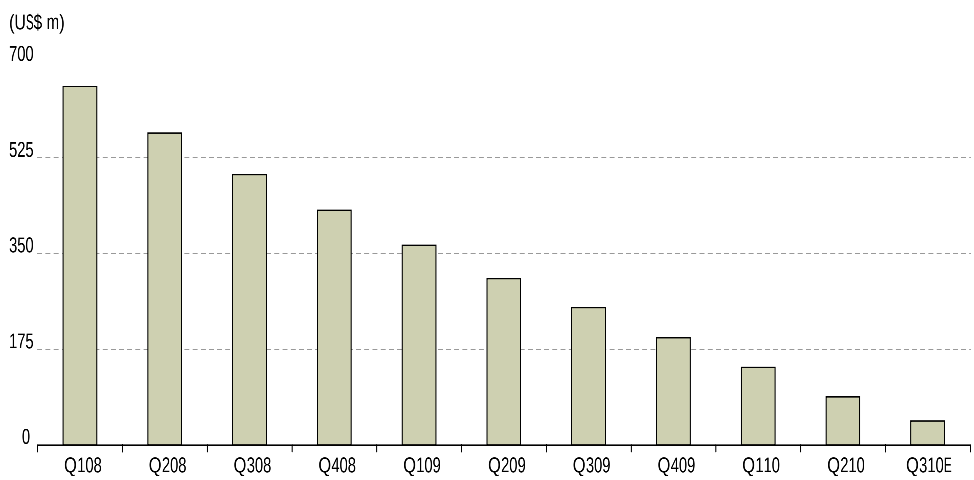
*Expiry of price-ceiling contracts a key positive as it will stem negative cash flows for the company*

'Price ceiling contracts', wherein fixed prices have been offered to customers on future deliveries (irrespective of prevailing LME prices), have been a cash flow strain for Novelis. However, these contracts are due to expire by December 2009. We see expiry of price-ceiling contracts as a key positive for Hindalco as it will stem negative cash flows for the company.

Hindalco recently highlighted that Novelis has already entered into new multi-year arrangements without a price-ceiling clause and that it would continue to service existing clients based on the new agreements effective 1 January 2010. In the context of expected losses on account of the price-ceiling contracts, Hindalco had created a reserve of US$655m in May 2007 and losses against price-ceiling contracts were netted off against the reserve. Subsequently, with losses corresponding to majority of the price-ceiling contracts (barring one) already booked, the reserve size has gradually reduced to US$45m as on 30 September 2009. The outstanding portion of the reserve (i.e. US$45m) would be amortized over Q3FY10, also signifying an end to the legacy price-ceiling contracts.

*The outstanding portion of the reserve (i.e. US$45m) created against price-ceiling contracts to be amortized over Q3FY10*

Exhibit 2: Depletion of reserve indicating end of price ceiling contracts




*Source: IDFC-SSKI Research, Company*

Novelis had attempted to mitigate the adverse impact of metal price-ceiling contracts by entering into derivative instruments to hedge projected aluminium volume requirement (above the available internal hedge). However, the move backfired due to a sharp correction in aluminium prices; as a result, Hindalco continued to incur cash losses on price-ceiling contracts even when LME prices dropped considerably below the ceiling price. The fair value of the liability associated with these derivative contracts was US$14m as of September 2009 and the instruments would expire by Q3FY10 – in line with the price ceiling contracts.

## ❑ Sharp profitability improvement in Q2FY10

*The qoq growth in operational EBITDA led by a better price/ product mix, and operating leverage from higher shipments*

Novelis reported EBITDA and net profit of US$361m (our estimate at US$234m) and US$195m (US$91m) respectively for Q2FY10. However, adjusting for unrealized gains on derivatives, EBITDA for the quarter stood at US$200m. Adjusted EBITDA/ tonne grew by a sharp US$99 on qoq basis to US$290. The sequential improvement in operational EBITDA has accrued on the back of a better price/ product mix, reduction in conversion costs owing to lower energy, labor and alloy costs, and operating leverage from higher shipments.

Exhibit 3: Novelis – sharp improvement in adjusted EBITDA/ tonne

| (US$ m) | Q1FY08 | Q2FY08 | Q3FY08 | Q4FY08 | FY08 | Q1FY09 | Q2FY09 | Q3FY09 | Q4FY09 | FY09 | Q1FY10 | Q2FY10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Net income (loss) attributable** | | | | | | | | | | | | |
| to common shareholder | (142) | (19) | (73) | 117 | (117) | 24 | (104) | (1,814) | (16) | (1,910) | 143 | 195 |
| Interest, net | (51) | (56) | (47) | (45) | (199) | (40) | (41) | (44) | (43) | (168) | (40) | (41) |
| Income tax provision benefit | (31) | (20) | (26) | - | (77) | (35) | 168 | 196 | (83) | 246 | (112) | (87) |
| Depreciation and amortizations | (81) | (103) | (108) | (111) | (403) | (116) | (107) | (107) | (109) | (439) | (100) | (92) |
| Non-controlling interest | | | | | | | | | | | (18) | (19) |
| **EBITDA** | **21** | **160** | **108** | **273** | **562** | **215** | **(124)** | **(1,859)** | **219** | **(1,549)** | **413** | **434** |
| Unrealized gain (loss) on derivatives | (10) | (87) | (24) | 118 | (3) | 20 | (220) | (464) | 145 | (519) | 299 | 254 |
| Goodwill impairment | | | | | | | | (1,340) | | (1,340) | | |
| Gain on debt exchange | | | | | | | | | 122 | 122 | | |
| Proportional consolidation | (16) | 7 | (15) | (19) | (43) | (18) | (18) | (174) | (16) | (226) | (16) | (17) |
| Restructuring changes | (2) | - | (1) | (4) | (7) | 1 | - | (15) | (81) | (95) | (3) | (3) |
| Other costs, net | (31) | 11 | (4) | (5) | (29) | (6) | 25 | 6 | (4) | 21 | 9 | |
| Segment income | 80 | 229 | 152 | 183 | 644 | 218 | 89 | 128 | 53 | 488 | 124 | 200 |
| Additional acquisition related costs | (51) | | | | (51) | | | | | | | |
| **Adjusted EBITDA** | **131** | **229** | **152** | **183** | **695** | **218** | **89** | **128** | **53** | **488** | **124** | **200** |
| **Adjusted EBITDA/ tonne (US$)** | **174** | **307** | **208** | **242** | **233** | **281** | **117** | **202** | **88** | **176** | **191** | **290** |

*Source: IDFC-SSKI Research, Company*

Exhibit 4: Novelis – key financials

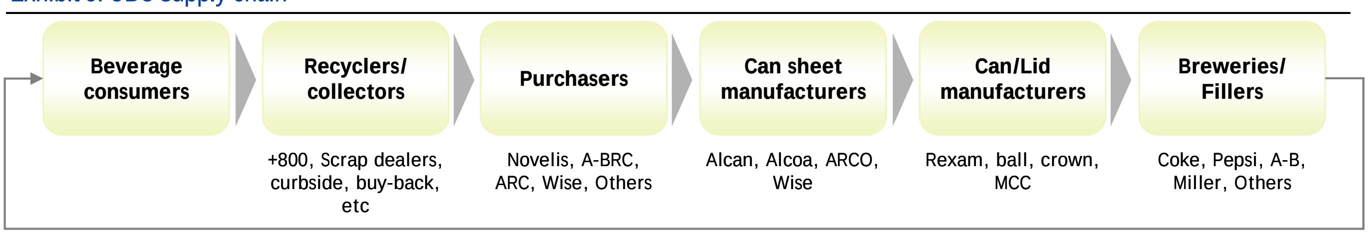
| (Rs m) | Q2FY08 | Q3FY08 | Q4FY08 | Q1FY09 | Q2FY09 | Q3FY09 | Q4FY09 | Q1FY10 | Q2FY10 |
|---|---|---|---|---|---|---|---|---|---|
| **Net sales** | **49,597** | **45,317** | **50,102** | **46,475** | **56,832** | **41,172** | **37,717** | **38,995** | **49,171** |
| *% growth* | *7* | *(3)* | *6* | *(1)* | *15* | *(9)* | *(25)* | *(16)* | *(13)* |
| **Operating profit** | **9,217** | **8,006** | **7,967** | **9,490** | **9,934** | **7,793** | **3,141** | **7,578** | **6,092** |
| *% growth* | *(7)* | *(23)* | *(24)* | *7* | *8* | *(3)* | *(61)* | *(20)* | *(39)* |
| Other income | 1,098 | 1,143 | 1,442 | 2,146 | 1,768 | 1,505 | 947 | 753 | 573 |
| Interest | 632 | 622 | 988 | 761 | 855 | 932 | 821 | 682 | 663 |
| Depreciation | 1,446 | 1,460 | 1,516 | 1,568 | 1,592 | 1,611 | 1,682 | 1,653 | 1,658 |
| Operational PBT | 8,237 | 7,067 | 6,905 | 9,307 | 9,255 | 6,755 | 1,586 | 5,996 | 4,344 |
| **PBT** | **8,237** | **7,067** | **6,905** | **9,307** | **9,255** | **6,755** | **1,586** | **5,996** | **4,344** |
| Current tax | 1,809 | 1,640 | (3,865) | 2,340 | 2,056 | 1,306 | (1,102) | 1,190 | 903 |
| **Reported PAT** | **6,428** | **5,427** | **10,770** | **6,967** | **7,200** | **5,449** | **2,688** | **4,806** | **3,441** |
| *% growth* | *8* | *(16)* | *49* | *15* | *12* | *0* | *(75)* | *(31)* | *(52)* |

*Source: Company, IDFC-SSKI Research*

## ❑ Reimbursement under BCS agreement to further improve cash flows

Novelis has a beverage can sheet umbrella agreement with North American bottlers (BCS agreement), wherein the bottlers direct can fabricators to source a percentage of their requirement for beverage can body, end and tab stock from Novelis. Under the agreement, Novelis enters into derivative contracts to hedge the exposure to price on behalf of the bottlers. As on 30 September 2009, Novelis has settled US$118m of net derivative losses, for which it is yet to be paid under the BCS agreement. According to the management, receivables on the incurred losses were reasonably assured and cash flows would accrue in subsequent quarters going forward.

Exhibit 5: UBC supply chain




*Source: Company, IDFC-SSKI Research*

## ❑ Improving operating cash flows; lower net debt by FY11E

*The management has recently guided to annualized cost savings of US$140m by end-FY10*

Novelis's profitability is determined by three variables – price-ceiling contracts, metal price lag and conversion premium. Novelis operates on a conversion model, wherein it passes on any change in LME aluminium costs and charges a conversion premium – governed by the competitive scenario and conversion cost to produce the rolled product. The management has recently guided to annualized cost savings of US$140m by end-FY10, with US$100m of savings (annualized) already achieved. We expect steady reduction in Novelis's conversion costs as the management targets a leaner cost structure with firm-wide operational efficiency initiatives under implementation, along with manpower rationalization and closure/ streamlining of high cost European and US facilities.

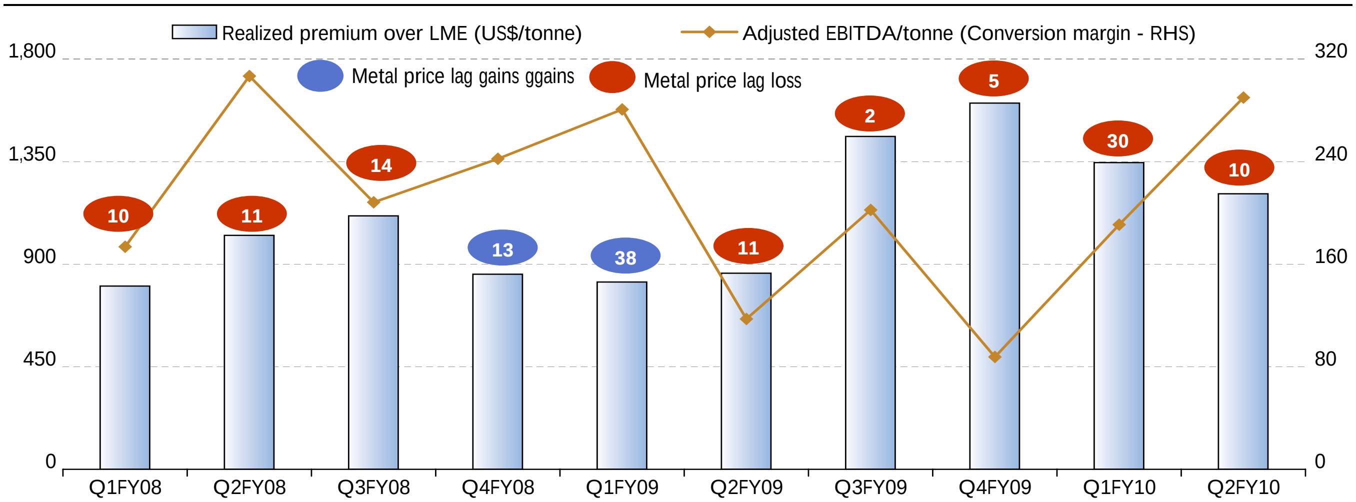
*Novelis now maintains inventories on order-to-order basis to eliminate inventory gains/ losses*

Novelis's profitability, till recently, used to be exposed to 'metal price lag', i.e. gains/ losses arising due to timing difference between the aluminium purchase price and realizations on products when sold. However, Hindalco management indicates that the exposure to 'metal price lag' has been completely done away with and that Novelis now maintains inventories on order-to-order basis, thereby completely eliminating inventory gains/ losses.

*We expect Novelis's conversion and local market premiums to steadily increase in FY11*

We expect Novelis's conversion and local market premiums to steadily increase in FY11 on the back of traction in end-product demand and as the company realizes the benefits of operating leverage, improved price/ product mix and operational cost efficiencies. Overall, we expect Novelis to report EBTIDA/ tonne of US$269 for FY11 with production volume estimates of 2.9m tonnes. We see expiry of price ceiling contracts and working capital release as the key catalysts for a marked improvement in operating cash flows going forward. This would lead to a reduction of US$549m in net debt for FY11E over Q2FY10 to ~US$2bn.

Exhibit 6: Novelis – key operational parameters




Source: IDFC-SSKI Research, Company

## DOMESTIC ALUMINIUM BUSINESS: IMPROVING VOLUME GROWTH VISIBILITY

Large greenfield expansions in India are finally witnessing considerable progress. Around 2/3rd of projected investments at Utkal Alumina and half the investment at Mahan Aluminium projects have already been committed. Led by three large greenfield projects, domestic aluminium smelting capacity is slated to increase ~3.5x by FY14. We expect commissioning of Mahan Aluminium and Utkal Alumina project in FY12 to be a key trigger for the stock. Notably, the capacities are expected to be extremely cost-competitive in view of captive raw material (bauxite and coal) sources.

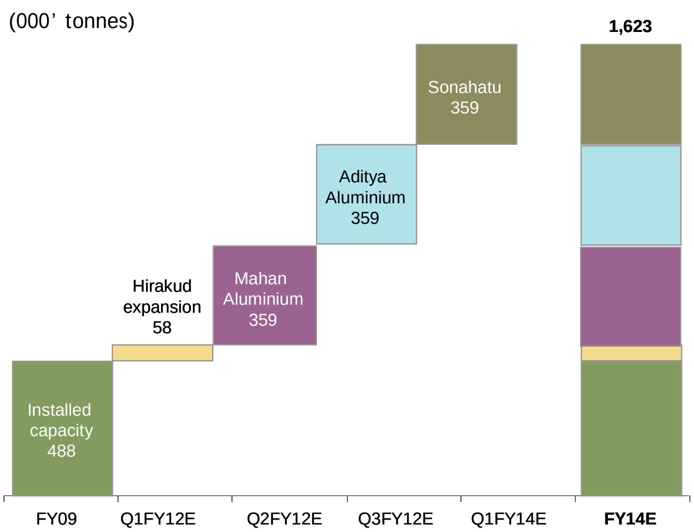
### ❑ Emerging visibility on large expansions

*Smelting capacity slated to increase 3.5x by FY14*

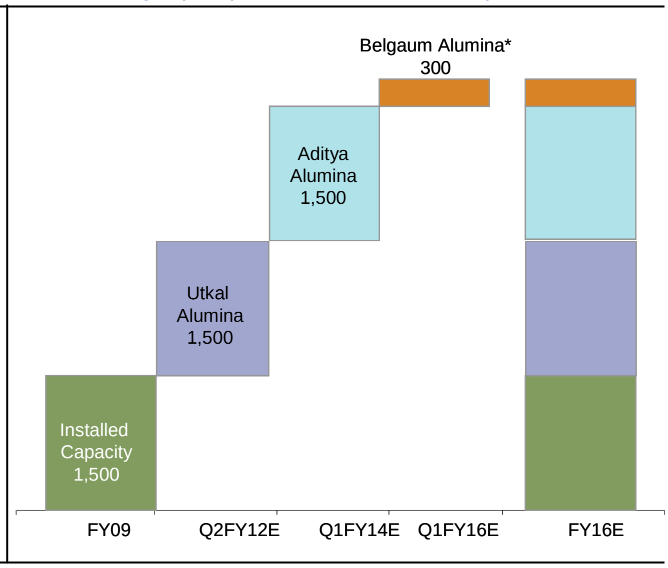
Large greenfield expansions at Hindalco are finally witnessing considerable progress. According to the management, 66% and 49% of the projected investment at Utkal Alumina and Mahan Aluminium projects respectively has already been committed. The management also reiterates that all the domestic expansion plans are on track and any of the brownfield/ greenfield expansion plans are unlikely to be postponed or scaled down. We believe the progress achieved on securing key raw materials (coal and bauxite) is also impressive. We understand that significant progress has already been achieved at (a) the 8.5m tpa bauxite mines at Baphimali, Orissa which would feed the upcoming Utkal Alumina refinery; and (b) the 3.6m tpa Mahan coal block, Madhya Pradesh. Having said so, we believe the key challenge for Hindalco would be to ramp-up bauxite mining to 4.5m tpa from a single mine as there exist significant logistic challenges. We have built in a 6-9 months delay in commissioning of the bauxite mines, and consequently aluminium production.

Post expansion, Hindalco's refining and smelting capacity is slated to increase 3.2x and 3.5x to 4.8m tonnes and 1.6m tonnes respectively over the next 3-4 years. We expect Hindalco's refining and smelting capacity to increase to 3m tpa (from 1.5m tpa) and 1.3m tpa (from 0.48m tpa) by FY12.

Exhibit 7: Hindalco's smelting capacity to grow >3x...



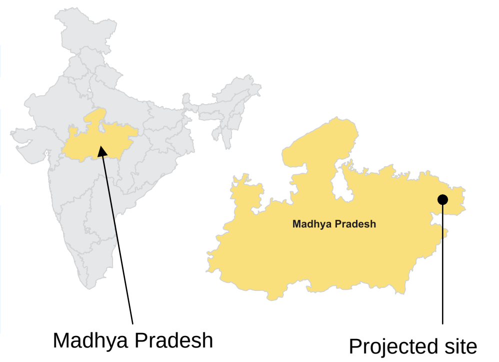

...and refining capacity 3.5x over the next three years

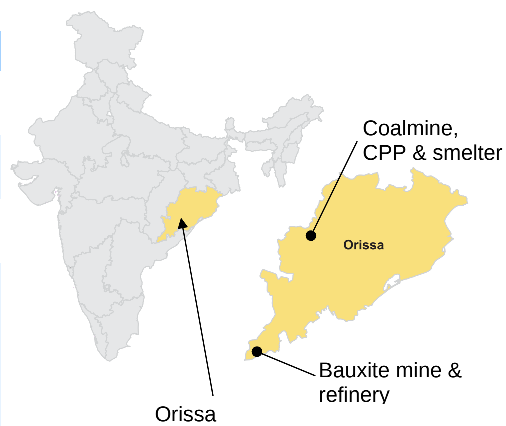



Source: IDFC-SSKI Research, Company; * Proposed

### Exhibit 8: Details of Hindalco's greenfield expansion plans

| | Particulars |
|---|---|
| **Mahan Aluminium, Madhya Pradesh** | |
| Aluminium smelter | 359,000 tonnes |
| Power plant | 900 MW |
| Commissioning schedule | First metal expected by July 2011 |
| Regulatory clearances | Received all material regulatory and environmental clearances |
| Cost of project | Rs82bn; 57% of capital already committed |
| Progress on project | Basic engineering 100% complete and progressing ahead of schedule<br>Major turnkey packages and equipment orders finalized<br>58% of the total project cost has been committed |
| Technology provider | Pechiney |
| **Linkages** | |
| Details (coal) | Mahan coal block allotted in JV with Essar Power; Hindalco's share in Mahan coal block at 3.6m tpa |
| Commissioning schedule | Production from coal block indicated by FY10 (earlier guidance was October 2009) |
| | |
| **Aditya Aluminium & Alumina, Orissa** | |
| Aluminium smelter | 359,000 tonnes |
| Alumina refinery | 1,500,000 tonnes |
| Power | 900MW + 90MW |
| Commissioning schedule | First metal expected by Oct 2011 and refinery to be mechanically complete by June 2013 |
| Regulatory clearances | Land acquisition in advanced stage – 1,500 acres acquired; application for 295 acres of forest land forwarded from state to Centre<br>Water agreements already in place<br>Railways - rail layout plans approved by East Coast Railways.<br>51%of total project cost for Smelter & Power Plant has been committed |
| Cost of project | Rs82bn for smelting facility (47% already committed); Rs53bn for refining capacity |
| Progress on project | Basic engineering 100% complete and progressing ahead of schedule<br>Major turnkey packages and equipment orders finalized |
| Technology provider | Smelting technology from Pechiney, refining technology from ALCAN |
| **Linkages** | |
| Details (coal) | JV with Nevyeli Lignite and Mahanadi coal fields<br>20m tpa JV coalmine at Ib valley, Talabir II & III, Orissa; 3m tpa of coal linkages in place (CHK) |
| Commissioning schedule | All environmental and forest clearances in place, mining expected to begin during Q3FY10 |
| Details (bauxite) | 4.2m tpa bauxite mining capacity |




*Source: IDFC-SSKI Research*

### Details of Hindalco's greenfield expansion plans

| | Particulars |
|---|---|
| **Sonahatu, Jharkhand** | |
| Aluminium smelter | 359,000 tonnes |
| Power | 900MW + 90MW |
| Commissioning schedule | First metal expected by June 2013 (earlier guidance Sept' 2013) |
| Regulatory clearance | Land acquisition under progress; 7,000 acres of land earmarked till now |
| | Clearances received for 55MCM water; awaiting further clearances for 70MCM water form Gujarat state government from Subernrekha basin |
| Cost of project | Rs82bn |
| Technology provider | Pechiney |
| **Linkages** | |
| Details | 4.6m tpa of tubed coal block of Auranga coal fields allotted in JV with Tata Power |
| | |
| **Utkal Alumina, Orissa** | |
| Alumina refinery | 1,500,000 tonnes |
| | Can increase capacity to 2m tpa via debottlenecking within three years of start-up |
| Power (MW) | 90 |
| Commissioning schedule | First metal from refinery expected by July 2011 |
| Regulatory clearance | Land and all statutory clearances required for the project have been obtained |
| Cost of project | Rs55.6bn; 66% of capital already committed |
| Progress on project | Engineering work for the project nearing completion; all major orders placed |
| | 75% of project cost already committed |
| Technology provider | ALCAN |
| **Linkages** | |
| Details (bauxite) | 8.5m tpa bauxite mining capacity at Baphimali mines; bauxite mining expected to begin by mid 2010 |



### Hindalco's brownfield projects

| | Particulars |
|---|---|
| **Hirakud smelter** | |
| Existing capacity | 155,000 tonnes |
| Current expansion | By 58,000 tonnes to 213,000 tonnes |
| Commissioning schedule | Part of expansion to be commissioned by July 2010, full commissioning by FY12 |
| Cost of project | Rs8.9bn |
| Progress on project | Procurement of additional land required for pot lines in advanced stages of finalization |
| | Contract with GAMI already signed |
| Belgaum refinery | |
| Existing capacity | 350,000 tonnes |
| Planned expansion | to 300,000 tonnes to 650,000 tonnes |
| Commissioning schedule | On hold; awaiting government approvals relating to bauxite mines |

*Source: IDFC-SSKI Research*

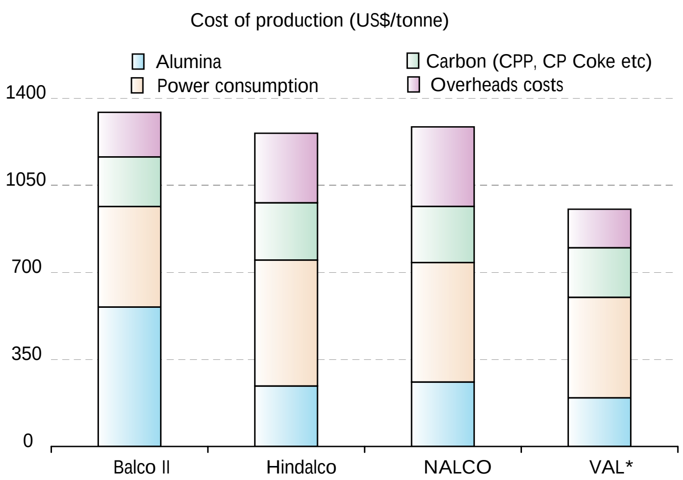
*Incremental capacities to enjoy further cost efficiencies.*

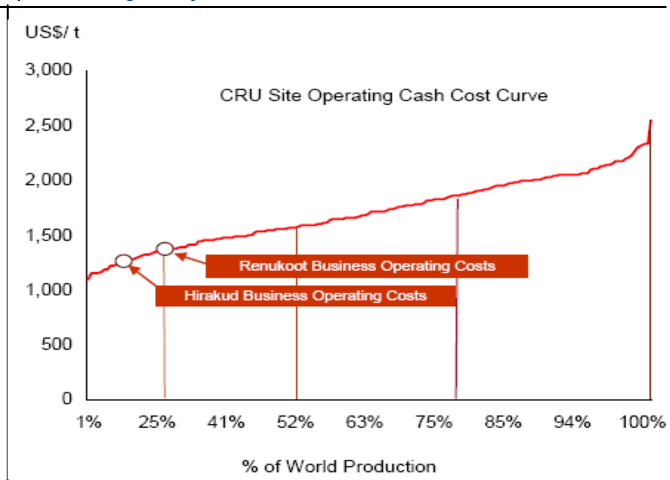
### ❑ Cost structure to improve on scale and captive raw material linkages

Hindalco's aluminium operations have a globally cost-competitive cost structure on the back of cost-effective access to quality raw materials. According to CRU, Hindalco's Renukoot plant, which accounts for 85% of aluminium production, is among the top 15% of the lowest cost producers globally. We expect Hindalco's cost structure to improve on incremental capacities as the company (a) continues to enjoy benefits of captive raw material, i.e. coal and bauxite; and (b) logistic cost savings on the back of pithead based power plant operations and proximity of operating facilities to end-user markets. Importantly, we expect further improvement in cost structure at existing operations, primarily with benefits of scale accruing on the commissioning of brownfield expansion at Hirakud and Belgaum (proposed).

In the near term, we expect cost of production at Renukoot smelter, which procures 70% of its coal through linkages (from Coal India) and the remaining from e-auction, to increase led by a recent price revision implemented by Coal India.

Exhibit 9: Hindalco's smelting operations – amongst the lowest cost producers globally




*Source: IDFC-SSKI Research, Industry, CRU*

## COPPER BUSINESS: TC/ RC MARGINS UNLIKELY TO IMPROVE IN NEAR TERM

TC/ RC margins have been trending down for the past few quarters due to short supply of copper concentrate. The trend is likely to continue for two more quarters. The recent run-up in LME copper prices (up 40% in six months) has led to high concentrate demand from smelters and a deficit in copper concentrate markets in turn. This is despite consensus being achieved at Chilean Escondida Copper mines over wage increases; closure of the mines was seen as a key risk to concentrate supply.

*We do not expect an immediate rebound in TC/ RC margins*

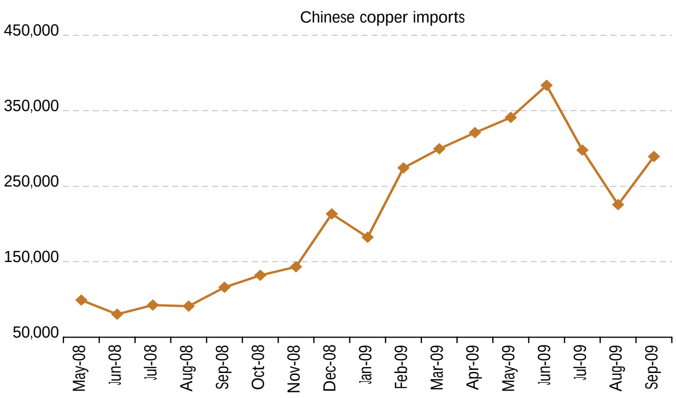
More importantly, stable warehouse inventories (ex-Asia) and trends observed for Chinese copper imports point to improved demand. We do not expect an immediate rebound in TC/ RC margins as these margins typically have an inverse correlation to copper demand. Our view is supported by an improving macroeconomic environment, particularly in China; Chinese copper imports have stayed resilient and have put to rest the argument that higher imports are only on the back of arbitrage opportunities (between LME and SHFE) and physical metal hoarding by Chinese and Korean State Reserve Bureaus. Hindalco procures ~60% of its concentrate feed through annual contracts, 15% through spot purchase and the remaining from Mt. Nifty and Mt. Gordon – Aditya Birla Minerals' mines in Australia.

### Exhibit 10: Trend in annual contract TC/ RC margins

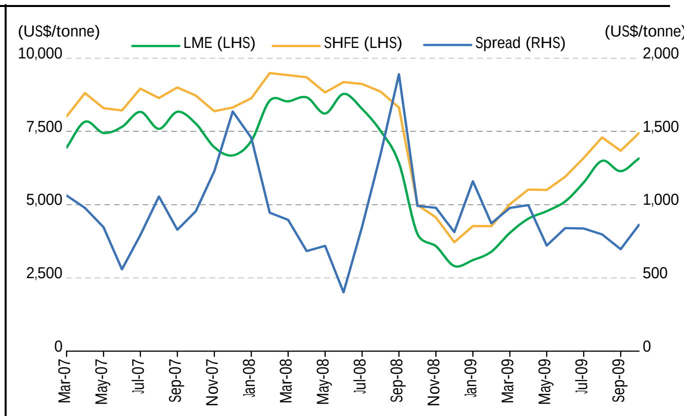
| Particulars | 2007 | 2008 | 2009 | 2010E |
|---|---|---|---|---|
| Treatment charges (US$/t) | 47 | 45 | 76.5 | 60 |
| Refining charges (c / lb) | 4.7 | 4.5 | 7.65 | 6 |
| **Total TC/ RC charges (Us c/lb)** | **11.1** | **10.6** | **18.1** | **14.2** |

*Source: IDFC-SSKI Research*

### Exhibit 11: Chinese copper imports inching up...

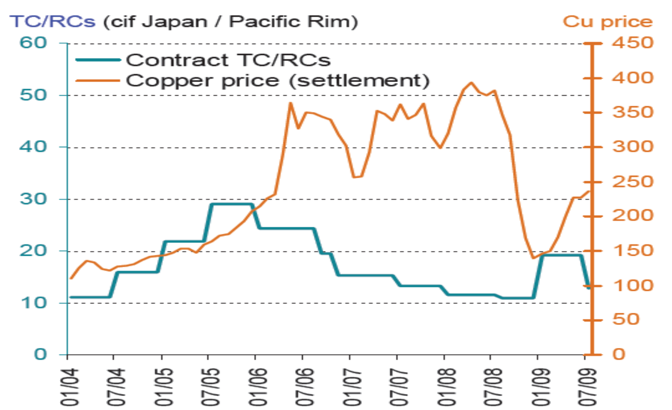



### ...despite sharp contraction in arbitrage spread (LME & SHFE)

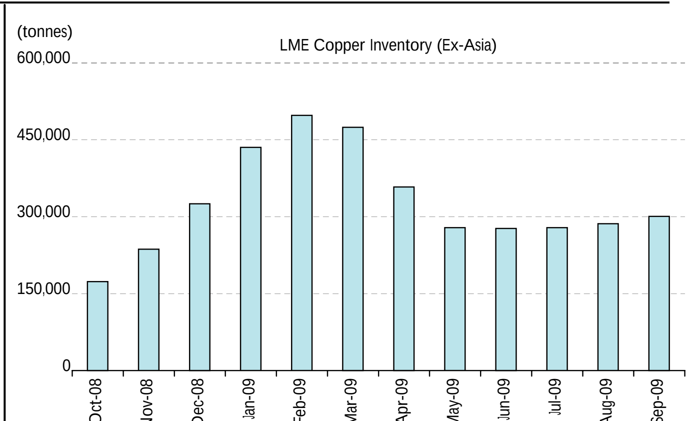



*Source: IDFC-SSKI Research*

### Exhibit 12: TC/ RC margins on a decline




### LME copper inventory – stabilizing




*Source: IDFC-SSKI Research, Industry, Bloomberg*

Post our interaction with key industry personnel, we expect a sharp 18-25% fall in annual benchmark copper TC/ RC rates for 2010. To factor in subdued spot TC-RC rates in the interim and Hindalco's contractual agreements, we downgrade our TC/ RC assumptions for H2FY10 to US c13.5/ lb. We expect Hindalco's copper smelting operations to be a drag on consolidated return ratios due to lower TC/ RC margins and depressed realizations for byproducts (sulphuric and phosphoric acid). Based on our revised estimates, we expect copper business to contribute 63% to Hindalco's revenues (standalone) and 25% to EBITDA in FY10.

## FINANCIAL ANALYSIS & VALUATIONS

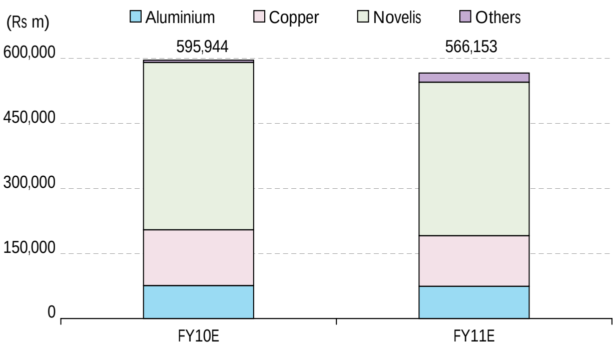
We have upgraded our EPS estimates for Hindalco and now expect adjusted consolidated EPS at Rs12.3 for FY10 and Rs8.3 for FY11. Reported EPS numbers are, however, expected to be higher as we expect interest cost on SPV level debt to be adjusted through the business reconstruction reserve. Overall, we believe that most of our earlier concerns on Hindalco are now dissipating. We upgrade the stock to Outperformer with a price target of Rs156 per share.

### ❑ We upgrade our FY10E and FY11E earnings

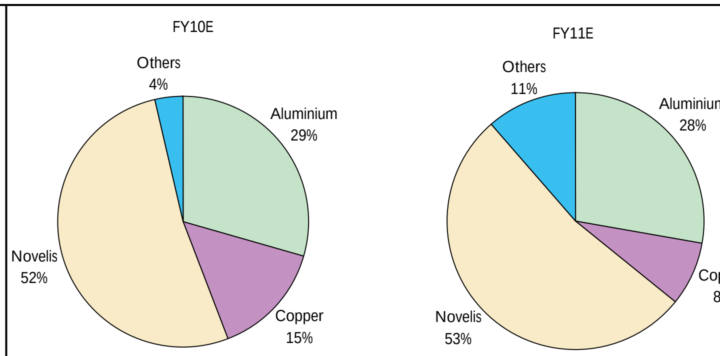
*We revise our estimates to factor in higher LME prices and coal costs in India, and better conversion premium for Novelis*

We introduce our revised EPS estimates for FY10 and FY11 to factor in (a) increase in our base aluminium price estimates to US$1,699 and US$1,650/ tonne respectively (US$1530 and US$1500/ tonne earlier); (b) increased cost of power for standalone operations due to higher linkage prices; (c) lower profitability in the copper business to factor in lower TC/ RC margins (at US c13.5/ lb for FY11E); and (d) upgrade in volume and conversion premium for Novelis. Our revised numbers assume a US$/ INR conversion rate of 46 for FY11. We expect Hindalco to report an EPS of Rs14.3 and Rs10.2 for FY10 and FY11 respectively. Novelis is expected to contribute 53% of consolidated EBITDA in FY11.

Exhibit 13: Hindalco – consolidated revenue mix...




...consolidated EBITDA mix




Source: IDFC-SSKI Research

However, we expect adjusted consolidated EPS, at Rs12.3 for FY10 and Rs8.3 for FY11, to be substantially lower than the reported EPS. The adjustment is on account of interest cost at the SPV (AV Minerals, Netherlands) level. This entity, in turn, holds equity in Novelis and has acquisition-related debt on its books. Hindalco had earlier created a Business Reconstruction Reserve (BRR) to formulate a scheme of financial restructuring to deal with costs associated with organic and inorganic growth plans. The reserve was created by transferring Rs86.5bn from the 'securities premium' account. Post that, the reserve was used against the following in FY09:

*We expect adjusted consolidated EPS to be substantially lower than reported EPS*

- Impairment of goodwill on account of consolidation of Novelis – Rs36bn;
- Impairment of fixed assets totaling Rs1.1bn (net of deferred tax of Rs344m);
- Interest and finance charges worth Rs5.44bn on loan taken by AV Minerals (Netherlands) BV; and
- Other costs totaling Rs3.6bn associated with existing business operations and implementation of the restructuring exercise.

We expect interest and finance charges at the SPV level to continue being adjusted against the BRR. Hence, after accounting for the aforesaid interest costs, we expect Hindalco's adjusted consolidated EPS at Rs12.3 for FY10 and Rs8.3 for FY11.

Exhibit 14: Profitability estimates adjusted for SPV interest cost

| (Rs m) | FY09 | FY10E | FY11E |
|---|---|---|---|
| Net Income After Exceptional Items | 5,206 | 25,402 | 19,552 |
| Less: Interest capitalized in Netherlands SPV against BRR | 5,445 | 3,500 | 3,500 |
| Adjusted Net Income | | 21,902 | 16,052 |
| Reported EPS (Rs/share) | 3.5 | 14.3 | 10.2 |
| **Adjusted EPS (Rs)** | **3.5** | **12.3** | **8.3** |

*Source: IDFC-SSKI Research*

## ❑ Adj. gearing remains high; free cash to be used to repay debt

***We expect consolidated operations to generate operating cash flows of US$1.9bn over FY10-11***

Post Novelis acquisition, Hindalco's consolidated gearing increased from ~0.3x in FY07 to ~1.3x in FY09. We expect Hindalco's consolidated operations to generate operating cash flows in excess of US$1.9bn over FY10-11. We expect reported gearing to steadily drop below 1x on consolidated basis by FY11 on the back of robust operating cash flows. However, adjusted gearing is likely to remain high, at 1.5x even by Mar'11 (refer exhibit below).

Exhibit 15: Adjusted gearing likely to remain high at 1.5x as of March 2011

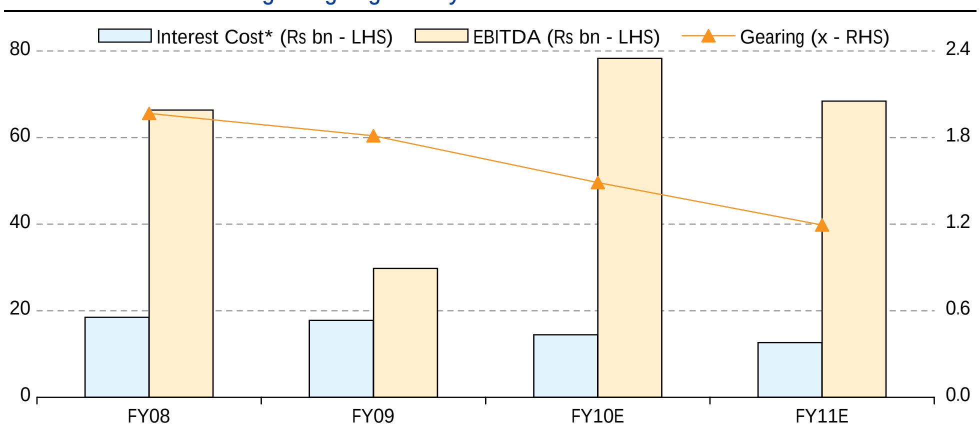
| (Rs m) | FY09 | FY10E | FY11E |
|---|---|---|---|
| Net worth | 163,981 | 211,472 | 224,062 |
| Less: Miscellaneous expenditure | 5 | 5 | 5 |
| Less: Goodwill | 42,907 | 42,907 | 40,265 |
| Less: Other intangibles | 41,142 | 41,142 | 41,142 |
| Less: Interest capitalized to BRR | 5,445 | 3,500 | 3,500 |
| Adjusted net worth | 74,482 | 123,918 | 139,150 |
| Consolidated net debt | 218,746 | 220,383 | 210,644 |
| Debt-equity ratio (x) | 1.33 | 1.04 | 0.94 |
| Adjusted debt-equity ratio (x) | 2.9 | 1.8 | 1.5 |
| Reported book value (Rs/ share) | 96 | 110 | 116 |
| Adjusted book value (Rs/ share) | 44 | 64 | 72 |

*Source: IDFC-SSKI Research*

***We believe net debt levels have peaked in FY09***

With the recent fund raising, covenant reset as also improving cash flow visibility, Hindalco is unlikely to attract any breach of debt covenants (at ~3.5x Debt/ EBITDA for Hindalco's standalone balance sheet). Further, with 90% of the principal debt repayment at Novelis (US$2.6bn) due only after 2014, overseas operations do not need further support from the parent's balance sheet. We expect Hindalco's consolidated (net) debt to reduce by US$169m to US$4.4bn by FY11 even as we factor in a capital expenditure of ~US$1bn over FY09-11.

Exhibit 16: Consolidated gearing to gradually reduce




*Source: IDFC-SSKI Research, * includes interest cost from AV Minerals*

*With most concerns dissipating and given emerging long-term growth visibility, we upgrade the stock to Outperformer*

## ❑ Upgrading the stock to Outperformer

Our negative bias on Hindalco stemmed from: (a) sub-optimal return on capital invested for acquisition compared to opportunities back in India; (b) balance sheet stretch that Hindalco undertook for the acquisition; (c) the significant valuation premium paid for the acquisition; and (d) issues pertaining to near-term profitability on account of price-ceiling and loss making derivative contracts. Most of these concerns are now dissipating. An improving business environment and the fund raising, we believe, would limit downside risk to multiples in the near term as also address apprehensions on the company's ability to fund near-term expansion plans. Given the emerging long-term growth visibility, Hindalco now deserves to trade at a premium. We upgrade the stock to Outperformer with a price target of Rs156/share.

We have valued Hindalco's consolidated operations based on the sum-of-parts method, primarily using EV/ EBITDA as we believe that earnings multiple does not adequately capture the business dynamics and impact of a leveraged buyout.

Based on sum-of-parts, we have arrived at a near-term value of Rs156per share for Hindalco. Our sum-of-parts valuation assumes the following:

*Our 12-month price target of Rs156 is based on 8x and 5x FY11E EV/ EBITDA for aluminum and copper businesses respectively*

- EV/ EBITDA of 8x on Hindalco's standalone FY11E EBITDA in the aluminium business, assuming aluminium LME price of US$1,650/tonne.
- EV/ EBITDA of 5x on FY10E EBITDA for copper smelting business and similar multiple for copper mining business in Australia held through the 51% owned subsidiary – Aditya Birla Minerals (ABML).
- We value Novelis operations at 8x EV/EBITDA, against our earlier assigned multiple of 5x on the back of increased cash flow visibility led by higher volume visibility, improved price/ product mix, benefits of operational efficiencies and expiry of metal price ceiling contracts.
- We have assigned a 20% discount to the quoted investment value and reduced net debt expected as of FY11 (adjusted for cash and liquid investments).

Exhibit 17: Hindalco – Sum-of-parts valuation

| Particulars | EBITDA (Rs m) | Justified multiple (x) | (Rs m) |
|---|---|---|---|
| Hindalco standalone aluminium business EBITDA FY11E | 18,603 | 8 | 148,827 |
| Add Novelis EBITDA (FY11E) | 35,412 | 8 | 283,296 |
| Add Copper business EBITDA (FY11E) | 5,515 | 5 | 27,575 |
| Add 51% stake in Aditya Birla Minerals (listed on Australian SE) | 6,738 | 5 | 17,182 |
| Add quoted value of investments at 20% discount | | | 23,074 |
| Add unquoted investments in subsidiaries/ group companies | | | 11,371 |
| Add quoted bonds | | | - |
| Less Hindalco consolidated net debt as of FY11E | | | (210,644) |
| Justified market capitalization | | | 300,681 |
| No. of shares (m) | | | 1,925 |
| Justified price per share (Rs) | | | 156 |
| CMP (Rs) | | | 133 |
| Potential upside from CMP (%) | | | 17 |

*Source: IDFC-SSKI Research*

## Income statement

| Year to 31 Mar (Rs m) | FY07 | FY08 | FY09 | FY10E | FY11E |
|---|---|---|---|---|---|
| **Net sales** | **193,161** | **600,128** | **656,252** | **596,028** | **567,841** |
| *% growth* | *59.4* | *210.7* | *9.4* | *(9.2)* | *(4.7)* |
| Operating expenses | 148,855 | 533,778 | 626,478 | 517,734 | 499,406 |
| EBITDA | 44,306 | 66,351 | 29,774 | 78,294 | 68,435 |
| *% change* | *55.7* | *49.8* | *(55.1)* | *163.0* | *(12.6)* |
| Other income | 4,090 | 6,560 | 6,878 | 856 | 1,317 |
| Net interest | (3,134) | (18,491) | (12,323) | (10,941) | (9,150) |
| Depreciation | 8,646 | 24,565 | 30,378 | 27,656 | 28,531 |
| Pre-tax profit | 36,616 | 29,855 | (6,049) | 40,553 | 32,071 |
| Current tax | 9,585 | 3,617 | (9,538) | 13,326 | 7,913 |
| Profit after tax | 27,031 | 26,238 | 3,488 | 27,227 | 24,158 |
| Minorities | (161) | (2,206) | 1,718 | (1,825) | (4,606) |
| PAT after MI | 26,870 | 24,032 | 5,206 | 25,402 | 19,552 |
| Adj PAT | 26,870 | 24,032 | 5,206 | 18,389 | 12,539 |

## Balance sheet

| As on 31 Mar (Rs m) | FY07 | FY08 | FY09 | FY10E | FY11E |
|---|---|---|---|---|---|
| Paid-up capital | 1,043 | 1,226 | 1,705 | 1,925 | 1,925 |
| Reserves & surplus | 128,179 | 172,244 | 156,832 | 209,547 | 222,137 |
| Total shareholders' equity | 137,789 | 189,636 | 171,402 | 230,524 | 242,815 |
| Total current liabilities | 44,013 | 172,037 | 162,597 | 139,558 | 132,679 |
| Total debt | 96,238 | 373,038 | 310,670 | 343,149 | 289,987 |
| Total liabilities | 140,250 | 545,074 | 473,266 | 482,708 | 422,666 |
| **Total equity & liabilities** | **278,040** | **734,711** | **644,668** | **713,232** | **665,481** |
| Net fixed assets | 108,234 | 254,539 | 227,629 | 266,537 | 273,942 |
| Investments | 4,963 | 42,234 | 61,873 | 60,710 | 61,020 |
| Total current assets | 160,469 | 311,430 | 235,144 | 257,340 | 206,061 |
| Other non-current assets | 4,373 | 126,508 | 120,023 | 128,645 | 124,458 |
| Working capital | 116,457 | 139,394 | 72,547 | 117,782 | 73,383 |
| **Total assets** | **278,040** | **734,711** | **644,668** | **713,232** | **665,481** |

## Cash flow statement

| Year to 31 Mar (Rs m) | FY07 | FY08 | FY09 | FY10E | FY11E |
|---|---|---|---|---|---|
| Pre-tax profit | 36,616 | 29,855 | (6,049) | 40,553 | 32,071 |
| Depreciation | 8,646 | 24,565 | 30,378 | 27,656 | 28,531 |
| Chg in working capital | (3,035) | 6,823 | 17,352 | (31,234) | 2,769 |
| Total tax paid | (9,585) | (3,617) | 9,538 | (13,326) | (7,913) |
| Operating cash inflow | 32,642 | 57,626 | 51,219 | 23,649 | 55,458 |
| Capital expenditure | (13,587) | (146,304) | 26,910 | (38,908) | (7,406) |
| Free cash flow (a+b) | 19,055 | (88,678) | 78,129 | (15,259) | 48,053 |
| Chg in investments | (1,299) | (37,272) | (19,639) | 1,163 | (310) |
| Debt raised/ (repaid) | 21,166 | 276,800 | (62,368) | 32,480 | (53,162) |
| Capital raised/ (repaid) | 6,653 | 23,060 | (35,920) | 28,800 | - |
| Dividend (incl. tax) | (2,044) | (2,676) | (2,708) | (3,513) | (3,513) |
| Misc | 7,110 | 5,393 | (1,582) | 4,363 | (4,905) |
| Net chg in cash | 50,642 | 176,626 | (44,088) | 48,033 | (13,838) |

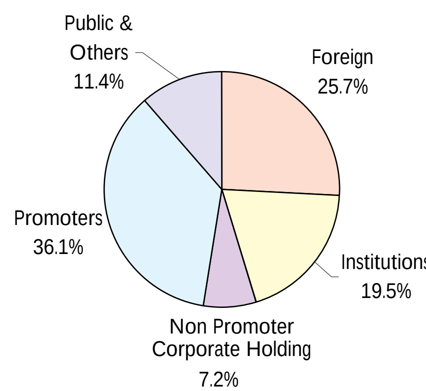
## Key ratios

| Year to 31 Mar | FY07 | FY08 | FY09 | FY10E | FY11E |
|---|---|---|---|---|---|
| EBITDA margin (%) | 22.9 | 11.1 | 4.5 | 13.1 | 12.1 |
| EBIT margin (%) | 18.5 | 7.0 | (0.1) | 8.5 | 7.0 |
| PAT margin (%) | 13.9 | 4.0 | 0.8 | 4.3 | 3.4 |
| RoE (%) | 23.1 | 14.7 | 2.9 | 12.6 | 8.3 |
| RoCE (%) | 17.6 | 10.5 | (0.1) | 9.6 | 7.2 |
| Gearing (x) | 0.7 | 2.0 | 1.8 | 1.5 | 1.2 |

## Valuations

| Year to 31 Mar | FY07 | FY08 | FY09 | FY10E | FY11E |
|---|---|---|---|---|---|
| Reported EPS (Rs) | 25.8 | 19.6 | 3.5 | 14.3 | 10.2 |
| Adj. EPS (Rs) | 25.8 | 19.6 | 3.5 | 12.3 | 8.3 |
| PE (x) | 5.2 | 6.8 | 43.5 | 10.1 | 13.1 |
| Price/ Book (x) | 1.0 | 0.9 | 1.3 | 1.1 | 1.1 |
| EV/ Net sales (x) | 0.8 | 0.7 | 0.7 | 0.9 | 0.9 |
| EV/ EBITDA (x) | 3.6 | 6.6 | 16.3 | 6.8 | 7.6 |
| EV/ CE (x) | 0.7 | 0.8 | 1.0 | 0.9 | 1.0 |

## Shareholding pattern




*As of September 2009*

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**Explanation of Ratings:**

1. Outperformer: More than 10% to Index
2. Neutral: Within 0-10% to Index
3. Underperformer: Less than 10% to Index

**Disclosure of interest:**

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2. Affiliates of IDFC - SSKI may have mandate from the subject company.
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