

HINDALCO



Hindalco Industries Limited

An Emerging Non-Ferrous Metals Powerhouse

*DSP Merrill Lynch Investor Conference, Udaipur
February 2003*

Hindalco: Investment Highlights

- **Hindalco is an emerging non-ferrous metal powerhouse**
 - A low cost aluminium producer with significant strategic advantages
 - Acquired a fast growing copper business
- **Entering into high growth trajectory; helped by**
 - Brownfield expansion in Aluminium
 - Margins recovery in Aluminium
 - Full and faster realisation of synergies with Indal
 - Copper business acquisition
 - Copper mine acquisition
- **Growth momentum will be sustained even in the long run**
 - Growth canvas widened with recent restructuring
- **Strong earnings outlook and rising ROCE is yet to be reflected in stock valuations**

HINDALCO

*Aluminium Business
- Emerging Stronger*

ADITYA BIRLA GROUP



Hindalco: A Dominant Force in Aluminium

- **Market leader in India**

- 43% market share in Primary Aluminium
- Over 70% share of downstream markets

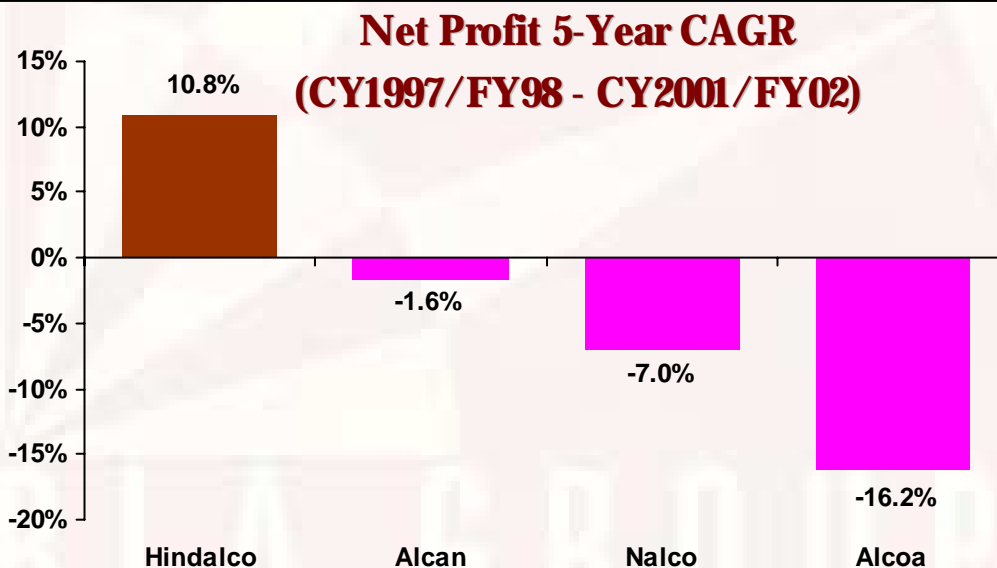
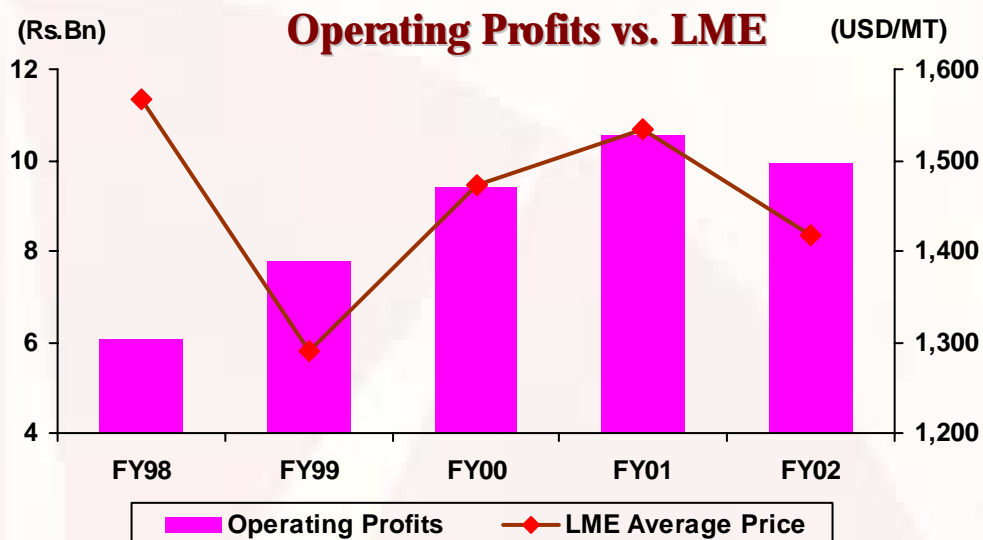
- **Low cost Aluminium producer**

- Cash cost of US\$869/MT against Global avg. cost of US\$1182/MT

- **Delivered superior value notwithstanding LME volatility**

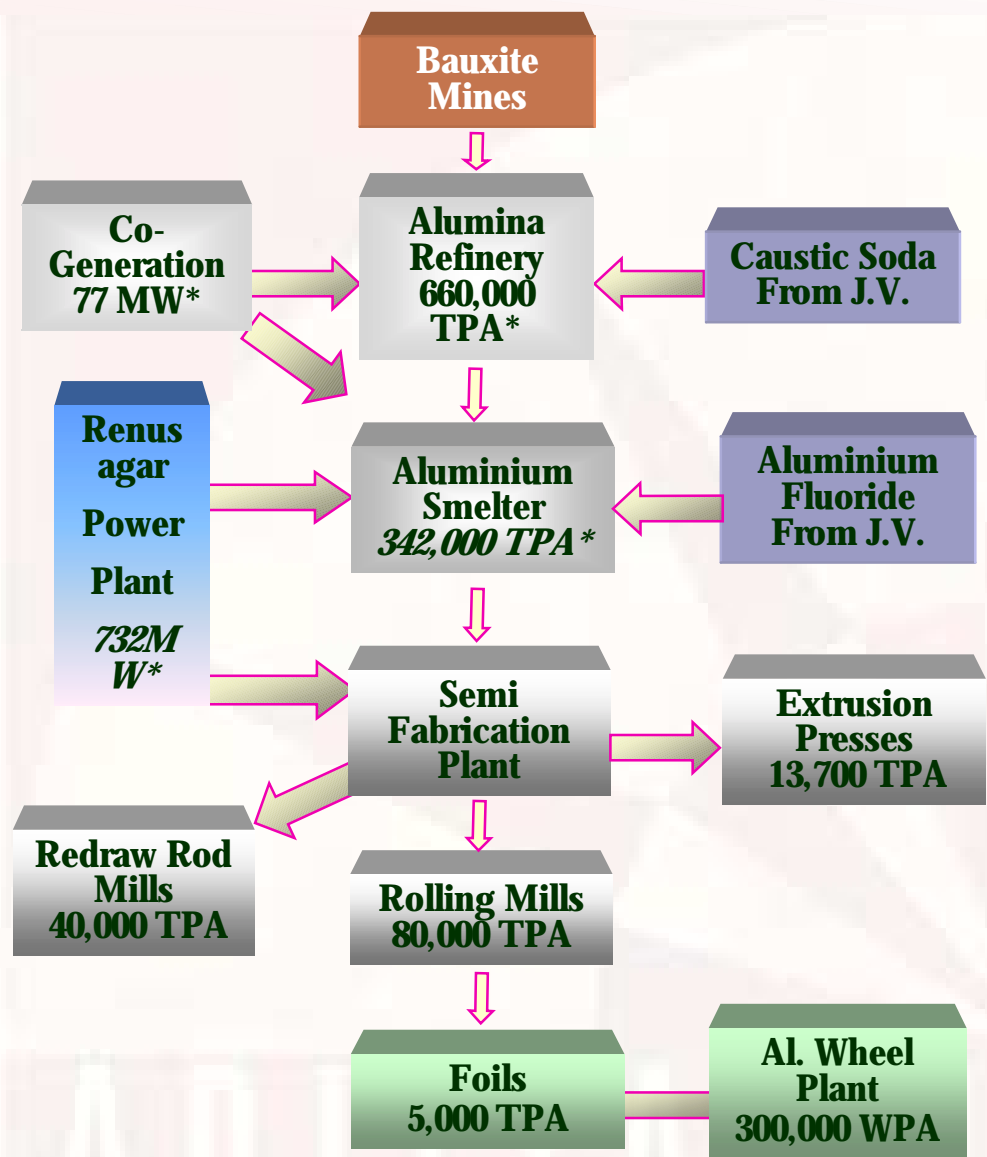
- **Significant competitive advantage**

- Fully Integrated operations
- Product flexibility, enhanced further by full ownership of Indal
- Access to rich bauxite reserves and low cost captive power
- Wide distribution network and proximity to high growth markets of Asia



Source: Bloomberg

Fully Integrated Operations – A Significant Strength



* Post Brownfield Expansion

	Capacity (TPA)*		
	Hindalco	Indal	Combined
Alumina	660,000	400,000	1,060,000
Metal	342,000	72,000	414,000
Rolled	80,000	90,000	170,000
Rods	40,000	10,000	50,000
Extrusion	13,700	8,000	21,700
Foils	5,000	9,000	14,000
Recycled Metal	-	25,000	25,000
Power (MW)	809	136	945

Brownfield Expansion To Have Twin Impact

- **Brownfield expansion ahead of schedule, to boost volumes significantly**
 - 11th Potline commissioned in December 2002
 - Smelter operating at 310,000 MTPA; to be fully operational in FY04
 - 9th Power Unit at Renusagar commissioned in December 2002
 - 10th Power Unit at Renusagar is targeted to be commissioned by Q1 FY 2004
 - Co-Generation Plant likely to be commissioned by October 2004
- **Expansion to lower cash cost of production by US\$50/MT**
 - Adoption of new technologies and upgradation of processes to help cut costs
 - Impact on entire production volumes, to help improving margins significantly
- **Indal smelter expansion to add further strength**
 - Hirakud smelter capacity rising from 30,000 MTPA to 57,200 MTPA

Brownfield expansion at 40% lower capital costs as compared to a Greenfield Project

Margins To Recover in FY04

- **Operations suffered during last 18 months**
 - Unfavourable economic conditions and resultant lower LME
 - Higher power costs
 - Power disruptions affecting Smelter operations
 - Operating margins have bottomed out at 30.3% in Q3FY03
- **Margins to recover from Q4FY03 onwards; Full impact to be seen in FY04**
 - Coal supply problems resolved
 - Smelter operations fully stabilized
 - On-going cost reduction exercises to add further strength to earnings
 - *Project “Rocket-2K” to help saving Rs.500 million per annum*
 - *Project “Everest” to help accelerate savings thru ERP implementation, started in FY03*
 - Insurgency at Bauxite Mines have no impact
- **Upturn in LME prices to add further strength**

Operating margins can be sustained around 40%

Indal Synergies To Be Realised Fully and Faster Now

- **Elimination of minority conflicts following recent open offer to help realise potential synergies fully and faster**
- **Well-crafted strategy being implemented**
 - Integration of logistics
 - Rationalisation of products and marketing strategies that enhance customer reach
 - Strengthening of production processes for higher efficiencies
 - Optimal and economical usage of intermediate products across locations
 - *Slabs, CC Coil, HR Coils, Foil Stock, Scrap, etc.*

Indal synergies to boost earnings from FY04 onwards

Impending Global Recovery to add Further Strength

- **Long-term fundamentals remain intact**
- **Immediate growth hinges on recovery in the US economy**
 - Definite signs of recovery yet to emerge
 - Threat of war with Iraq may impact industrial recovery and thus global aluminium demand
 - Uncertainty in US will affect export driven economies of Asia and Japan
- **China will remain a strong performer**
 - Demand expected to grow by 13% in 2003; to result in continued strong demand in Asia
- **Supply side concerns exaggerated**
 - BPA capacity restart appear unlikely
 - Supplies growth from China may ease
 - *Emerging concerns regarding adequate power and environmental impact*
 - *Impact of recent spike in Alumina prices*

Aluminium Consumption growth (%)			
Region	CY 2002	CY 2001	CY 2000
North America	8.1	-15.1	-0.5
Asia	7.0	-5.5	13.9
Japan	-3.0	-9.0	5.8
China	17.5	9.0	15.4
Western Europe	2.1	-0.5	3.9
World	5.7	-4.6	6.1
Aluminium Production Growth			
World	6.9	0.2	+3.1

Domestic Outlook Improving

- **GDP forecast to grow 6% in FY04; to support improved consumption**
 - FY03 GDP growth estimates vary between 4.4 – 5.5%
 - Manufacturing sector growth placed at 6.1% in FY03 against 3.4% last year
- **Aluminium consumption to have grown 4% in FY03; To strengthen further in FY04**
 - Electrical and Auto sector have performed well and these trends should continue
 - Encouraging trends in Construction and Packaging sector; likely to strengthen further in FY04
 - Building construction should accelerate with falling interest rates and easier financing options
 - Strategic Applications may witness slowdown, but medium term outlook remains positive
 - Consumer durables have been weak and demand revival is contingent on a stronger farm sector
- **Competitive pressures to remain intense**
 - Expanded capacities resulting in improved metal supplies
 - Impact of capacity overhang in downstream segments pronounced in weak market

With elections in the offing, Budget 2003 may favour consumers and take measures to strengthen economic activity, significantly benefiting Aluminium

Aluminium Price Outlook

- **Global prices expected to be maintained, though wary of impending Iraq war**
 - Global inventories at 45 days of consumption; relatively modest at this point in the cycle
 - Recent spurt in Alumina prices to have a salutary impact ?
 - Prices above psychologically important US\$1400 per tonne level
 - Prices expected to be maintained at current levels, though wary of impending Iraq war
- **Domestic prices to remain under pressure**
 - Rising supplies and unattractive exports could put pressure on metal prices
 - Prices at a 5% discount to landed costs; to cushion impact of unlikely tariff reduction in Budget 2003

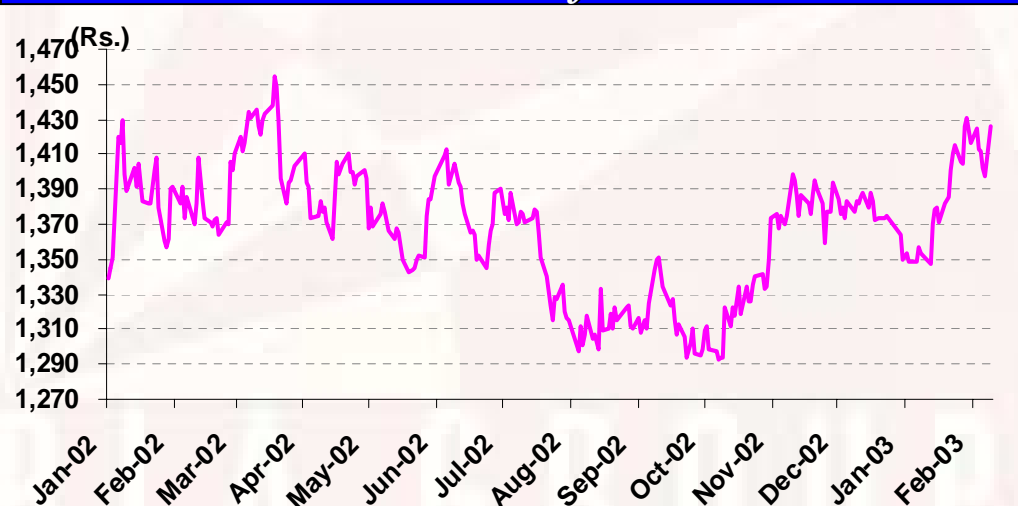
LME Projections

Source: Reuters Poll - January 2003

	CY-2003	CY-2004
High	1587	1587
Low	1235	1190
Average	1370	1407

LME Aluminium Prices

Since January 2002



HINDALCO

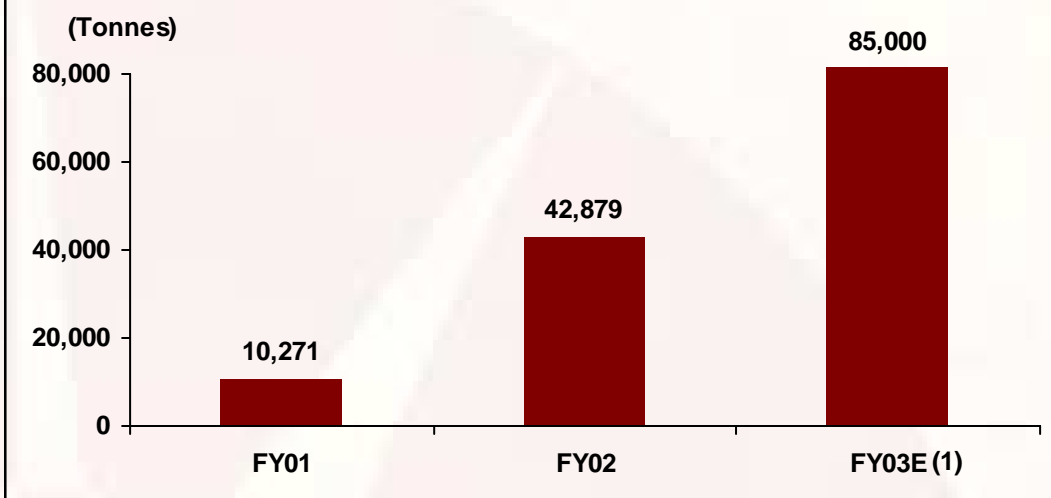
Copper Business
- A Significant Value Contributor

ADITYA BIRLA GROUP

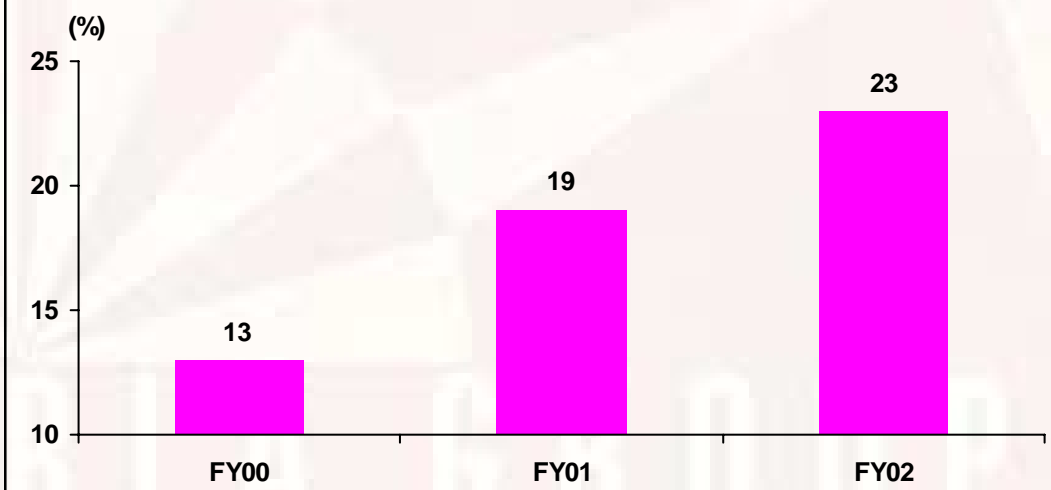
Copper: A Quality Business, Strengthening ROCE

- **World class, cost-efficient operations**
 - Domestic market leader with 41% share
 - Impressive export performance
 - Globally benchmarked efficiencies
 - Achieving globally competitive cost structure thru low cost expansions
- **Scope for accelerated growth**
 - Brownfield expansion nearing completion
 - Further expansions being planned
- **Generates superior ROCE, to be sustained even in future**
 - High operational efficiencies
 - Value contribution from by-products
 - Notwithstanding fixed cost disadvantage
 - Low cost expansions offset duty cut impact

Enviably Export Success



Rising ROCE

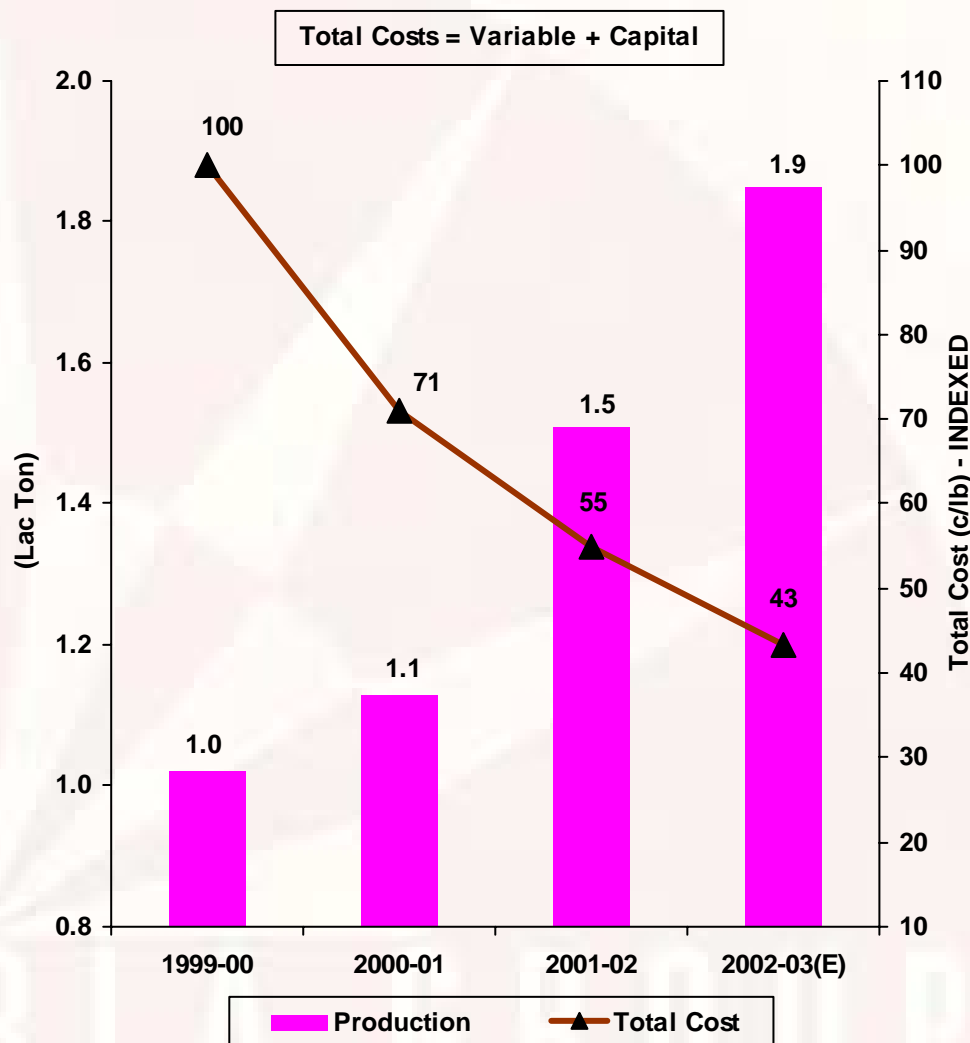


Source: Company Data; (1) 9-month data annualised

Copper Expansion Will Be A Key Contributor

- **Current phase of smelter expansion to be completed by Mid-2003**
 - Copper smelter capacity to rise from 1.5 Lac MTPA to 2.5 Lac MTPA
 - Significantly lower capital costs to help bring down per ton costs
- **LME accreditation for “Birla Copper”**
 - To help further strengthen export presence

Benefiting From Low Cost Expansions



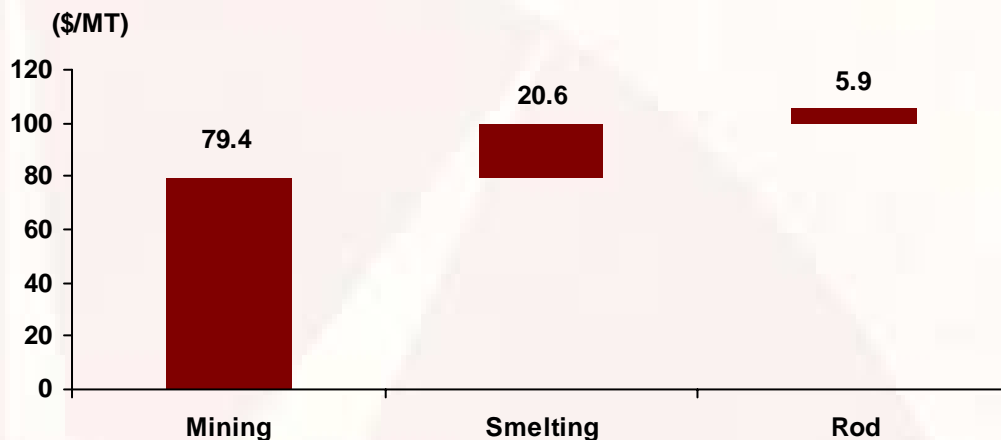
Source: Company Data



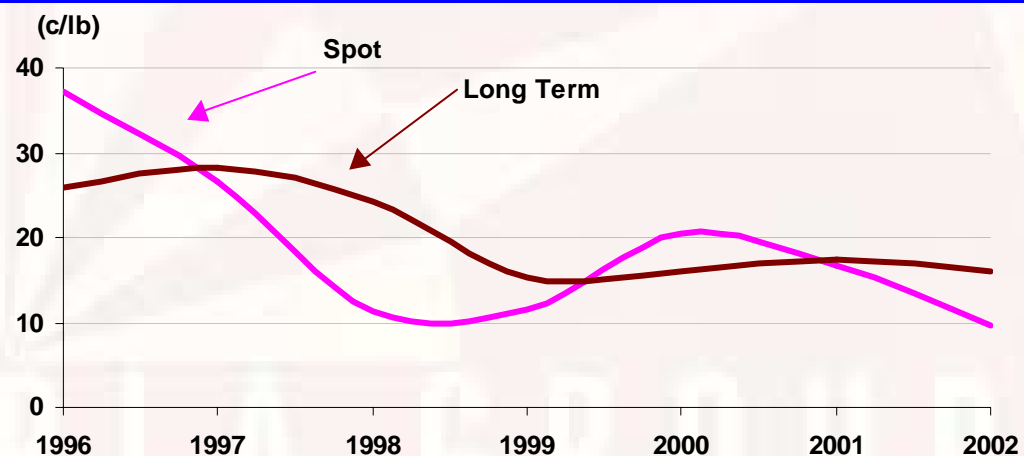
Nifty Mine Will Add Further Strength

- **Acquired Nifty Mines for A\$89.82mn**
 - Copper oxide operations produces 25,000 tonnes of cathodes
 - Has the potential to produce copper in concentrate over 14+ years
 - Acquisition gives right for exploration in the mineral rich Paterson Range
- **Will further strengthen copper business**
 - Tap copper value chain optimally
 - Secure concentrates in a tight market
 - Especially, in the context of expanding operations of Birla Copper
 - *Smelter capacity rising to 2.5 lac tpa by 2003*
 - *Scope for further expansion being explored*
 - To result in freight cost advantage of around US\$36-46/Ton of Copper

Copper Value per ton (Indexed LME Prices)



Long Term & Spot TCRC in (c/lb)



Source: Brook Hunt



Copper Industry Outlook Stable

- **Copper fundamentals improving**
 - Global demand up 3.9% in CY2002
 - Cyclical demand recovery likely by 2003/04, supported by global economic recovery
 - Global demand likely to grow 4.4% in 2003
 - Plant closures and deferred commissioning of new capacities to restrict supplies
- **Price stability dependent on producers' ability to maintain supply discipline**
 - Finished copper inventories easing gradually; having peaked in April 2002
 - Market deficits and supply constraints to erode stocks even further
- **Asian demand outlook remain promising**
- **Domestic outlook is disappointing**
 - Negative growth in JFTC segment.
 - Surge in imports from Sri Lanka
 - Supplies to rise with expanded capacities

In '000 Tons	2000	2001	2002 (E)	2003 (E)
Asia	2778	2679	2846	3038
China	1800	2190	2518	2712
Sub-Total	4578	4869	5364	5760
Japan	1349	1145	1099	1121
Total Demand	5927	6014	6463	6871
Growth (% YoY)	-	1.5	7.5	6.3
Production	4168	4345	4336	4666
Demand-Supply Gap	1759	1669	2127	2205

Source: CRU Monitor, October 2002

Successful penetration in to the lucrative Asian markets will help Birla Copper perform better even in future

Copper Price Outlook

• Global Prices

- Copper prices improving on restrained supplies and demand hopes
 - *LME quarterly average prices up by \$39/MT*
- Further recovery contingent on improvement in global economic activity
- Spot TC tumbled to the lowest ever in response to tightening concentrate markets

• Domestic Prices to move in line with LME price movements

LME Projections

Source: Reuters Poll - January 2003

	CY-2003	CY-2004
High	1808	1984
Low	1543	1675
Average	1693	1856

LME Copper Prices

Since January 2002



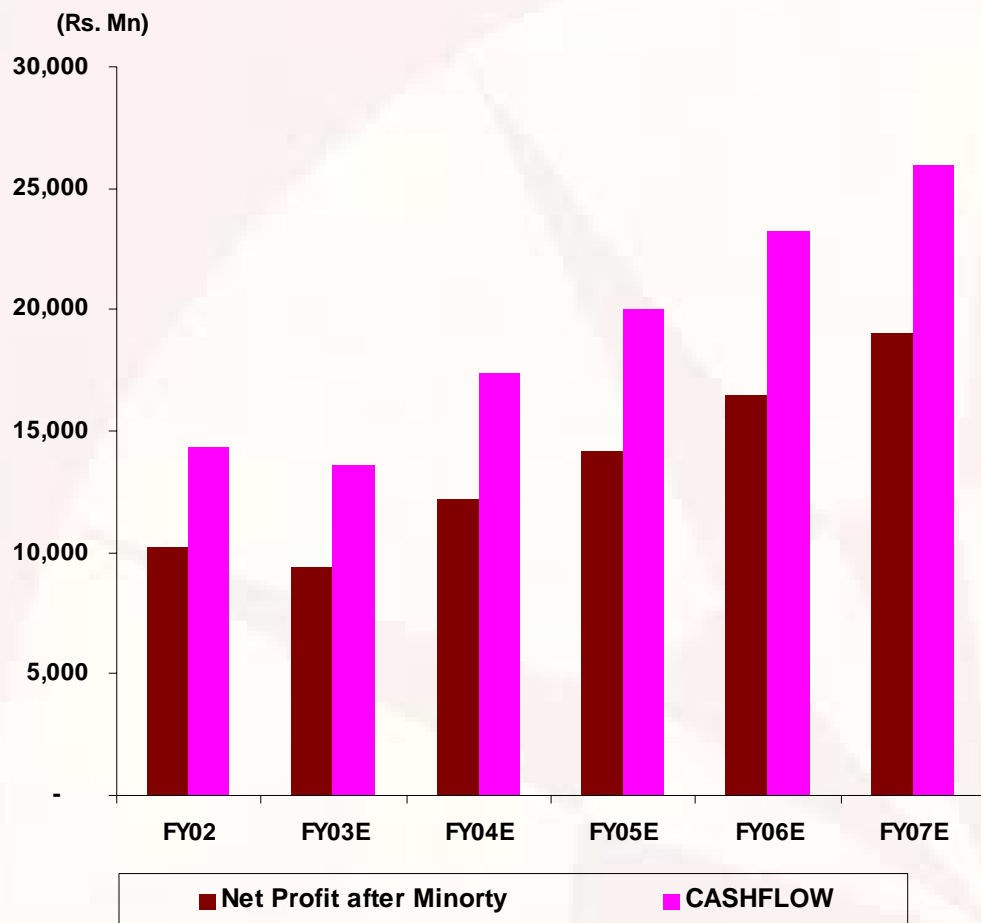
HINDALCO

Strengthened growth outlook, backed by a possible improvement in global industry environment will boost earnings growth and result in impressive rise in ROCE...

ADITYA BIRLA GROUP

Profits to grow 13% CARG & ROCE to reach 22%

Net Profit to grow 13% annually



Source: JM Morgan Stanley Research

Sustained Improvement in ROCE to 22%



Source: JM Morgan Stanley Research

Birla Copper will contribute to strengthening of ROCE

A Wider Canvas to Drive Long Term Growth

Aluminium

- **Nalco**
- **Greenfield Alumina / Smelter**
- **Low Cost Brownfield Expansion**
- **Greenfield Opportunities in Upstream/Downstream Aluminium**

Copper

- **Further Low Cost Expansions in Copper**
- **Mine Acquisitions**
- **Domestic Acquisition Opportunities, including PSU disinvestments**

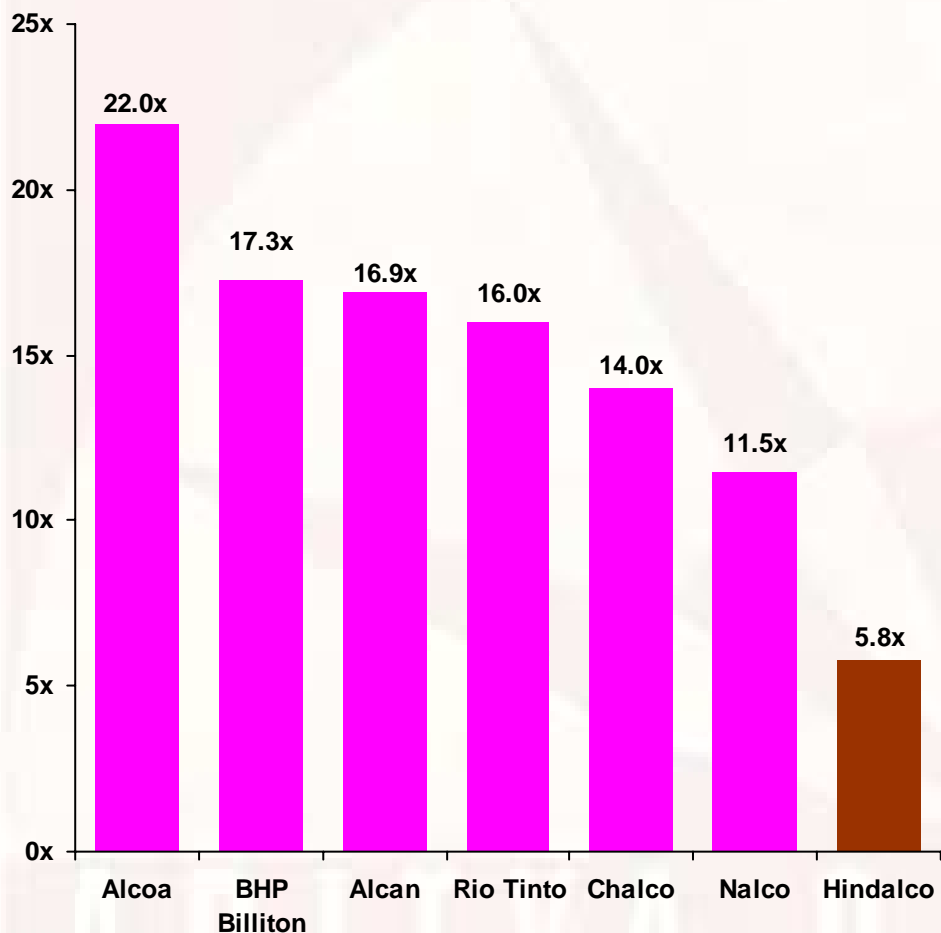
HINDALCO

***We believe, sustainable growth momentum
and attractive returns are yet to be reflected
in stock valuations***

ADITYA BIRLA GROUP

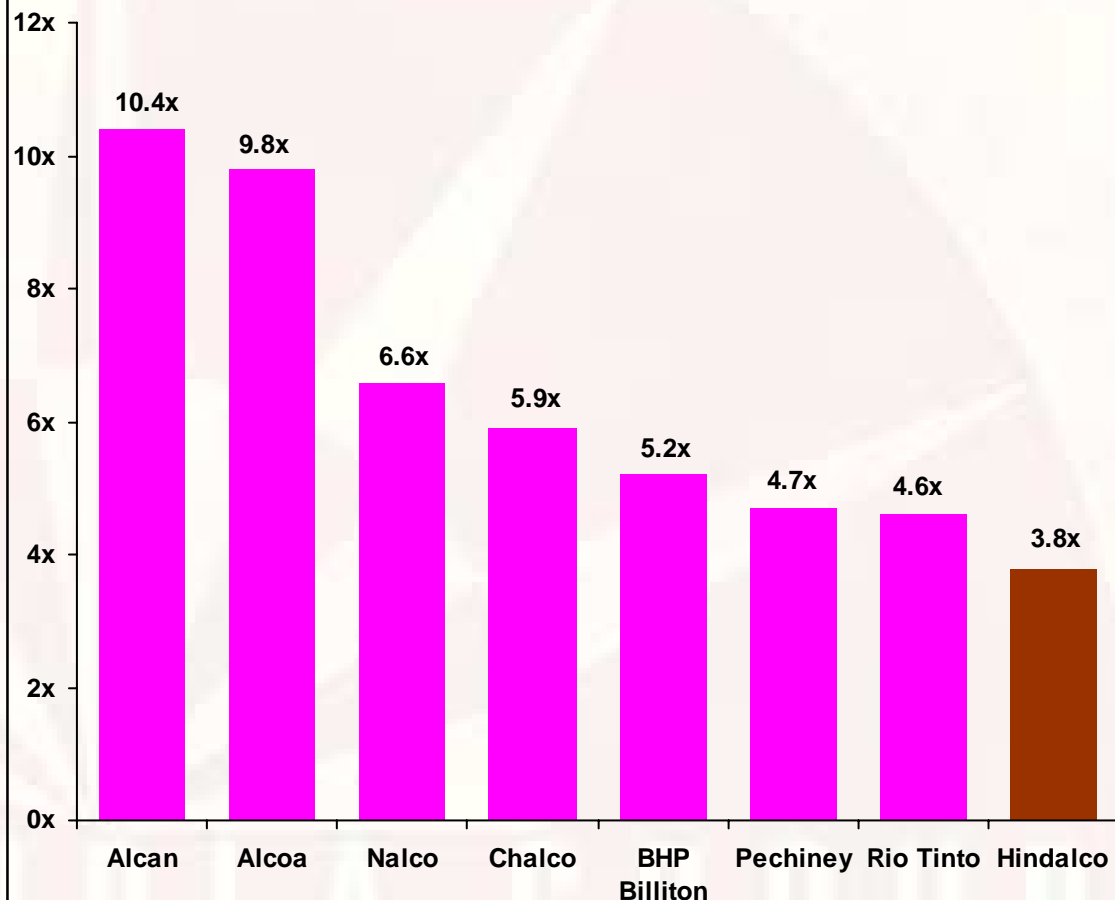
Value Pick...

PER (x) CY02/FY03(E)



Source: Bloomberg; Stock prices as on 11th February 2003

EV/EBIDTA (x) CY02/FY03(E)



Source: Bloomberg; Stock prices as on 11th February 2003

...Ahead of Possible Re-rating



	Price	M.Cap (US\$m)	PER (x)		EV/EBIDTA (x)		P/BV (x)	
			CY2002 / FY03E	CY2003 / FY04E	CY2002 / FY03E	CY2003 / FY04E		
Alcoa	USD	19.8	16,727	22.0	16.1	9.8	6.7	1.7
Alcan	CAD	42.4	8,885	16.9	12.7	10.4	8.8	1.0
Pechiney	EUR	26.1	2,309	NM	10.6	4.7	4.4	0.7
Chalco	HKD	1.5	2,070	14.0	11.0	5.9	5.2	1.2
Nalco	INR	93.6	1,256	11.5	9.0	6.6	5.4	1.9
BHP Billiton	AUD	9.2	20,350	17.3	16.2	5.2	5.5	1.5
Rio Tinto	AUD	32.8	9,644	16.0	16.0	4.5	4.3	1.2
HINDALCO								
- Stand-alone	INR	602.0	924	7.5	6.0	4.6	3.6	0.8
- Consolidated	INR	602.0	1,155	5.8	4.5	3.8	3.0	0.7

Source: Bloomberg Data as on 11th February 2003

We believe, substantial discount to Global peers notwithstanding impressive growth and returns should drive a re-rating

HINDALCO

Thank You

ADITYA BIRLA GROUP

