

## **HINDALCO - NOVELIS ACQUISITION: CREATING AN ALUMINIUM GLOBAL GIANT**

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## **ABSTRACT**

### **HINDALCO - NOVELIS ACQUISITION: CREATING AN ALUMINIUM GLOBAL GIANT**

Last decade witnessed growing appetite for takeovers by Indian corporate across the globe as a part of their inorganic growth strategy. In this chain Indian aluminium giant Hindalco acquired Atlanta based company Novelis Inc, a world leader in aluminium rolling and flat-rolled aluminium products. Hindalco Industries Ltd., acquired Novelis Inc. to gain sheet mills that supply can makers and car companies. Strategically, the acquisition of Novelis takes Hindalco onto the global stage as the leader in downstream aluminium rolled products. The transaction makes Hindalco the world's largest aluminium rolling company and one of the biggest producers of primary aluminium in Asia, as well as being India's leading copper producer.

The case study attempts to analyze the financial and strategic implications of this acquisition for the shareholders of HINDALCO. The case explains the acquisition deal in detail and highlights the benefits of the deal for both the companies. Followings are the main issues to be discussed for critical review of this case:

- What is the strategic rational for this acquisition?
- Were the valuation for this acquisition was correct?
- What are financial challenges for this Acquisition?
- What is the future outlook of this acquisition?

# HINDALCO - NOVELIS ACQUISITION: CREATING AN ALUMINIUM GLOBAL GIANT

*'We look upon the aluminium business as a core business that has enormous growth potential in revenues and earnings,' 'Our vision is to be a premium metals major, global in size and reach .... The acquisition of Novelis is a step in this direction'*

**-Kumar Mangalam Birla, Chairman, Hindalco Industries**

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## 1. INTRODUCTION

Mergers and Acquisitions have been the part of inorganic growth strategy of corporate worldwide. Post 1991 era witnessed growing appetite for takeovers by Indian corporate also across the globe as a part of their growth strategy. This series of acquisitions in metal industry was initiated by acquisition of Arcelor by Mittal followed by Corus by Tata's. Indian aluminium giant Hindalco extended this process by acquiring Atlanta based company Novelis Inc, a world leader in aluminium rolling and flat-rolled aluminium products. Hindalco Industries Ltd., acquired Novelis Inc. to gain sheet mills that supply can makers and car companies. Strategically, the acquisition of Novelis takes Hindalco onto the global stage as the leader in downstream aluminium rolled products. The acquisition of Novelis by Hindalco bodes well for both the entities. Novelis, processes primary aluminium to sell downstream high value added products. This is exactly what Hindalco manufactures. This makes the marriage a perfect fit. Currently Hindalco, an integrated player, focuses largely on manufacturing alumina and primary aluminium. It has downstream rolling, extruding and foil making capacities as well, but they are far from global scale. Novelis processes around 3 million tonnes of aluminium a year and has sales centers all over the world. In fact, it commands a 19% global market share in the flat rolled products segment, making it a leader.

Hindalco has completed this acquisition through its wholly-owned subsidiary AV Metals Inc and has acquired 75.415 common shares of Novelis, representing 100 percent of the issued and outstanding common shares AV Metals Inc transferred the common shares of Novelis to its wholly-owned subsidiary AV Aluminium Inc. The deal made Hindalco the world's largest aluminium rolling company and one of the biggest producers of primary aluminium in Asia, as well as being India's leading copper producer. Hindalco Industries Ltd has completed its acquisition of Novelis Inc under an agreement in which Novelis will operate as a subsidiary of Hindalco.

## 2. INDUSTRY OVERVIEW: GLOBAL

Globally, newer packaging applications and increased usage in automobiles is expected to keep the demand growth for aluminium over 5% in the long-term. Asia will continue to be the high consumption growth area led by China, which has been and is expected to continue to register double-digit growth rates in aluminium consumption in the medium-term. With key consuming industries forming part of the domestic core sector, the aluminium industry is sensitive to fluctuations in performance of the economy. Power, infrastructure and transportation account for almost 3/4th of domestic aluminium consumption. With the government focusing towards attaining GDP growth rates above 8%, the key consuming industries are likely to lead the way, which could positively impact aluminium consumption. Domestic demand growth is estimated to average in the region of over 8% over the longer-term. Lowering of duties reduces the net tariff protection for domestic aluminium producers. Aluminium imports are currently subject to a

customs duty of 5% and an additional surcharge of 3% of the customs duty. The customs duty has been reduced in a series of steps from 15% in 2003 to 5% in January 2007. With reduction in import duties, domestic realization of aluminium majors, namely Hindalco and Nalco, is likely to be under pressure, as the buffer on international prices is reduced. Moreover, with greater linkage to international prices, volatility in financials could increase. However, producers are moving downstream to negate the higher volatility. [Exhibits 8-9]

### 3. INDUSTRY OVERVIEW: INDIA

The Indian aluminium sector is characterized by large integrated players like Hindalco and National Aluminium Company (Nalco). The other producers of primary aluminium include Indian Aluminium (Indal), now merged with Hindalco, Bharat Aluminium (Balco) and Madras Aluminium (Malco) the erstwhile PSUs, which have been acquired by Sterlite Industries. Consequently, there are only three main primary metal producers in the sector.

Company	Capacity (lac tonne)	Production (lac tonne)	Capacity utilisation (%)
BAICO	1.00	0.96	96
HINDALCO	2.42	2.49	103
INDAL	1.17	0.44	37.18
MALCO	0.25	0.02	0.06
NALCO	2.18	2.13	97.56
Total	7.02	6.03	85.92

\* figures pertaining to the year 1999-2000

The per capita consumption of aluminium in India is only 0.5 kg as against 25 kg. in USA, 19kg. in Japan and 10 kg. in Europe. Even the World's average per capita consumption is about 10 times of that in India. One reason of low consumption in the country could be that consumption pattern of aluminium in India is vastly different from that of developed countries. The demand of aluminium is expected to grow by about 9 percent per annum from present consumption levels. This sector is going through a consolidation phase and existing producers are in the process of enhancing their production capacity so that a demand supply gap expected in future is bridged. However, India is a net exporter of alumina and aluminium metal at present. In order to develop a guideline for energy management policy for the plants comprising the aluminium industry, it was decided to undertake a questionnaire survey that was followed up by plant visits.

#### Features of Indian Aluminium Industry

- Highly concentrated industry with only five primary plants in the country
- Controlled by two private groups and one public sector unit
- Bayer-Hall-Heroult technology used by all producers
- Electricity, coal and furnace oil are primary energy inputs
- All plants have their own captive power units for cheaper and un-interrupted power supply
- Energy cost is 40% of manufacturing cost for metal and 30% for rolled products
- Plants have set internal target of 1 – 2% reduction in specific energy consumption in the next 5 – 8 years
- Energy management is a critical focus in all the plants
- Two plants have declared formal energy policy
- Each plant has an Energy Management Cell

- Achievements in energy conservation are highlighted in the Annual Report of the company
- Energy targets are based on best energy figures achieved in their sector / region and by the plant itself in the past
- Generally, government policies were rated as conducive to energy management
- Task Force' formed by BEE in this sector to work as catalyst in promoting energy efficiency
- High cost of technology is the main barrier in achieving high energy efficiency

## **4. COMPANY OVERVIEW**

### **4.1 HINDALCO INDUSTRIES LIMITED**

Hindalco Industries Limited, a flagship company of the Aditya Birla Group, is structured into two strategic businesses aluminium and copper with annual revenue of US \$14 billion and a market capitalization in excess of US \$ 23 billion. Hindalco commenced its operations in 1962 with an aluminium facility at Renukoot in Uttar Pradesh. Birla Copper, Hindalco's copper division is situated in Dahej in the Bharuch district of Gujarat. Established in 1958, Hindalco commissioned its aluminium facility at Renukoot in eastern U.P. in 1962 and has today grown to become the country's largest integrated aluminium producer and ranks among the top quartile of low cost producers in the world. The aluminium division's product range includes alumina chemicals, primary aluminium ingots, billets, wire rods, rolled products, extrusions, foils and alloy wheels. It enjoys a domestic market share of 42 per cent in primary aluminium, 63 per cent in rolled products, 20 per cent in extrusions, 44 per cent in foils and 31 per cent in wheels. Hindalco has launched several brands in recent years, namely Aura for alloy wheels, Freshwrapp for kitchen foil and ever last for roofing sheets. The copper plant produces copper cathodes, continuous cast copper rods and precious metals like gold, silver and platinum group metal mix. sulphuric acid, phosphoric acid, di-ammonium phosphate, other phosphatic fertilisers and phospho-gypsum are also produced at this plant. Hindalco Industries Limited has a 51.0% shareholding in Aditya Birla Minerals which has mining and exploration activities focused in Australia. The company has two R&D centres at Belgaum, Karnataka and Taloja, Maharashtra. They have been recognized by the Government of India's Department of Scientific and Industrial Research (DSIR). [Exhibit 1] Year over year, Hindalco Industries Ltd. has been able to grow revenues from 121.2B to 193.2B. Most impressively, the company has been able to reduce the percentage of sales devoted to selling, general and administrative costs from 4.15% to 2.96%. This was a driver that led to a bottom line growth from 15.8B to 26.9B. [Exhibit 2-7]

### **4.2 COMPANY OVERVIEW: NOVELIS**

Novelis is the world leader in aluminium rolling, producing an estimated 19 percent of the world's flat-rolled aluminium products. Novelis is the world leader in the recycling of used aluminium beverage cans. The company recycles more than 35 billion used beverage cans annually. The company is No. 1 rolled products producer in Europe, South America and Asia, and the No. 2 producer in North America. With industry-leading assets and technology, the company produces the highest-quality aluminium sheet and foil products for customers in high-value markets including automotive, transportation, packaging, construction and printing. Our customers include major brands such as Agfa-Gevaert, Alcan, Anheuser-Busch, Ball, Coca-Cola, Crown Cork & Seal, Daching Holdings, Ford, General Motors, Lotte Aluminium, Kodak, Pactiv, Rexam, Ryerson Tull, Tetra Pak, ThyssenKrupp and others. Novelis represents a unique combination of the new and the

old. Novelis is a new company, formed in January 2005, with a new velocity, a new philosophy and a new attitude. But Novelis is also a spin-off from Alcan and, as such, draws on a rich 90-year history in the aluminium rolled product marketplace. Novelis has a diversified product portfolio, which serves to the different set of industries vis-à-vis it has a very strong geographical presences in four continents.

Novelis was always a problem child. It was born in early 2005 as a result of a ‘forced’ spin-off from its parent, the \$ 23.6-billion aluminium giant and Canada-based Alcan. In 2003, Alcan won a hostile offer to wed French aluminium company Pechiney. But the marriage produced an unwanted child — Novelis. Both Alcan and Pechiney had bauxite mines, facilities to produce primary aluminium, and rolling mills to turn the raw metal into products such as stock for Pepsi and Coke cans and automotive parts. But the US and European anti-trust proceedings ruled that the rolled products business of either Alcan or Pechiney had to be divested from the merged entity. Alcan cast out its rolled products business to form Novelis. It is now the world’s leading producer of aluminium-rolled products with a 19 per cent global market share. But in the spin-off process, Novelis ended up inheriting a debt mountain of almost \$2.9 billion on a capital base of less than \$500 million. That was just the beginning of its troubles. The situation is worse now. Though it marginally reduced debt, it made some losses too. On a net worth of \$322 million, Novelis has a debt of \$2.33 billion (most of it high cost). That’s a debt-equity ratio of 7.23:1. Soon, the unwanted child stumbled into another crisis. Novelis has a simple business model. It buys primary aluminium, processes it into rolled products like stock for soft drink cans, automotive parts, etc., and sells it to customers such as Coke and Ford. But the management took a wrong call on aluminium prices. In a bid to win more business from soft drink manufacturers, it promised four customers not to increase product prices even if raw material aluminium prices went up beyond a point. A few months after Novelis signed those contracts, aluminium prices shot up 39 per cent (between 30 September 2005 and 2006). To these four customers, Novelis was forced to sell its products at prices that were lower than raw material costs. These four account for 20 per cent of Novelis’s \$9-billion revenues. But the management’s wrong judgement led to losses of \$350 million (in 2006). For long, Novelis’s former CFO Geoffrey P. Batt, former controller Jo-Ann Longworth and the finance team didn’t quantify these losses. After the complicated spin-off from Alcan — this involved extensive operations in over 35 plants in 11 countries and four continents — the finance team also struggled to file quarterly and annual results on time. Many of the numbers it managed to file on time were wrong and were later re-stated. The board stepped in. First, it replaced its CFO and controller (in December 2005). When that didn’t help much, it replaced CEO Brian W. Sturgell in August 2006. (It is still looking for a full-time CEO.) There are many more reasons for the distress in Novelis. More on all that later. Now, enter the suitor.

More recent expansions were made through both acquisitions and modernization of existing mills, which increased Alcan’s can stock, sheet and foil rolling capabilities. Novelis was spun off to carry on most of the aluminum rolled products businesses operated by Alcan with an approach to business that is more focused on helping our customers perform and on transforming new ideas into practical product solutions.

Novelis inherited its assets, know-how and structure from Alcan. In 1902, the Canadian subsidiary of the Pittsburgh Reduction Company (later re-named Alcoa) was first chartered as the Northern Aluminum Company, Limited. When Alcoa divested most of its interests outside the United States in 1928, Alcan was formed as a separate company from Alcoa to assume control of most of these interests. In the following years Alcan expanded globally, building or acquiring hydroelectric power, smelting, packaging and fabricated product facilities run by approximately 88,000 employees in 63 countries. The first Alcan rolling operation began in 1916

in Toronto, Canada, with an 84-inch hot mill and three finishing mills. Over the years Alcan constructed a number of mills, including several that are among the largest aluminum rolling operations in each of the geographic regions in which Novelis operates:

- Oswego, United States (1963) - the hot mill began operations and is now a major producer of can stock and industrial sheet.
- Norf, Germany (1967) - a joint venture, owned at 50%, operates the world's largest aluminum rolling mill in terms of capacity.
- Saguenay Works, Canada (1971) – the largest continuous caster in the world in terms of capacity.
- Pindamonhangaba, Brazil (1977) – the only South American plant producing beverage can body and end stock.

The company had 36 operating facilities in 11 countries as of December 31, 2005. The tables below present Net sales and Long-lived assets by geographical area (in millions). Net sales are attributed to geographical areas based on the origin of the sale. Long-lived assets are attributed to geographical areas based on asset location. In 2005, 2004 and 2003, 40%, 41% and 39%, respectively, of our total *Net sales* were to our ten largest customers. [Exhibit 11]

## **5. IMPORTANT FACTS ABOUT DEAL**

Organic and inorganic both strategies have worked for companies worldwide. But in the process of global expansions inorganic growth strategies has always been the first preference for the companies globally. As a part of its inorganic growth strategy of global expansion. The following points highlight the important points about this acquisition of Hindalco for this acquisition:

- The acquisition of Novelis by Hindalco was in an all-cash transaction, which values Novelis at enterprise value of approximately US \$6.0 billion, including approximately US \$2.4 billion of debt.
- This merger of Novelis into Hindalco will establish a global integrated aluminium producer with low-cost alumina and aluminium production facilities combined with high-end aluminium rolled product capabilities.
- After merger Hindalco will emerge as the biggest rolled aluminium products maker and fifth-largest integrated aluminium manufacturer in the world.
- As Novelis is the global leader in aluminium rolled products and aluminium can recycling, with a global market share of about 19%. Hindalco has a 60% share in the currently small but potentially high-growth Indian market for rolled products.
- Hindalco's position as one of the lowest cost producers of primary aluminium in the world is leverageable into becoming a globally strong player. The Novelis acquisition will give the company immediate scale and strong a global footprint.
- Novelis is a globally positioned organization, operating in 11 countries with approximately 12,500 employees. In 2005, the company reported net sales of US \$8.4 billion and net profit of US \$90 million.
- The company reported net sales of US \$7.4 billion and net loss of US \$170 million in nine months during 2006, on account of low contract prices. Some of these contracts are expected to continue for next Years also.
- Novelis is expecting the full year loss to be US \$263 million in 2006, however the company is expecting to be in black with US \$68 million profit in 2007. The

total free cash flow is expected to be US \$175 million in 2006.

- By January 1, 2010, all the sales contracts will get expired and profitability will increase substantially from then onwards.
- Novelis will work as a forward integration for Hindalco as the company is expected to ship primary aluminium to Novelis for downstream value addition.
- Novelis has a rolled product capacity of approximately 3 million tonne while Hindalco at the moment is not having any surplus capacity of primary aluminium.
- Hindalco's greenfield expansion will give it primary aluminium capacity of approximately 1 million tonne, but this will take a minimum 3-4 years to all the capacities to come into operation. Novelis profitability is adversely related to aluminium prices and higher aluminium prices on LME in near future can't be ruled out. However, we expect the aluminium prices to be softening in long term and this would be positive for Novelis.
- Considering these factors, Hindalco's profitability is expected to remain under pressure and this will bounce back in 2009-10. The profitability will be accretive only in 2010-11.
- The debt component of Novelis stood at US \$2.4 billion and additional US \$2.8 billion will be taken by Hindalco to finance the deal. This will put tremendous pressure on profitability due to high interest burden.
- Hindalco's existing expansion will cost Rs. 25,000 crore and as a result debt and interest burden of the company will increase further.
- CRISIL has placed its outstanding long-term rating of 'AAA/Stable' on Hindalco Industries Limited (Hindalco), on '**Rating Watch with Negative Implications**'. The short term rating of 'P1+' has been reaffirmed. This would lead to higher interest rate for the company.

## **6. FUNDING STRUCTURE FOR THE DEAL**

The funding structure of this deal is remarkably different from the leveraged buyout model that Tata Steel used to fund the Corus buy. The Tatas are to buy 100 per cent of Corus' equity for \$12.1 billion. Only \$4.1 billion of this is being raised by the Tatas. The remaining \$8 billion will be raised (as debt) and repaid on the strength of the Corus balance sheet. Effectively, the Tatas are paying only a third of the acquisition price. This was possible because Corus had relatively low debt on its balance sheet and was able to borrow more. But that is not the case with Novelis. With a debt-equity ratio of 7.23:1, it can't borrow any more. So, the Birlas were unable to do a leverage buyout. To buy the \$3.6 billion worth of Novelis's equity, Hindalco is now borrowing almost \$2.85 billion (of the balance, \$300 million is being raised as debt from group companies and \$450 million is being mobilised from its cash reserves). That is almost a third of the Rs 2,500 crore net profit Hindalco may post in 2006-07. (It has reported a net profit of Rs 1,843 crore for the first three quarters of this year.) The second part of the deal is the \$2.4-billion debt on Novelis's balance sheet. Hindalco will have to refinance these borrowings, though they will be repaid with Novelis's cash flows. [Exhibit 12]

## **7. ISSUES AND DISCUSSION**

The case study attempts to analyze the financial and strategic implications of this acquisition for the shareholders of hindalco. The case discusses the acquisition of US-Canadian aluminium company Novelis by India-based Hindalco Industries Limited (Hindalco), a part of Aditya

Vikram Birla Group of Companies, in May 2007. The case explains the acquisition deal in detail and highlights the benefits of the deal for both the companies. Followings are the main issues to be discussed for critical review of this case:

- What is strategic rationale for this acquisition?
- Were the valuation for this Acquisition was correct?
- What are financial Challenges for this Acquisition?
- What is future outlook for this acquisition?

## 7.1 STRATEGIC RATIONALE FOR ACQUISITION

This acquisition was a very good strategic move from Hindalco. Hindalco will be able to ship primary aluminium from India and make value-added products." The combination of Hindalco and Novelis establishes an integrated producer with low-cost alumina and aluminium facilities combined with high-end rolling capabilities and a global footprint. Hindalco's rationale for the acquisition is increasing scale of operation, entry into high—end downstream market and enhancing global presence. Novelis is the global leader (in terms of volume) in rolled products with annual production capacity of 2.8 million tonnes and a market share of 19 per cent. It has presence in 11 countries and provides sheets and foils to automotive and transportation, beverage and food packaging, construction and industrial, and printing markets. Hindalco's rationale for the acquisition is increasing scale of operation, entry into high—end downstream market and enhancing global presence. Novelis is the global leader (in terms of volumes) in rolled products with annual production capacity of 2.8 million tonnes and a market share of 19 per cent. It has presence in 11 countries and provides sheets and foils to automotive and transportation, beverage and food packaging, construction and industrial, and printing markets. Acquiring Novelis will provide Aditya Birla Group's Hindalco with access to customers such as General Motors Corp. and Coca-Cola Co. Indian companies, fueled by accelerating domestic growth, are seeking acquisitions overseas to add production capacity and find markets for their products. Tata Steel Ltd. spent US \$12 billion last month to buy U.K. steelmaker Corus Group Plc. Novelis has capacity to produce 3 million tonne of flat- rolled products, while Hindalco has 220,000 tonne .. ``This acquisition gives Hindalco access to higher-end products but also to superior technology," Hindalco plans to triple aluminium output to 1.5 million metric tonne by 2012 to become one of the world's five largest producers. The company, which also has interests in telecommunications, cement, metals, textiles and financial services, is the world's 13th-largest aluminium maker. After the deal was signed for the acquisition of Novelis, Hindalco's management issued press releases claiming that the acquisition would further internationalize its operations and increase the company's global presence. By acquiring Novelis, Hindalco aimed to achieve its long-held ambition of becoming the world's leading producer of aluminium flat rolled products. Hindalco had developed long-term strategies for expanding its operations globally and this acquisition was a part of it. Novelis was the leader in producing rolled products in the Asia-Pacific, Europe, and South America and was the second largest company in North America in aluminium recycling, metal solidification and in rolling technologies worldwide. The benefits from this acquisition can be discussed under the following points:

- Post acquisitions, the company will get a strong global footprint.
- After full integration, the joint entity will become insulated from the fluctuation of LME Aluminium prices.

- The deal will give Hindalco a strong presence in recycling of aluminium business. As per aluminium characteristic, aluminium is infinitely recyclable and recycling it requires only 5% of the energy needed to produce primary aluminium.
- Novelis has a very strong technology for value added products and its latest technology 'Novelis Fusion' is very unique one.
- It would have taken a minimum 8-10 years to Hindalco for building these facilities, if Hindalco takes organically route.
- As per company details, the replacement value of the Novelis is US \$12 billion, so considering the time required and replacement value; the deal is worth for Hindalco.

Novelis being market leader in the rolling business, has invested heavily in developing various production technology. One of such technology is a fusion technology that increases the formability of aluminium. This means that it can be better used formed into the design requirement by the car companies. All raw aluminium is processed so that it can be used in products. Fourty percent of the products are rolled products and Novelis is in leader in rolling business with a market share of 20%. Any change in the raw material price is directly passed on to the customers who range from coca cola to automobile companies like aston martin. The current revenue of hindalco is very much dependent on the aluminium prices and when the prices are high they make a larger margin, this not the case with rolling business which usually has a constant margin. For Hindalco to develop such technology will take a lot of time. According to Standard and Poors it would take 10 years and \$ 12 billion to build the 29 plants that Novelis has with capacity of close to 3 million tonnes. The takeover of Novelis provides Hindalco with access to the leading downstream aluminium player in western markets. The purchase structurally shifts Hindalco from an upstream aluminium producer to a downstream producer. This is reflected in Novelis' downstream product capacity of 3.0 mt compared to Hindalco's existing primary capacity of 500 kt. Even with Hindalco's expansion plans to take primary production to 1.5 mt by 2011, the group will remain a downstream aluminium producer. Novelis shareholders are required to approve the deal which the companies expect to be completed by 2007.

## **7.2 VALUATION FOR ACQUISITION**

The big concern is Novelis's valuation. Analysts believe the Birlas are paying too high a price for a company that incurred a loss of US \$170 million for the nine months ended 30 September 2006. In its latest guidance, the Novelis management has indicated a loss of US \$240 million-285 million for the whole of 2006. Even in 2005, when Novelis had made a US \$90-million net profit, its share prices never crossed US \$30. Financial numbers show that novelis is not a good choice by Hindalco at least at the price that they paid for the company. The imediate effect of the merger is that Hindalco would achieve its target of doubling its turnover to \$ 20 billion three years in advance. Novelis fits well in the long term strategy of Hindalco. Novelis is not a dying company looking for a savior, Hindalco approached Novelis because they believed that Novelis can give them some business advantage. So, why is Hindalco paying US \$44.93 a share for a loss-making company? In its guidance, the Novelis management has indicated a pre-tax profit of US \$35 million-100 million for 2007. Going by the optimistic end of the guidance, the price Hindalco paid translates to a market capitalization/profit before tax (PBT) multiple of 36 on Novelis's 2007 forecast. That appears to be high. [Exhibit 13]

Hindalco has long held an ambition to become a leading (top 10) player across its 2 key business segments, aluminium and copper. The acquisition of Novelis should achieve part of this goal by

propelling Hindalco to the world's leading producer of aluminium flat rolled products. With capacity of nearly 3.0 mt of flat rolled aluminium products, Novelis takes Hindalco down the value chain to become a downstream aluminium producer, versus its current upstream focus. At a price of US \$44.93/share and assuming US \$2.4 bn of debt, Novelis is not coming cheaply. Based on Novelis' guidance and consensus forecasts for 2007, we estimate that Hindalco is paying 11.4x EBITDA, 20.7x EBIT or 53.4x PE. At a total enterprise value of US \$ 6 billion, Novelis is nearly 50% larger than Hindalco's current market capitalization. The concern is the severity of the earnings and value dilution that will result. Assuming synergies are minimal and based on Novelis' guidance for 2007; we calculate that Hindalco's EPS will be diluted by 18%. At Novelis long term annual free cash flow target of US \$400m (using a real WACC of 9%), we estimate the acquisition will destroy value by INR60/share. To put it another way, we estimate Hindalco will need to improve annual free cash flow by 35% to US \$540m for the acquisition to be value (NPV) neutral. Perhaps the greatest issue with the Novelis acquisition is Hindalco's balance sheet position post acquisition. Having already committed to significant expansion projects, Novelis will push Hindalco's high gearing levels even further. We calculate that Hindalco's gearing (ND/E) will reach 236%, with its Net Debt / EBITDA ratio reaching over 5.0x. In our view, an equity raising is highly possible in the short to medium term. Novelis recently reported a 3Q loss of US \$102m. For the nine-months to Sep06, Novelis reported a loss of US \$170m. A key factor behind the losses suffered in 2006 was price ceilings contracted to Novelis' long-term can-making customers, which impacted revenues by US \$350m. Novelis believes that their exposure to these types of contracts will reduce to a maximum of 10% of sales in 2007. While this is comforting, we believe Novelis remains a challenging turnaround prospect. Based on Novelis guidance for 2007 and assuming this is relevant to Hindalco's FY08 period, we calculate Hindalco's EPS will be diluted by 18%. [Exhibit 10]

### **7.3 FINANCIAL CHALLENGES FOR THE ACQUISITION**

The acquisition will expose Hindalco to weaker balance sheet. Besides the company will move from high margin metal business to low—margin downstream products business. The acquisition will more than triple Hindalco's revenues, but will increase the debt and erode its profitability. The deal will create value only after the Hindalco's expansion completion, and due to its highly leveraged position, expansion plans may get affected. Some of the customers of Novelis are significant to the company's revenues, and that could be adversely affected by changes in the business or financial condition of these significant customers or by the loss of their business. (The company's ten largest customers accounted for approximately 40% of total net sales in 2005, with Rexam Plc and its affiliates representing approximately 12.5% of company's total net sales in that year). Novelis profitability could be adversely affected by the inability to pass through metal price increases due to metal price ceilings in certain of the company's sales contracts.

Adverse changes in currency exchange rates could negatively affect the financial results and the competitiveness of company's aluminium rolled products relative to other materials. The Company's agreement not to compete with Alcan in certain end-use markets may hinder Novelis ability to take advantage of new business opportunities. The end-use markets for certain of Novelis products are highly competitive and customers are willing to accept substitutes for the company products. Though the Hindalco-Novelis acquisition had many synergies, some analysts raised the issue of valuation of the deal as Novelis was not a profit-making company and had a debt of US \$ 2.4 billion. They opined that the acquisition deal was over-valued as the valuation was done on Novelis' financials for the year 2005 and not on the financials of 2006 in which the company had reported losses.

## 7.4 FUTURE OUTLOOK

High prices and buoyant demand outlook in the domestic as well as international markets prompted aluminium companies to undertake huge expansion plans. Huge quantity of aluminium will come into the market in the coming years. All the three major companies Nalco, Hindalco and Vedanta group have drawn up plans to increase Capacities. At the end of January 2007, investment in hand in the aluminium anti aluminium products sector amounted to Rs.59,81800 million and are spread across 35 projects. Most of the major projects, amounting to over 60 per cent of the aggregate investment in value terms, are under implementation. If all the projects are successfully implemented, aluminium smelting capacity will increase from 11.8 lakh tonnes to 18 lakh tonnes. Of this, about 1.6 lakh tonnes will come on stream in 2007—08 and five lakh tonnes each in 2009 and 2010. Hindalco has undertaken aggressive plans to increase its capacities through capacity expansion as well as by setting up greenfield plants. Hindalco increased its capacity at Hirakud plant by 35,000 tonnes to one lakh tonne. When Hindalco completes all its project, smelting capacity will increase by about 10 lakh tonnes. Along with smelting capacities, the companies are expanding alumina capacities and setting up captive power plants. Domestic alumina capacity is set to increase by 9.5 million tonnes when all the outstanding projects are completed. In 2007—0 itself about 1.23 million tonnes of capacity will come on stream, catapulting aggregate capacity to 4.23 million tonnes. Large alumina capacities will not only feed captive aluminium smelters, but also leave surplus alumina to be exported to lucrative markets like China. Currently Hindalco's production is tied up with clients. Also Novelis has similar contracts with its suppliers. But after 3-4 years it would start the operation of new plants. Then it can source excess capacity to the Novelis plants located in south east asian countries. The merger looks not bad if the current financial valuations are ignored. Also we need to keep in mind that Hindalco is a very aggressively growing company, for it to build infrastructure that can match Novelis is very difficult.

## 8. TEACHING NOTES

This case is designed for discussion in class room. As the case covers various perspectives but the major focus of the case is from the point of view of mergers & acquisition as business expansion strategy. The case study attempts to analyze the financial and strategic implications of this acquisition for the shareholders of HINDALCO Industries Limited. The case explains the acquisition deal in detail and highlights the benefits of the deal for both the companies. The case can be used for students doing Post Graduate programme in Management/Business Studies as a part of their strategy and strategic finance course. Followings are the main issues to be discussed for critical review of this case:

- What is the strategic rational for this acquisition?
- Were the valuation for this acquisition was correct?
- What are financial challenges for this Acquisition?
- What is the future outlook of this acquisition?

## **BIBLIOGRAPHY**

- 1] Surojit Chatterjee, "Birla's Hindalco Buys Aluminium Giant Novelis for US \$6.4 billion," <http://in.ibtimes.com>, February 13, 2007.
- 2] Heather Timmons, "Indian Metals Company to Buy Canadian Rival," [www.iht.com](http://www.iht.com), February 11, 2007.
- 3] Suresh P Iyengar, "Hindalco Deal May Not Impact Aluminium Prices," The Hindu Business Line, February 13, 2007.
- 4] Research reports of HSBC and KPMG
- 5] Energy Management Policy – Guidelines for Energy Intensive Industry of India, Chapter 3, pp 13-36 by Bureau of Energy Efficiency

## **Web Resources**

- KPMG ([kpmg.com](http://kpmg.com))
- Net Worth Stock Pvt Ltd
- CMIE
- ICFAI ([icfai.org](http://icfai.org))
- Kslindia.com

## EXHIBIT 1: PRODUCTION CAPACITIES

Division	Capacity	Location
Alumina chemicals	1,160,000 tpa	700,000 tpa (Renukoot)
		110,000 tpa (Muri)
		350,000 tpa (Belgaum)
Primary aluminium	424,000 tpa	345,000 tpa (Renukoot)
		65,000 tpa (Hirakud)
		14,000 tpa (Alupuram)
Extrusions	27,700 tpa	19,700 tpa (Renukoot)
		8,000 tpa (Alupuram)
Rolled products	200,000 tpa	80,000 tpa (Renukoot)
		45,000 tpa (Belur)
		45,000 tpa (Taloja)
		30,000 tpa (Mouda)
Wire rods	64,000 tpa	40,000 tpa (Renukoot)
		10,000 tpa (Alupuram)
		14,000 tpa (Mouda)
Aluminium foil	11,000 tpa	5,000 tpa (Silvassa)**
		6,000 tpa (Kalwa)
Aluminium wheels	300,000 wpa	Silvassa
Copper cathodes	500,000 tpa	Dahej
** Additional 17,000 tpa thick gauge foil capacity at Silvassa		

## EXHIBIT 2: FINANCIALS OF HINDALCO

Date End	31-Mar-07	31-Mar-06	31-Mar-05	31-Mar-04
Net Sales	183130	113965	95233	61909
Other Income	3701	2439	2700	2446
Total Income	186831	116404	97933	64355
Expenditure	-142980	-87914	-72467	-47113
Operating Profit	43851	28490	25466	17242
Interest	-2424	-2252	-1700	-1612
Gross Profit	41427	26238	23766	15630
Depreciation	-6381	-5211	-4633	-3174
Profit before Tax	35046	21027	19133	12456
Tax	-9403	-4502	-5748	-4067
Profit after Tax	25643	16525	13385	8389
Extraordinary Items	-	30	-91	-
Net Profit	25643	16555	13294	8389
Equity Capital	1043	986	928	925
Reserves	123137	95077	75738	67654

<b>EPS</b>	26	16.8	143	91
<b>Nos. of Shares - Non Promoters</b>	845583773	847818402	68706740	69941039
<b>Percent of Shares - Non Promoters</b>	72.94	73.78	74.06	75.63

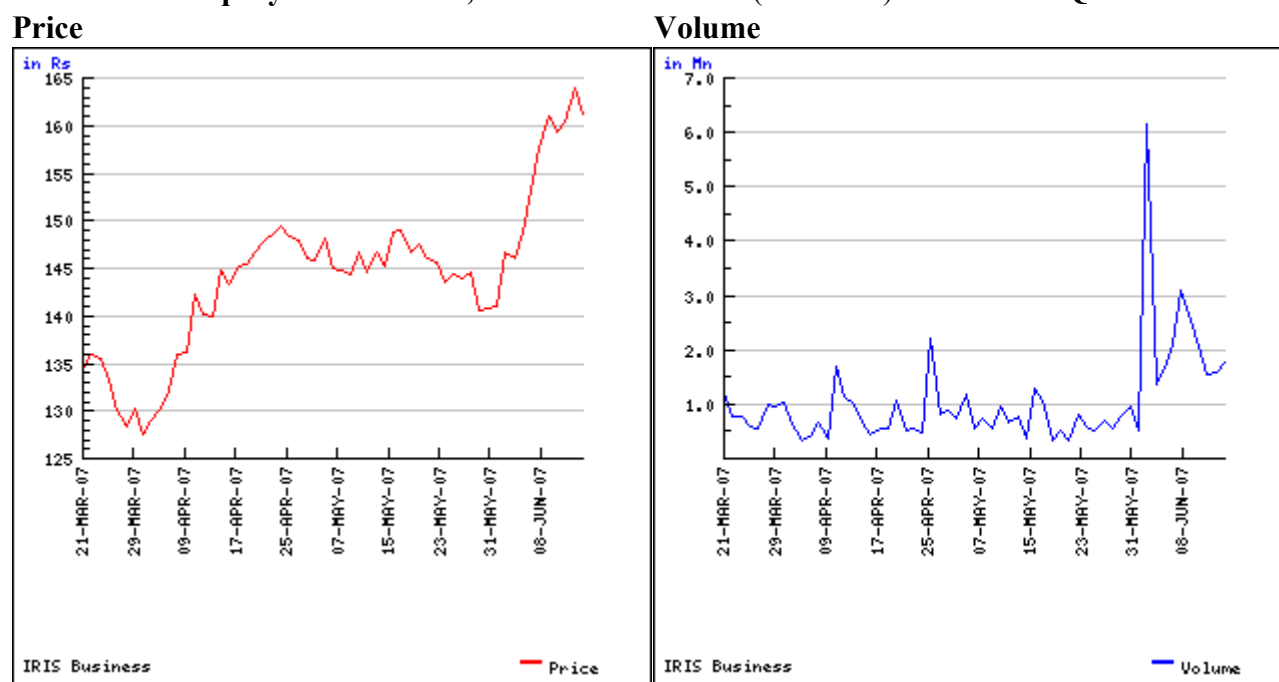
### EXHIBIT 3: GROWTH FIGURES LAST FIVE YEARS

Growth Annual	Margins - ( Difference between successive annuals )						in %			
	31-Mar-2006 (3)	31-Mar-2005 (3)	31-Mar-2004 (3)	31-Mar-2003 (3)	31-Mar-2002 (3)					
Period ending (months)	Value	Diff(%)	Value	Diff(%)	Value	Diff(%)	Value	Diff(%)	Value	Diff(%)
GPM	23.68	-1.21	23.97	-1.09	24.23	-3.03	24.99	-42.73	43.64	-
OPM	18.92	-0.63	19.04	-0.34	19.10	-2.92	19.68	-46.75	36.95	-
NPM	15.87	-7.28	17.11	21.01	14.14	11.45	12.69	-60.72	32.31	-

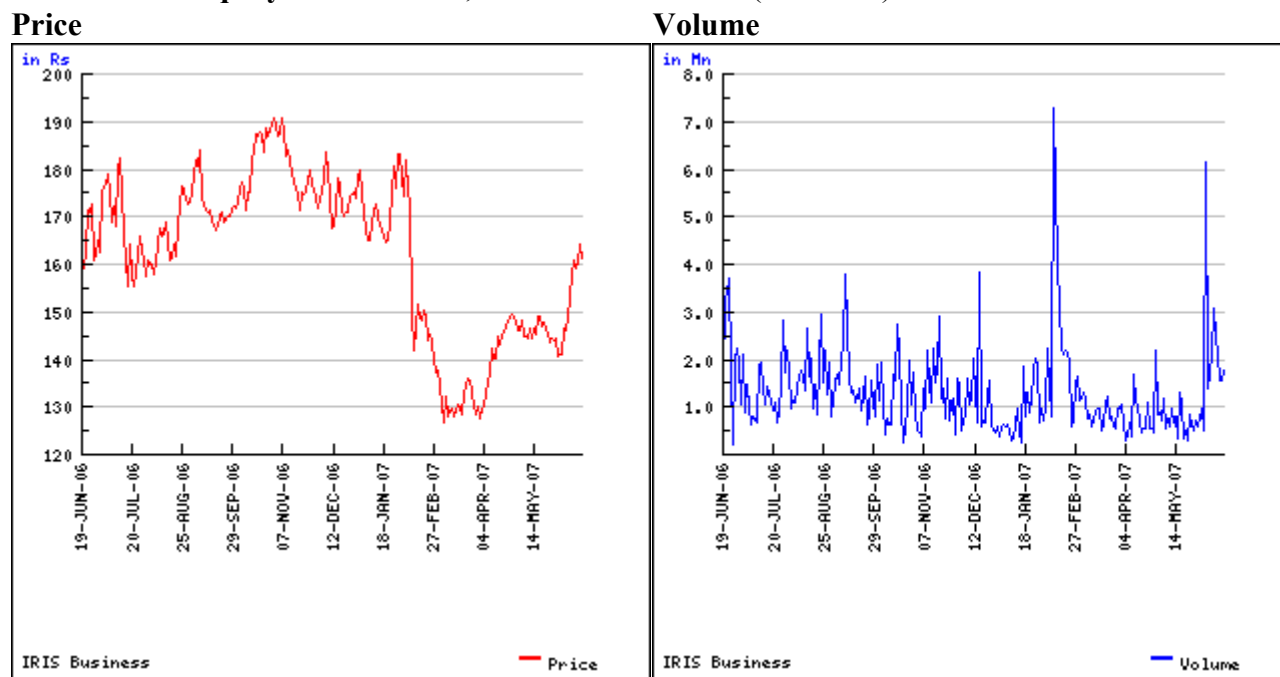
### EXHIBIT 4: STOCK PRICE/VOLUME MOVEMENT AT A GLANCE

		All figures in Rs			
	Exchange / Period	Latest	30 days back	90 days back	1 yr. back
<b>Price (Rs.)</b>	BSE	161.30	147.60	134.20	160.25
<b>Price (Rs.)</b>	NSE	161.00	147.65	133.95	160.25
<b>Volume (in Mn.)</b>	BSE	1.78	0.52	1.23	1.55
<b>Volume (in Mn.)</b>	NSE	4.55	1.48	2.43	4.30

### EXHIBIT 5: Equity Stock : Price,Volume movements. (BSE data) : Over Last Quarter



**EXHIBIT 6: Equity Stock : Price,Volume movements. (BSE data) : Over Last Year**



**EXHIBIT 7: STOCK PRICE REACTIONS TO SOME RECENT NEWS HEADLINES FOR THE COMPANY**

<b>Stock Price Volatility</b>				
<b>Headline</b>		<b>Price Before</b>	<b>Price After</b>	<b>+/-</b>
Hindalco completes acquisition of Novelis IRIS	16-May-2007	147	148.85	+
Novelis shareholders approve Hindalco's bid IRIS NEWS DIGEST	12-May-2007	147	148.85	+
Novelis shareholders approve Hindalco's bid IRIS	12-May-2007	147	148.85	+
LIC picks 2% stake in Hindalco, hikes stake to 9% 2007 IRIS	10-May-2007	145.5	146.6	+
Karvy rates Hindalco as 'Underperformer' IRIS Exclusive	09-May-2007	145.4	144.4	-
Result Analysis: Hindalco net up 15% for Mar'07 qtr May-2007 IRIS	04-May-2007	147	148.15	+
Hindalco net rises 15% for Mar'07 qtr IRIS	04-May-2007	147	148.15	+
Hindalco may buyout Alcan in Utkal Alumina IRIS	17-Apr-2007	145.1	143.3	-
Hindalco allots shares on preferential basis IRIS	12-Apr-2007	142.4	140.1	-
		142.4	140.1	-

## EXHIBIT 8: COMPANY GROWTH VS INDUSTRY GROWTH

Growth	Sales(%)	Profit(%)
Company	16.35	24.54
Industry	15.18	15.65

## EXHIBIT 9: PEER GROUP COMPARISON

Figures in Mn

Company name	Sales	Rank	PAT	Rank	Market Cap	Rank
Hindalco Industries Limited	110807.76	1	16555.50	1	197576.78	1
National Aluminium Company Limited	48460.70	2	15622.00	2	167520.50	2
Madras Aluminium Company Limited	4513.23	3	831.35	3	9585.00	3
Associated Profiles & Aluminium Limited	1662.98	4	43.58	5	2130.09	4
P G Foils Limited	1018.31	5	17.30	6	0.00	5

## EXHIBIT 10: FINANCIAL ANALYSIS OF NOVELIS ACQUISITION

<b>Hindalco: Financial Analysis of Novelis Acquisition</b>			
<b>CY07</b>	<b>Low</b>	<b>High</b>	<b>Mid-Point</b>
Total Regional Income	575	625	600
Corporate Costs	-80	-70	-75
EBITDA	495	555	525
Interest Expense	-235	-235	-235
EBIT	260	320	290
Net Interest @7.0%	420	420	420
Pretax Profit	-160	-100	-130
Tax (@25%)	-40	-25	-33
NIPAT	-120	-75	-98
NIPAT (INR)	-5280	-3300	-4290
Current FY08 estimate (HSBC)	23553	23553	23553
Issued number of shares	1159	1159	1159
EPS (post Novelis)	15.8	17.5	16.5
EPS (HSBC FY08 current)	20.0	20.0	20.0
EPS Change	-22%	-14%	-18%

**EXHIBIT 11: BRIEF FINANCIAL OF NOVELS**

	Year Ended December 31		
	2005	2004	2003
Total Regional Income	\$620	\$654	\$508
Interest expense and amortization of debt and fees	(203)	(74)	(40)
Unrealized gain due to changes in the fair market value of derivatives (A)	140	77	20
Depreciation and amortization	(230)	(246)	(222)
Impairment charges on long-lived assets	(7)	(75)	(4)
Minority interest share	(21)	(10)	(3)
Adjustment to eliminate proportional consolidation (B)	(36)	(41)	(36)
Restructuring charges	(10)	(20)	(8)
Gain on disposals of fixed assets and business	17	5	28
Corporate Costs ©	(72)	(49)	(36)
Litigation settlement-net of insurance recoveries	(40)	--	--
Gains on the monetization of cross-currency interest rate swaps	45	--	--
Provision for taxes on income	(107)	(166)	(50)
Net income before cumulative effect of accounting change	96	55	157
Cumulative effect of accounting change-net of tax	(6)	--	--
<b>Net Income</b> ➔	<b>\$90</b>	<b>\$55</b>	<b>\$157</b>

**EXHIBIT 12: THE WORLD OF NOVELIS\*\***

	North America	Europe	Asia	South America
<b>Assets</b>	1,487	2,392	1,021	814
<b>Net Sales</b>	2,841	2,688	1,235	626
<b>Regional Income</b>	64	208	70	122
<b>Description of assets*</b>	10 plants 2 recycling facilities	14 plants 1 recycling facilities	3 plants	2 plants 2 smelters 1 refinery 2 bauxite mines
*Plants refer to aluminium rolled products facilities.				
**Figures are for nine months ended 30 September 2006				

**EXHIBIT 13: SUMMARY OF FINANCIAL OF NOVELIS (US \$ million)**

	Jan-Sep 2006	Jan-Sep 2006	FY 2005	FY 2004	FY 2003
<b>Net sales</b>	7,377	6,337	8,363	7,755	6,221
<b>Operating Expenses</b>	7,224	5,938	7,962	7,145	5,737
<b>EBIDTA</b>	153	399	401	610	484
<b>Interest</b>	149	148	194	48	33
<b>Net Income</b>	-170	32	90	55	157

Source: company