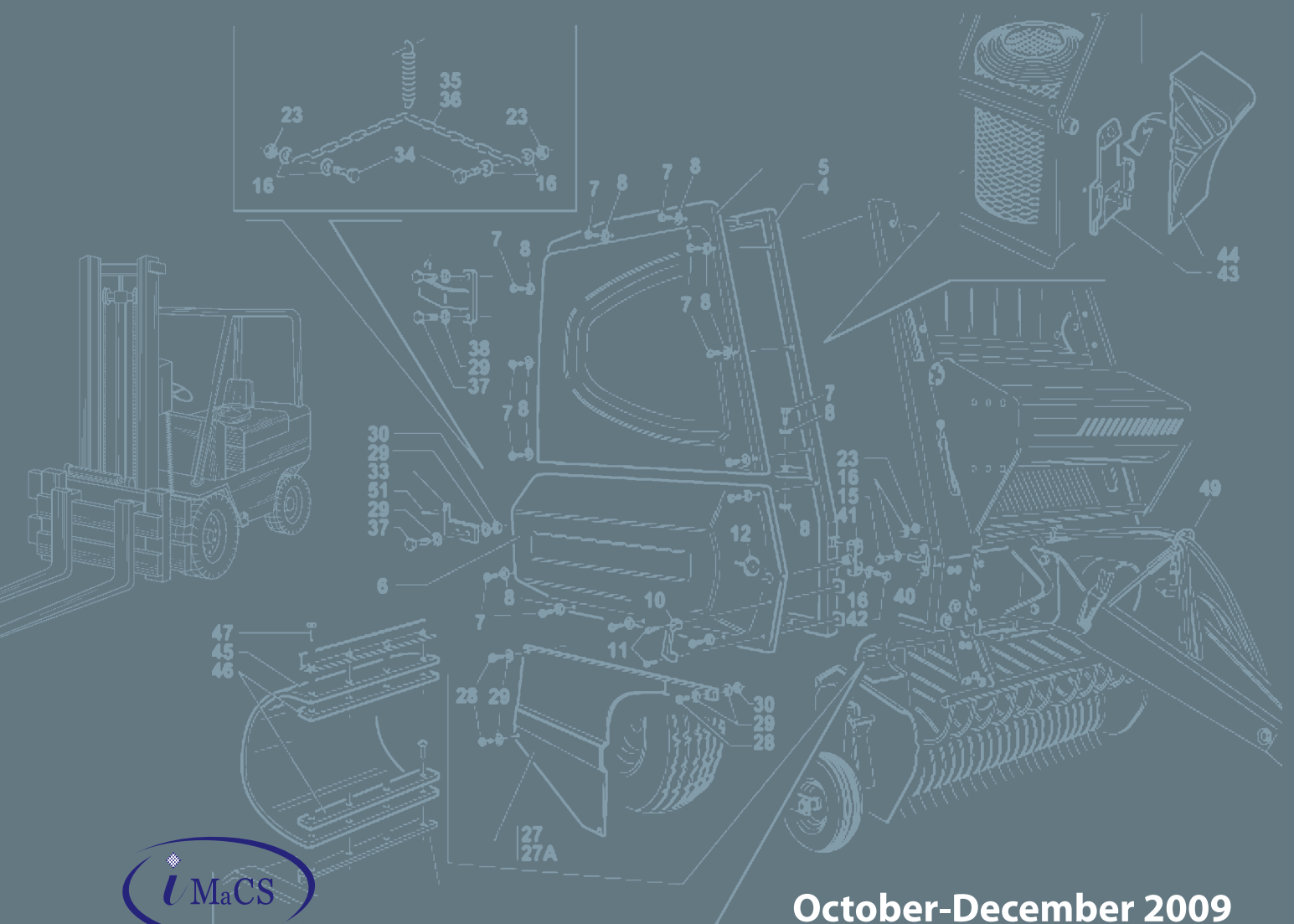
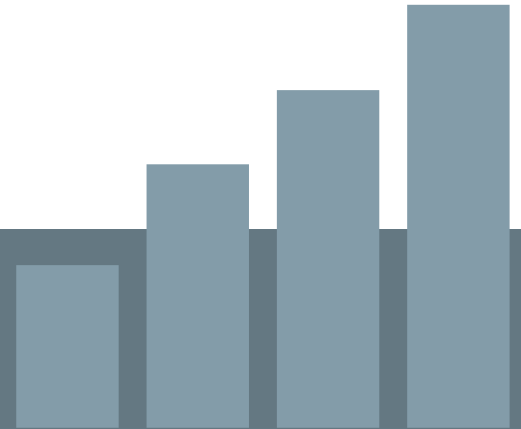




Confederation of Indian Industry

INDUSTRY UPDATE

Mining



October-December 2009

From Chairman's Desk

As a key representative of the Mining Sector in India, CII has been taking pioneering steps in improving the competitiveness of the sector. Minerals are a valuable natural resource being the vital raw material for many industries. India's mining sector should continue to post impressive growth driven by strong domestic demand. The long-term prospect of the sector – like that of the Indian economy – remains very positive. However, the sector as a whole is yet to achieve its true potential.

It is the objective of the CII National Committee on Mining to provide a national point of reference for the mining and equipment Industry in India and interact closely with the government at central and state levels on issues like technology, investments, clearances & approvals, Policy & regulatory issues like – Exploration, Taxation regime, issues related to RP/PL/ML's etc. The committee has been in active dialogue with the government on the New Mineral Policy.

The committee has also undertaken a study for Ministry of Mines on 'Skills mapping and manpower requirement for the Indian mining sector till 2025'.

In the meantime, I have great pleasure in presenting to you the first issue of the Mining newsletter. This initiative is a reiteration of the importance that we attach to the growth and development of the sector.

We seek your valued engagement through contribution of your thoughts, ideas and suggestions for this journal and also your support and participation in the various CII Mining Initiatives and activities.

Shrinivas V Dempo
Chairman CII National Committee on Mining

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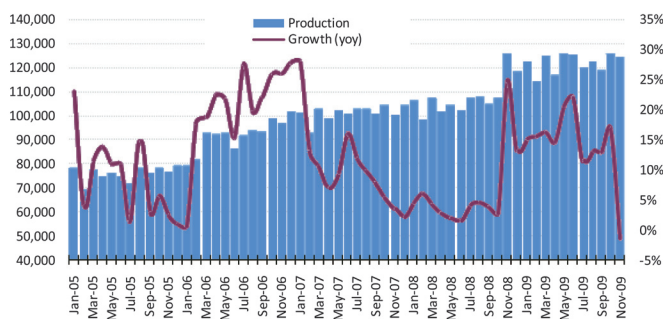
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ALUMINIUM

Recent Developments

- Cumulative primary aluminium production in India increased 7% in 2008 to 1,308 kilo tonnes (kt). By comparison, production increased 10.6% in 2007, and 17.3% in 2006. Aluminium production growth slowed down in late-2008 because of capacity constraints faced by two major aluminium producers—Hindalco and Nalco, and slower growth in demand. Production growth also slowed down because of cessation of production by Malco due to uneconomic prices. However, aluminium production increased 14.1% (year on year or yoy) to 1,347 kt in 11M2009 (January-November 2009), primarily because of commencement of production by VAL, and higher production by Nalco.

India's Aluminium Production
Thousand tonnes



- During 8MFY2010 (April-September 2009), Hindalco's aluminium production increased 7.5% (yoy) to 369 kt. The increase in production has been due to the expansion at Muri and Hirakud. The full advantage of Phase I of Hirakud expansion helped in increasing metal production. The downstream assets purchased in the last two years were fully utilised, in addition to improved production from other plants. Nalco's production increased 18.7% (yoy) during 8MFY2010 to 280 kt. Aluminium production of Sterlite Industries (India) Limited (SIL) declined 26.7% (yoy) to 177

Aluminium Production
Thousand tonnes

8MFY	2009	2010	Change
Nalco	236,142	280,306	18.7%
Hindalco	343,495	369,238	7.5%
Balco	241,628	177,119	-26.7%
Malco	23,224		-100.0%
Vedanta		157,575	
Total	844,489	984,239	16.5%

kt. The decrease in production was primarily on account of the complete ramp down of the BALCO plant I smelter. However, a group company—VAL—commenced production in FY2009, and reported aluminium production of 158 kt in 8MFY2010. Malco has temporarily shut down its smelter operations since December 2008, and reported nil production in 8MFY2010.

- Aluminium prices were in a narrow range of US\$1,300-1,600/t during 1996-2003. However, world aluminium prices have witnessed a sharp increase since 2003 following a surge in global aluminium demand mainly in China, and a decline in stocks. During 2007, although aluminium prices increased 2.7% to an average of US\$2,638/t, there was a moderation during the second half. Average prices declined from US\$2,761/t in 2Q2007 to US\$2,444/t in 4Q2007. Prices declined from US\$2,732/t in May 2007 to US\$2,382/t in December 2007 because of a combination of volatility in global financial markets and improved supply. During 2008, aluminium prices increased sharply to US\$3,071/t in July 2008, before declining to US\$2,764/t in August 2008 primarily because of the build-up in inventories, and tightening credit markets. Much of the price increase was attributable to reduced global production owing to electricity shortages in South Africa, and severe weather in China that forced many producers to decrease production. Prices also increased because of increased cost of electricity, which accounts for 30-40% of total input costs. As energy (and production) costs rise, marginal aluminium producers are expected to reduce output, resulting in lower supplies of aluminium, placing an upward pressure on aluminium prices. Prices in mid-2008 were around 30-40% higher than the typical cost of the least efficient producer, and around 60% higher the cost of a typical producer. However, between August-December 2008, prices declined 52% (or by US\$1,581/t) to US\$1,490/t in December 2008. While annual average prices declined 2.5% in 2008 to US\$2,573/t, quarterly average prices declined 38% from US\$2,940/t in 2Q2008 to US\$1,821/t in 4Q2008. Since September 2008, marginal producers cut production as a result of rising input costs combined with falling aluminium prices. Because consumption slowed rapidly from September 2008, production cuts were not been sufficient to support prices.

- After a sharp fall till March 2009, aluminium prices have increased 63% (or by US\$844/t) during April-December 2009. On a quarterly basis, prices

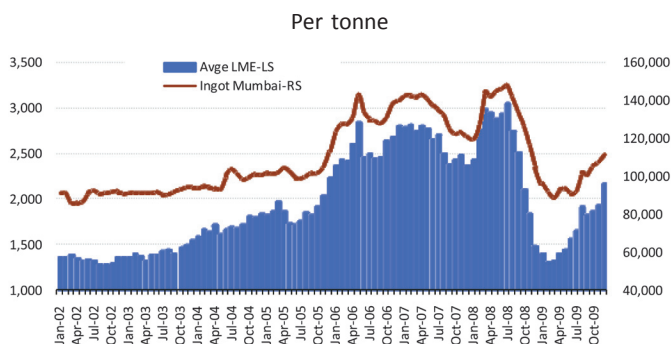
increased from US\$1,360/t in 1Q2009 to US\$2,003/t in 4Q2009. Despite this recent increase, the aluminium price is estimated to have averaged US\$1,665/t in 2009, which represents a decline of 35% over 2008 levels. Aluminium prices have recovered on Chinese demand, signs of economic recovery becoming more pronounced, and consumers anticipating rapid future increases in demand. Aluminium prices have been partially supported by the Chinese Government's US\$586 billion stimulus package and strategic stock building in that country. Stock building, combined with domestic production cuts, could result in China becoming a net importer of aluminium in 2009. In the nine months to September 2009, Chinese imports of aluminium aggregated 1.4 mt, compared with 12 kt for 2008. Contributing to China's import growth was a sharp decline in domestic production that coincided with strong demand growth. However, in response to recent price increases, China's production of aluminium has increased, leading to reduced imports of aluminium. As production is expected to remain around current levels for most of 2010, import demand from China is not expected to provide significant support for world aluminium prices in 2010.

- Domestic aluminium prices are determined on the basis on landed cost of imported aluminium besides the cost of production of domestic producers. The high but declining import duties on aluminium in India keep the landed costs above the international prices. Average aluminium ingot prices in Mumbai increased 24.6% in FY2007 to Rs. 136.6/kg, as compared with an increase of 9.3% during FY2006, and 7.6% during FY2005. However, the sharp rupee appreciation in FY2008 resulted in a further decline in price differential and a decline in prices in FY2008. During FY2008, although average domestic prices declined 3.7% to Rs. 131.6/kg, there was a sharp improvement in Q4FY2008, from Rs. 122.8/kg in

Q3FY2008 to Rs. 131.2/kg in Q4FY2008, reflecting the increase in world prices. During FY2009, the improvement in world prices since early-2008 and the rupee depreciation during Q1FY2009 resulted in a sharp improvement in realisations, from Rs. 131.2/kg in Q4FY2008 to Rs. 144.9/kg in Q1FY2009. Subsequently, the decline in international prices resulted in average prices declining from Rs. 145/kg in Q1FY2009 to Rs. 92.7/kg in Q4FY2009, and to Rs. 93.1/kg in Q1FY2010. Annual average prices declined 5.8% in FY2009 to Rs. 124/kg. During FY2010, although prices have increased to Rs. 109/kg in Q3FY2010, they were 6% lower than the levels prevailing in Q3FY2009.

- World aluminium prices are forecast to increase 18% in 2010 to average around US\$1,950/t. This still represents a 25% decline over the peak levels of 2007. In 2010, production is expected to exceed consumption for the fourth consecutive year and, hence, stocks are forecast to increase further to around 8 mt (12 weeks of consumption). However, major risks to this forecast include the extent to which expectations about recovering demand from developed economies are met in 2010 and the effect of large stocks, which are expected to continue to accumulate through 2010, have on prices. Developments in China and Europe will have a significant bearing on world aluminium prices. China is expected to continue to account for the majority of the growth in world aluminium production demand. Over the medium term, the growth in aluminium production in China is expected to slow, because of ban on the construction of smelters with capacity below 0.1 mtpa; stricter capital investment requirements; and more stringent environmental standards. In developed countries, lower growth in automotive production, significant increase in electricity prices, increasing costs associated with ageing technology and low economies of scale, have resulted in lower aluminium production, particularly in Europe.

Monthly Trends in International and Domestic Aluminium Prices

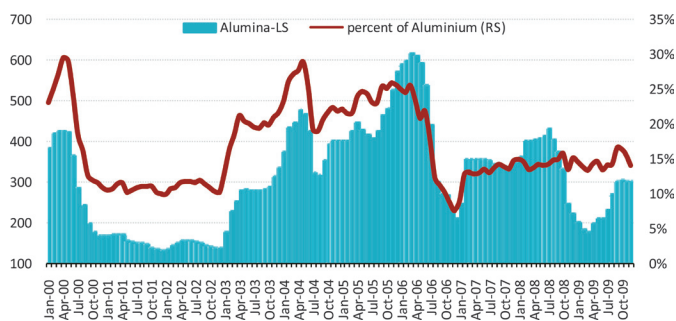


- The international market price for alumina fluctuates from time to time, and such fluctuation affects the price of alumina in the domestic market, which tracks changes in the international market prices. For most of the past two decades, alumina prices have been linked between 11-13% of the LME aluminium price. During 2008, alumina prices maintained a steady increase and reached US\$435/t in July 2008, before moderating to US\$408/t in August 2008. Since then, spot alumina prices declined 53% (or US\$210/t) between August-December 2008, as a result of

declining aluminium production and prices. Prices are estimated to have increased 7.6% in 2008 to average US\$370/t. The alumina surplus increased to 3.24 mt in 2008. During 2009, alumina prices declined to US\$178/t by March 2009 as aluminium production cuts reduced demand for alumina. The fall in the alumina price occurred despite announcements by some producers of production cuts. However, since March 2009, the alumina spot price has increased steadily and was trading at US\$305/t in December 2009. Improved sentiment surrounding future world economic activity, and thus demand for aluminium, has supported this price increase. Although prices increased from US\$189/t in 1Q2009 to US\$305/t in 4Q2009, average annual prices declined 34% in 2009 to US\$244/t.

Trends in International Alumina Prices

US\$/t, averages



- World alumina refineries were operating at 95% capacity utilisation in 2008, compared with an average of 95% in 2003-07. However, rising alumina prices have prompted a succession of brownfield expansion plans and encouraged the first major investment in greenfield plants for over 20 years. Worldwide alumina refinery capacity is estimated to have increased from around 63.7 mt by end-2008 to 64.3 mt by end-2009, to support the planned increase in aluminium production capacity. However, alumina production is forecast to decline in 2009, before recovering in 2010.

Capacity Expansions

India's primary aluminium production capacity as at end-March 2009 stood at around 1,529 kilotonnes per annum (ktpa) or 1.53 mtpa, which represents an increase from 1,204 ktpa at end-March 2008. The increase in both domestic and international demand has encouraged producers to raise their capacities. The major projects include:

HINDALCO

- Hindalco has recently commissioned Phase I of the expanded smelting capacity from 65 ktpa to 100 ktpa at its existing plant at Hirakud, Orissa. Phase II of the project is expected to result in further capacity addition to 143 ktpa. This project was completed in 2008 and production from the expanded facility is expected to reach its full capacity in second half of 2009. Further expansion from 143 ktpa to 155 ktpa was completed by August 2009. Work on the smelter expansion from 155 ktpa to 206.6 ktpa through addition of 80 pots using advanced pot technology along with 100 MW power plant has already started with expected commissioning in FY2012.
- Hindalco has also recently implemented a brownfield expansion of alumina refinery capacity at Muri, Jharkhand from 110 ktpa to 450 ktpa. Production is being ramped up in a phased manner. The entire steam and power requirement is being met by the new captive power plant (CPP). The production from the expanded facility is expected to reach its full capacity in second half of 2009. The project includes the construction of a new co-generation power plant and railway system to transport raw materials and finished products.
- Hindalco had also promoted a 55:45 joint venture (JV) with Alcan—Utkal Alumina—for setting up of alumina capacity of 1,500 ktpa at Rayagada, Orissa. It has subsequently acquired the 45% stake of Alcan. The alumina refinery is intended to have a capacity of 2,000 ktpa within three years of the refinery commencing operations. The refinery will be supplied by a 4,200 ktpa bauxite mine located nearby. The refinery is expected to be commissioned by January 2011 with alumina production expected to commence from July 2011.
- Its integrated aluminium project in Orissa under a separate company, Aditya Aluminium, comprises a 1,500 ktpa alumina refinery. The refinery will be supplied with bauxite by a 4,200 ktpa bauxite mine located at Kodingamali, which is three kilometres from the refinery. In addition, the project includes construction of a 359 ktpa aluminium smelter and a 900 MW CPP in Lapanga. The coal for the power plant is intended to be supplied by a 20 mtpa coal mine with respect to which Hindalco intends to have rights to 3,000 ktpa of coal. Major orders have been placed for both the smelter and the power plant. The technology contracts for the smelter and alumina have been executed with Aluminium Pechiney and

Alcan respectively. The first metal from the smelter is slated for October 2011. The refinery is expected to be mechanically completed by June 2013.

- Hindalco intends to build an aluminium smelter of 359 ktpa capacity near Bargawan, Sidhi District of Madhya Pradesh (MP). For this project, it has access to 3,500 ktpa of coal reserve through a JV with Essar Power to supply coal for a captive thermal power plant which is expected to have a capacity of 900 MW. First production from the smelter is expected by July 2011.
- Hindalco also intends to build an aluminium smelter at Sonahatu, Jharkhand which is 20 kilometres from Muri. This project will have a capacity of 359 ktpa along with a 900 MW CPP. The land acquisition process has already started. The Government of Jharkhand has given the water allocation clearance for 55 million cubic metres (mcm) of water from the Subarnarekha basin. The Tubed coal mine has been allotted jointly with Tata Power. The first metal from the smelter is expected by June 2013.
- The plans to extend the alumina refining capacity at Belgaum from 350 ktpa to 650 ktpa are on hold awaiting government approvals relating to bauxite mines. Instead, the specials alumina production from Belgaum will be ramped up from 138 ktpa to 316 ktpa. In addition, a 18 MW Cogen power plant and a Railway siding facility will also be taken up as a part of the project to reduce cost of production substantially.

NALCO

- Nalco is implementing an expansion project at an estimated cost of Rs. 44 billion. The expansion project will raise installed capacity of bauxite mines from 4,800 ktpa to 6,300 ktpa; alumina production capacity from 1,575 ktpa to 2,100 ktpa; aluminium production capacity from 345 ktpa to 460 ktpa; and power generation capacity from 960 MW to 1,200 MW. The commissioning of smelter plant has been started as per schedule. As of July 2009, around 150 pots out of total 240 pots had been commissioned. The refinery is expected to become operational by end-2009.
- The company is also looking for value-addition projects, as well as for expanding its activities, both in India and abroad. It has signed a Memorandum of Understanding (MoU) with Government of South

Sumatra, Indonesia for setting up a 500 ktpa aluminium smelter along with a 1,250 MW CPP; and with Kerman Development Organisation, Iran for setting up a 230 ktpa smelter.

- Nalco is also negotiating with the Government of Andhra Pradesh (AP) for grant of bauxite mining lease in Vishakapatnam and East Godavari Districts for setting up a 1,400 ktpa alumina refinery near Vishakapatnam.

VEDANTA RESOURCES/STERLITE

- Vedanta Resources (VR) has an 80% stake in SIL, an 80% stake in Malco, a 41% stake in Balco, and a 94% stake in Vedanta Aluminium Ltd. (VAL). At present, SIL holds a 51% ownership interest in Balco. The aluminium division of VR is comprised of three companies—SIL/Balco, Malco, and VAL. VR has recently announced a US\$7.8 billion investment programme to increase its fully integrated aluminium smelting capacity to nearly 2.6 mtpa by 2012. Upon completion, this is expected make it Asia's largest and among the top 5 integrated producers of aluminium worldwide.
- Balco has aluminium capacity of 350 ktpa at Korba, Chattisgarh. In 2006, Balco expanded capacity for aluminium production from 100 ktpa to 350 ktpa at its Korba Aluminium Smelter in Chattisgarh. The project also included a 540 MW coal-fired CPP to cater to the enhanced smelting requirement. The project was completed with an estimated investment of US\$550 million. Balco has also commenced work on a new 325 ktpa smelter, along with a 1,200 MW captive power. The first metal production is expected from October 2010.
- In 2003-04, VAL commenced construction of an alumina refinery at Lanjigarh, Orissa. At present, SIL Industries holds a 29.5% ownership interest in VAL. The other 70.5% is owned by VR. VAL is intended to be a fully integrated alumina and aluminium producer with an alumina refinery of 1,000 ktpa, expandable to 1,400 ktpa; with an associated 75 MW CPP, expandable to 90 MW. In March 2007, VAL began progressive commissioning of this new alumina refinery. One of the two units of the associated CPP was commissioned in February 2007. The Lanjigarh alumina refinery produced 267 kt of alumina in FY2008, feeding VR's captive requirements. The refinery produced 586 kt of alumina in FY2009. The second production stream of the alumina refinery

was commissioned in April 2009. Further, VAL is expanding its alumina refining capacity at the Lanjigarh refinery from 1,400 ktpa to 2,000 ktpa through debottlenecking, which is expected to be completed by March 2010, and from 2,000 ktpa to 5,000 ktpa by constructing a second 3,000 ktpa refinery with an associated 210 MW coal-based CPP, which are expected to be commissioned by mid-2011. VR is also implementing a bauxite mining project in the Niyamgiri Hills in Orissa. The project, due to start by late-2009, is expected to meet the requirements of the Lanjigarh project.

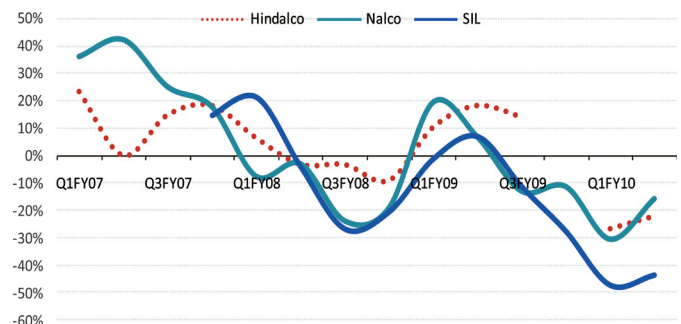
- VAL is also building a greenfield 500 ktpa aluminium smelter, together with an associated 1,215 MW coal-based CPP, in Jharsuguda, Orissa. The project will be implemented in two phases of 250 ktpa each. Commissioning of the first phase commenced in May 2008, six months ahead of schedule, and was fully commissioned in May 2009. The second phase is expected to be progressively commissioned from June 2009 through March 2010. The commissioning of the CPP is expected to meet the power requirements of the new Jharsuguda smelter and all other power requirements of the facility. In a subsequent project, VAL is also setting up another 1,250 ktpa aluminium smelter in Jharsuguda which is expected to be progressively commissioned from March 2010 and to be completed by September 2012.
- VR is also setting up a 325 ktpa aluminium smelter project together with an associated 1,200 MW CPP in Korba. The Korba Project will be fully commissioned by September 2011. The associated captive thermal power plant will comprise four units of 300 MW each. The commissioning of the power plant units is being scheduled to meet the power requirement of the new Korba smelter. Correspondingly, Vedanta will also increase its alumina production capacity at Lanjigarh from 1,400 ktpa to 5,000 ktpa. The estimated investment in the aluminium smelter projects is US\$5.65 billion for the Jharsuguda Project and US\$2 billion for the Korba Project, to be phased over four years.

Review of Latest Financials

During Q3FY2010, inspite of moderate growth in production, Hindalco's operating revenues from aluminium business declined 4.8% (yoy) to Rs. 18.85 billion. However, the rate of decline was lower than 22% (yoy) in Q2FY2010, and 27% (yoy) in Q1FY2010 primarily

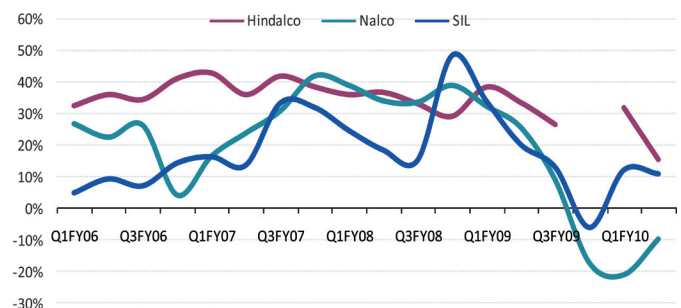
because of a recovery in aluminium prices. Domestic aluminium prices declined 6% (yoy) in Q3FY2010, compared with declines of 30% in Q2FY2010, and 37% (yoy) in Q1FY2010. Lower prices resulted in a 17% (yoy) decline in PBIT for aluminium business to Rs. 4.38 billion in Q3FY2010. PBIT margins from aluminium business declined from 26.8% in Q3FY2009 to 23.7% in Q3FY2010, but have improved from their recent low of 15.7% in Q2FY2010.

Yoy Growth in Revenues from Aluminium Business



Other primary aluminium producers reported a mixed trend in OI growth from Q3FY2009 onwards. While Nalco's operating revenues from aluminium business increased 47.6% (yoy) in Q3FY2010 to Rs. 11.41 billion (decline of 16% (yoy) in Q2FY2010), SIL's net sales in the aluminium segment declined 17.1% (yoy) in Q3FY2010 to Rs. 6.93 billion (decline of 43.7% (yoy) in Q2FY2010). Both also reported a sharp decline in PBIT from aluminium business. However, there has been a significant improvement in Q3FY2010 on a (qoq) basis.

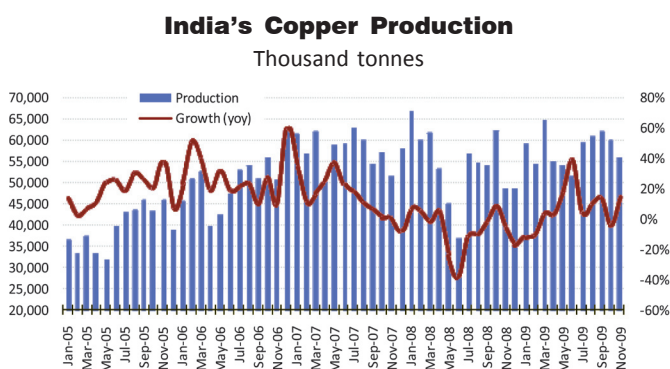
PBIT Margins from Aluminium Business



Till recently, rising prices, healthy demand growth, and cost competitiveness have ensured strong financials for the integrated players and the earnings appeared to be relatively stable as compared to many other industries. Although world (and domestic) aluminium prices have declined significantly on average in 2009, prices are expected to be firm to increasing over the short-term.

Recent Developments

- India's cumulative copper production in India declined 9% during FY2009 to 640.5 kt. Production growth decelerated in the second half of FY2009 because of lower conversion margins, higher copper prices, slowdown in demand, and declining customs duty differential (caused by duty protection from imports). However, after four successive quarters of decline, India's copper production has increased 18.8% (yoy) in Q1FY2010, and 10.1% (yoy) in Q2FY2010 primarily because of inventory build-up in Q1FY2010 rather than because of significant demand recovery. On a calendar year basis, copper production increased 6.2% (yoy) during 11M2009 (January-November 2009) to 642 kt.



- Hindalco's output increased 24% (yoy) to 229 kt in 8MFY2010. Hindalco's production during Q1FY2009 was lower due to the planned shutdown of smelter-1. The high increase in 8MFY2010 was mainly on account of lower quantum of outsourced production. SIL's total cathode production increased 7.9% (yoy) primarily on account of a planned 26 day maintenance shutdown in Q1FY2009. Hindustan Copper Limited (HCL's) copper output declined 59% (yoy) to 8.9 kt.

India's Copper Production
Thousand tonnes

8MFY	Volume (thousand tonnes)		Change
	2009	2010	
Hindalco	184,277	228,561	24.0%
HCL	208,118	224,646	7.9%
Sterlite	21,702	8,931	-58.8%
Total	414,097	462,138	11.6%

- As Indian smelters rely on overseas markets for almost their entire copper concentrates requirement,

their profitability is strongly dependent on the international variation in Treatment Charges and Refining Charges (or TcRc charges which is defined as the difference between the cathode prices and the concentrate prices). The TcRc for Indian producers are substantially influenced by the benchmark price set by certain large Japanese and Chinese smelters. For supplies from July 2006 to Japanese smelters, major suppliers negotiated a substantial decline in TcRc. For supplies from Chile (the world's largest mine producer of copper), the producers of concentrates and the integrated smelters agreed to reduce TcRc from 95/9.5 to 76/7.6 for supplying after second half of year 2006. The annual negotiations for copper concentrate TcRc between the Japanese smelters and BHP Billiton were settled at 60/6 in 2007. However, tight concentrate situation resulted in TcRc declining to 45/5 for 2008. The long term TcRc contracts for 2009 have been significantly higher than in 2008 due to depressed demand for refined copper and temporary surplus in concentrate availability at the time of negotiations. In January 2009, the annual TcRc between the Japanese smelters and BHP Billiton were settled at 75/7.5 for 2009, compared with spot rates of 80/8. Subsequently, Japan's copper smelters reached mid-year agreements with BHP Billiton for 50/5. The main reason for lower TcRc for 2H2009 was tight copper concentrate supply due to high levels of imports by China. The market could transform from a surplus of 484 kt in 2009 to a deficit of 150 kt in 2010 resulting from increased foundry capacity in Asia, and negligible growth in availability of concentrates. This would be reinforced by the prospects for 2011, where growth of molten copper production in Asia far exceeds the increase in concentrate production capacity globally, causing an increase in the deficit of concentrates to reach around 1.1-1.5 mt.

- Because of a global shortage situation since 2003 caused by slow growth in production and rising demand, prices of copper cathode maintained a rising trend since 2003, though there was a moderation in late-2006. During 2007, prices fell very rapidly in early January 2007, on chart based selling. Several labour contracts were resolved in December 2006 removing a key factor deterring selling. Exchange stocks also continued to edge upward. However, after a decline to US\$5,677/t in February 2007, copper prices rebounded to US\$8,009/t in October 2007 led by a surge of copper imports into China, in part due to re-stocking. On an annual basis, copper prices increased only 5.9% in 2007 to US\$7,118/t (US\$3.23/lb), compared with an annual average of

Concentrates' Production and Surplus/Deficit

Thousand tonnes

CY	Production				Surplus			
	2007	2008	2009	2010E	2007	2008	2009	2010E
Africa	697	832	887	1,070	110	248	253	259
America	6,620	6,448	6,136	6,585	3,297	3,266	3,209	3,412
Asia	2,803	2,720	3,109	3,134	-3,146	-3,258	-2,841	-3,465
Europe	1,483	1,441	1,464	1,533	-851	-909	-766	-784
Oceania	1,000	1,007	1,016	1,029	613	588	634	629
Production Loss			-65	-821			-5	-197
Total	12,603	12,448	12,547	12,530	23	-65	484	-146

55.8% during 2004-06. During 2008, copper prices increased sharply to average US\$8,685/t in April 2008, primarily because of a production deficit, drawdown of stocks, and investment demand. Prices peaked at US\$8,985/t on July 3, 2008, subsequently moderating to an average of US\$8,414/t in July 2008. Between August-December 2008, prices declined 63% (or by US\$5,342/t) to US\$3,072/t in December 2008. Prices averaged US\$3,905/t in 4Q2008, compared with US\$7,680/t in 3Q2008. On an annual basis, prices declined 2.3% in 2008 to average US\$6,956/t. Prices declined because of a sudden decline in demand, strengthening US dollar, concerns over the global economy, and rising physical exchange inventories. The current financial crisis raises issues for the future of commodities, including base metals, as an asset class. While the counter-cyclical relationship between commodities and equities/bond markets would suggest that commodities could see a surge in interest from the current turmoil as they can offer investors a safer haven from inflationary pressures, commodities are still categorised as a riskier asset class.

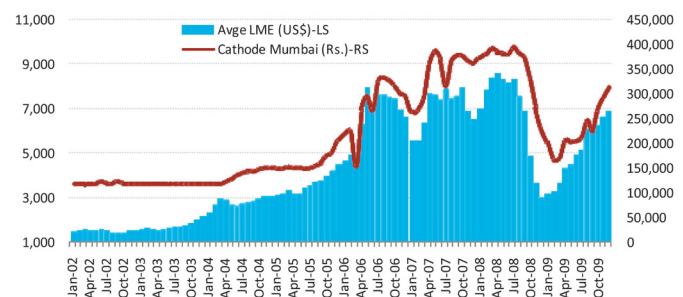
- During 2009, prices have recovered since February 2009 initially due to supply problems rather than any perceptible demand recovery. Labour disputes significantly curtailed production but there has been a lengthy list of issues impinging on supply, notably declining ore grades; lack of equipment and skilled labour; power and water constraints; project delays; accidents; and rising costs. Even with the sharp decline in prices since mid-2008, prices remain well above supply costs compared with other metals, and announced cuts in production have been less. Prices have also increased in recent months because of a recovery in demand primarily from China. Although demand has declined since October 2008, it has recovered from April 2009 driven by Chinese demand. During 2009, China has remained the primary

driver behind the increase in prices, and has compensated almost entirely for the contraction in the demand of copper in the developed countries. Refined stocks had increased from 962 kt at end-October 2008 to 1,323 kt in February 2009, but have since then declined to 1,192 kt in September 2009. Copper prices have increased from their recent low of US\$3,428/t in 1Q2009 to US\$6,648/t in 4Q2009. During December 2009, copper prices averaged US\$6,982/t, representing an increase of 127% over their December

2008 lows. However, annual average price of US\$5,150/t in 2009 was still 26% below the average for 2008.

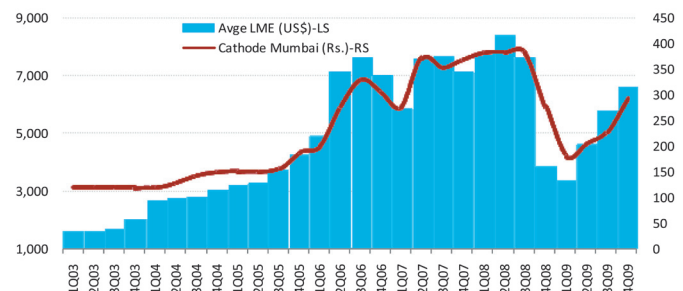
Monthly Trends in International and Domestic Copper Prices

Average per tonne



Quarterly Trends in International and Domestic Copper Prices

Average per tonne



- Reflecting the global trend of rising prices, domestic refined cathode prices per kg in Mumbai increased 24.2% in FY2008 to Rs. 372/kg, compared with an increase of 70.8% during FY2007, and 20.9% during FY2006. Prices increased by an annual average of 37% during FY2006-08. During FY2009, domestic prices increased to Rs. 397/kg in July 2008, but subsequently declined 57% to Rs. 172/kg in March 2009. Average prices declined 17% in FY2009

to Rs. 308.5/kg. The decline in domestic prices has been less than the decline in world prices primarily because of the sharp rupee depreciation. Indian producers benchmark their prices to landed cost of imports. However, prices have recovered in FY2010, with average prices in December 2009 being 86% above their lows of February 2009.

World Copper Balance

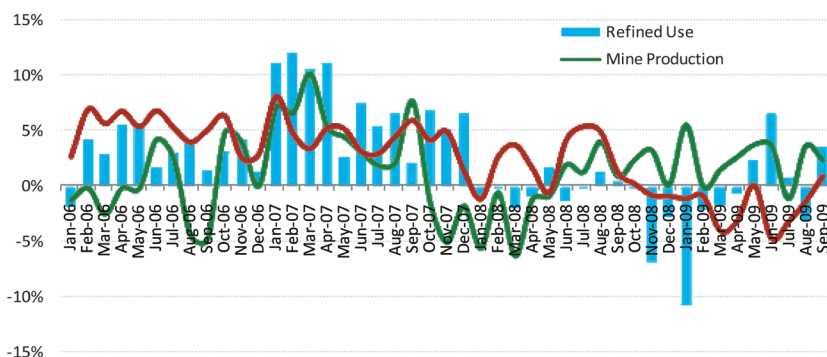
CY	Thousand tonnes					Growth		
	2006	2007	2008	2009	2010	2008	2009	2010
Mine Production	14,990	15,463	15,388	15,835	16,891	-0.5%	2.9%	6.7%
Refined Production	17,295	17,944	18,232	18,093	18,218	1.6%	-0.8%	0.7%
Refined Usage	17,043	18,168	18,006	17,725	17,679	-0.9%	-1.6%	-0.3%
Balance	252	-224	225	368	539	-200.4%	63.6%	46.5%

- The sharp rise in copper prices during 2009 is largely attributable to a significant increase in China's demand for refined copper and the closure of mine capacity in late 2008. For 2009, world copper prices are forecast to average US\$5,000/t (US\$2.27/lb.), reflecting a decline of 28% over the annual average of 2008. The fall in prices reflects sharp contractions in global copper demand and the associated increase in world stocks to around 5 weeks of consumption. However, copper prices are forecast to increase from US\$4,046/t in 1H2009 to around US\$6,065/t in 2H2009 because of a recovery in world economic conditions and some stock building. In 2010, the world copper price is forecast to increase by 30-35% to average US\$6,700/t (US\$3/lb.), as an expected increase in copper demand leads to declining copper stocks. At present, there is a significant amount of idled copper production capacity, which could be restarted relatively quickly in the event of sustained higher prices. As a result, the rate at which idled capacity is restarted represents a risk to this price forecast. A quicker and larger than forecast restart of idled capacity could place downward pressure on prices.
- In 2009, world refined production is estimated to have exceeded consumption, resulting in an increase in stocks. According to ICSG projections of October 2009, the refined copper market balance for 2008 showed a surplus of about 220 kt. Projections for 2009 and 2010 indicate a surplus of at least 368 kt and 539 kt, respectively. However, since then, there has been a marginal recovery in copper usage and a decline in inventories. Recent projections by COCHILCO indicate a market deficit of 113 kt in 2008. The surplus for 2009 is expected at 198 kt, as compared with

541 kt in the earlier projections of January-April 2009. For 2010, the surplus is expected at 308 kt. The pace of world economic recovery in 2010, especially in major OECD economies, is a key risk factor associated with copper demand-supply and price forecast. If economic growth recovers faster than currently assumed, world copper demand, and therefore prices, could be higher than currently forecast. Alternatively, if economic growth in key copper consuming nations proves to be weaker than currently assumed, copper prices could average significantly lower than currently forecast.

- World mine production is estimated to have declined 0.5% in 2008 because of scheduled commencement of new capacity offset by significant supply disruptions caused by labour disputes, equipment failure and lower ore grades. World mine production is estimated to have increased 2.9% (yoy) in 9M2009. While concentrate production increased 1.8% (yoy), solvent extraction-electrowinning (SX-EW) production increased 7.4% (yoy). Indonesia, where production increased by 331 kt (recovering from 2008 operational constraints), was the main contributor to production growth. Lower output in the two leading world producers—Chile and WE, as well as Canada—which totalled about 180 kt, partially offset growth in other countries. According to recent data by the International Copper Study Group (ICSG), world

Monthly Growth in World Copper Mine Production, Refined Production, and Refined Usage
yoy growth

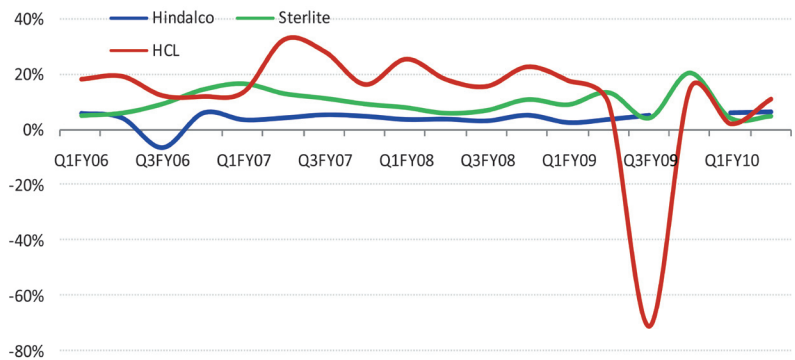


refined copper production declined 0.5% (yoy) in 9M2009. Refined consumption declined 0.8% (yoy) in 9M2009, with increases from mid-2009.

Review of Latest Financials

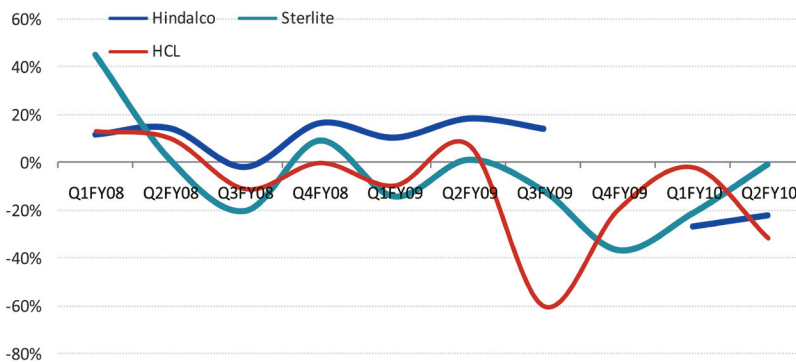
During Q3FY2010, Hindalco's revenues from copper business increased 60% (yoy) to Rs. 34.32 billion, primarily because of a strong recovery in prices. The (yoy) growth in Q3FY2010 reversed four quarters of OI declines. PBIT increased 38% (yoy) because of price increases.

Trends in PBIT Margins from Copper Business



SIL's revenues from copper business increased 48% (yoy) to Rs. 33.88 billion in Q3FY2010, thereby reversing four quarters of decline. The PBIT margins from the copper business declined from 13.6% in Q2FY2009 to 5% in Q2FY2010, and 4.3% in Q3FY2010 attributable to lower sales, lower TcRcs, and lower product prices.

Trends in Yoy Growth in Revenues from Copper Business



For primary producers, decline in prices and stagnant demand are expected to result in stagnation or decline in revenues and profits for the copper producers during 2009. However, the expected increase in TcRc charges for 2009 settled by Indian producers could result in higher margins on smelting.

COAL

Recent Developments

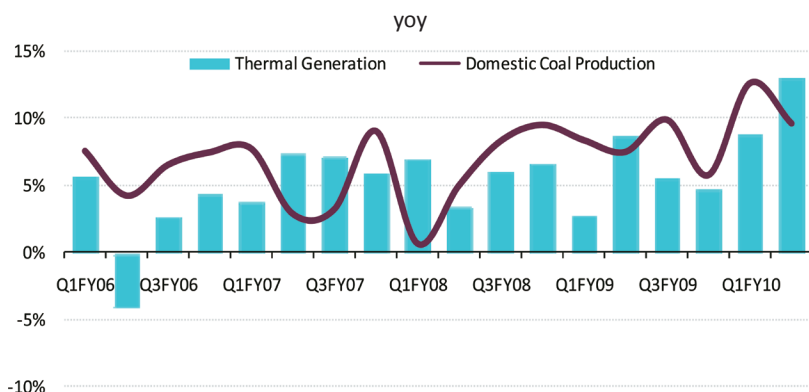
- As the following table highlights, India's coal production increased 4% (year on year or yoy) during Q3FY2010 (October-December 2009) to 136.29 million tonnes (mt). Coal production growth has increased from 5.8% (yoy) in Q4FY2009, but declined from 12.7% (yoy) in Q1FY2010. Overall, coal production increased 8.3% in 9MFY2010 to 368.1 mt.

India's Coal Production

FY	Production (mt)				Change	
	2007	2008	2009	2010	2009	2010
April	31.53	31.72	35.00	39.61	10.3%	13.2%
May	33.23	33.40	36.33	40.04	8.8%	10.2%
June	31.92	32.22	34.19	39.22	6.1%	14.7%
July	30.70	31.03	32.73	35.91	5.5%	9.7%
August	29.20	31.52	33.38	37.67	5.9%	12.9%
September	29.20	31.03	34.51	36.75	11.2%	6.5%
October	33.59	36.58	40.58		10.9%	
November	36.40	39.21	42.97		9.6%	
December	39.49	42.81	46.82		9.4%	
January	42.10	45.41	48.29		6.3%	
February	39.29	43.86	46.49		6.0%	
March	48.46	52.97	55.70		5.2%	
Total	425.11	451.76	486.99	229.20		
Q1 (April-June)	96.68	97.34	105.52	118.87	8.4%	12.7%
Q2 (July-September)	89.10	93.58	100.62	110.33	7.5%	9.7%
Q3 (October-December)	109.48	118.60	130.37	0.00	9.9%	
Q4 (January-March)	129.85	142.24	150.48	0.00	5.8%	

- The power sector accounts for around 75% of India's coal demand. Thermal power generation in India

Growth in India's Thermal Power Generation and Domestic Coal Production



¹ These do not include thermal (steam) units with capacity less than 20 MW (total capacity of thermal steam units with capacity less than 20 MW is 34.2 MW); gas and diesel units not supplying committed power to grid, hydro power plants having capacity of less than 2 MW.

increased 4.8% (yoy) during Q3FY2010, compared with 11.2% (yoy) during Q2FY2010.

- During 9MFY2010, power generation by the power utilities monitored by the Central Electricity Authority (CEA)¹ increased 6.8% (yoy) to 383,602 gigawatt hour (GWh). The increase in power generation was on higher generation capacity. The increase in generation was because of a 10.5% (yoy) increase in thermal power generation to 308,837 GWh. By comparison, while nuclear power generation increased 15% (yoy), hydro power generation declined 8.2% (yoy). Coal-based thermal power plants had an installed capacity of 80,396 megawatt (MW) at end-September 2009, accounting for 53.1% of total installed capacity of 152,360 MW.

- Coal prices in the international market have witnessed high level of volatility. Steam coal prices had increased significantly during 2004 and the first half of 2005 because of strong growth in coal fired electricity generation in Asia and a tightening of supply. However, increased supplies—mainly from a rapid expansion of thermal coal exports from Indonesia—spurred a decline in prices during the second half of

2005. However, a recovery occurred in 2006-2007, with prices stabilising at around US\$52-53/t (Newcastle) during April-July 2006, but subsequently declined to US\$49.8/t in December 2006. Overall steam coal prices increased 3.1% in 2006 to US\$49.1/t.

- During 2007, prices increased 34% to average US\$65.7/t. The high increase in prices was because of supply disruptions, particularly in Australia's Hunter Valley region, and strong demand growth in Asia that resulted in falling thermal coal stocks. Storms in the Hunter Valley during June 2007 disrupted exports through the port of Newcastle. Because of infrastructure

constraints, these were not made up during the second half of the year. Consequently, Australia's thermal coal exports grew by only 0.7% in 2007 to 112 mt. During 2008, Newcastle spot prices continued to rise sharply almost doubling from US\$92/t in January 2008 to US\$180/t in July 2008. Floods in Queensland's coal producing region, disruptions to South Africa's coal production caused by power supply problems, and increased demand in China because of severe winter storms in the south of the country that led to China's central government banning coal exports, all contributed to a tighter global demand and supply balance in 2008. However, since then, thermal coal prices declined sharply to US\$79/t in December 2008. Although thermal coal prices increased 93.4% in 2008 to average US\$127/t, they declined 43% during 4Q2008. The decline has coincided with a decline in the price of other energy commodities. During 2009, thermal coal prices declined further to US\$61/t in March 2009, before increasing to US\$82/t in December 2009. On an annual basis, thermal coal prices declined 44% in 2009 to average US\$72/t. Price changes have mirrored the movement in energy prices during 2009. Australian thermal coal contract prices for JFY 2008 (2008-09) were settled at US\$125/t, an increase of 125% over 2007-08. In March 2009, the contract price for thermal coal between Australian suppliers and Japanese power utilities was settled at around US\$70-\$72/t for JFY 2009 (2009-10), which represented a decline of 44% over the contract prices for JFY 2008. The sharp decline reflected falling electricity demand across Asia and expansions to export capacity in major regional coal suppliers such as Australia and Indonesia. Despite the significantly lower settlement, contract prices for the JFY 2009 in real terms remain the second highest since JFY 1986. Falling electricity demand associated with the

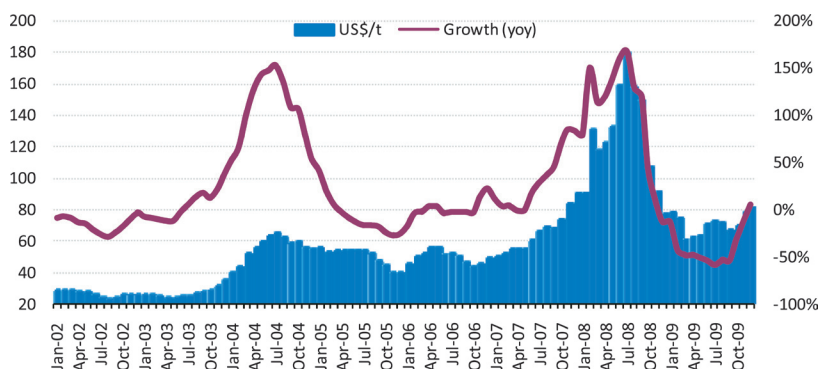
global economic downturn has resulted in lower thermal coal import demand, which in turn has created excess capacity, placing downward pressure on prices. However, recent import demand from China and India, and increase in energy prices has provided some support for thermal coal prices.

- India's imports of thermal coal are forecast to increase by 24% in 2009 to 42 mt. Coal despatches to power utilities increased 1.6% (yoy) during H1FY2010 to 140 mt. The despatch could have been more but for deteriorating law & order situation at CCL and inadequate availability of wagon, particularly at Talcher Field of MCL. Thus, in spite of having sufficient coal stock at pitheads, the constraints in logistics infrastructure affected desired growth in off-take. Partly because of disruptions to domestic supply, there have been reports of coal shortages at India's power stations. In July 2009, the Government announced that only 70% of the planned 14.5 GW of new electricity generation capacity will be added in FY2010, because of coal shortages. Most of the coal used in these new power stations is expected to be sourced from imports, leading to a forecast of total coal imports of 50 mt in 2010.

- Traditionally, coking coals have commanded a price premium over steam coals reflecting their higher carbon content. Coking coal prices had increased significantly till late-2005 because of significant increase in world coking coal demand from 477 mt in 2000 to 633 mt in 2005 caused by high growth in world steel production. Average free on board (fob) export unit value for Australia, Indonesia, the US and South Africa increased by 15-40% in 2005, after increases of 30-60% in 2004. Export prices reached a peak in late-2005 before softening in 2006 and 2007. The benchmark contract price for hard coking coal was settled at US\$98/t for JFY2007, representing a decline over JFY2006 levels of US\$116/t, and JFY2005 levels of US\$125/t. Hard coking coal negotiations are typically settled on benchmark Saraji and Goonyella coals, with lower quality hard coking coals trading at a discount to these. However, contract prices for most hard coking coals tripled for JFY 2008 rising to around US\$300/t for premium hard coking coal. Coking coal price increases reflected a supply constraint in the face of a strong and growing global steel demand. Supply difficulties resulted from congested Australian coal export infrastructure and high rainfall in Queensland during the March quarter 2008. A significant increase in international

Trends in International Thermal Coal Prices

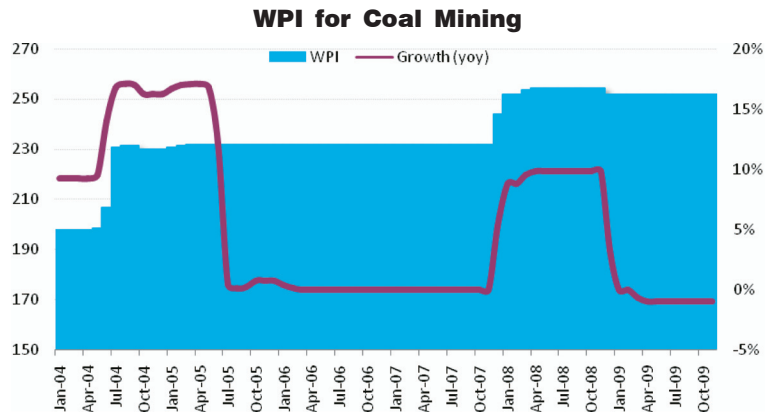
US\$/metric tonne for Australian thermal coal, 1200-btu/pound, less than 1% sulphur, 14% ash, FOB Newcastle/Port Kembla



prices for oil and gas has led to some Asian countries, including China and India, moving further toward coal-based power generation.

- However, following substantial increases in JFY 2008, contract prices for coking coal metallurgical coal have declined substantially for JFY 2009, to US\$129/t. In March 2009, Japanese steel mills were reported to have negotiated a price of US\$129/t for Queensland hard coking coal brands such as Saraji and Peak Downs. Although this represents a 57% decline over JFY 2008 levels, it is still the second highest contract price on record. Lower quality hard coking coals were settled at prices of US\$115-125/t, while semi-soft prices were settled at around US\$80/t. Steel production cuts from the second half of 2008 and continuing in 2009 have significantly reduced demand for coking coal. Exchange rate movements are also an important determinant of the contract prices which are settled in US dollar terms. The value of the US dollar has increased significantly against the Australian dollar over the past year. Consequently, there has been downward pressure on the negotiated prices (in US dollars) for JFY 2009 as a result of the recent exchange rate movements. Coking coal prices are expected to decline in 2009 and 2010, as the negative effects of the global economic downturn on steel production and consumption in China, North America and Europe are expected to linger until 2010. In addition, recent additions to coal supply infrastructure is projected to ensure supply outpaces demand growth in the short term.

- In India, domestic coal prices had increased significantly during FY2004-05, with the wholesale price index (WPI) increasing 15.3% during FY2005. However, prices increased 3.7% during FY2006. In spite of an increase in international coal prices, domestic prices remained unchanged during FY2007. In December 2007, CIL increased coal prices by 10%



across the coal companies of CIL except for North Eastern Coalfields where it was increased by 15%. As a result, the WPI for coal mining increased 2.7% in FY2008. During FY2009, coal prices remained stable till end-2008, with a marginal decline since December 2008. Overall, the WPI for coal mining increased 6.6% in FY2009.

Review of Latest Financials

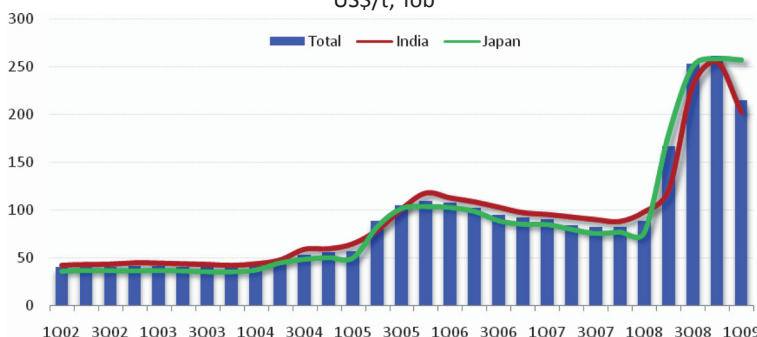
According to recent data released by CIL, gross

Trends in Gross Sales of CIL and Subsidiaries

FY	Rs. Million				Growth		
	2005	2006	2007	2008	2008	2009	
ECL	38,933	43,751	44,946	40,577	48,557	-9.7%	19.7%
BCCL	28,841	34,670	32,720	33,860	38,665	3.5%	14.2%
CCL	40,437	45,129	45,064	50,605	59,784	12.3%	18.1%
NCL	51,040	53,151	54,088	63,888	76,179	18.1%	19.2%
WCL	45,047	49,863	50,122	56,813	65,058	13.3%	14.5%
SECL	65,445	71,272	76,463	87,280	101,666	14.1%	16.5%
MCL	35,790	39,451	45,075	52,911	64,876	17.4%	22.6%
NEC/CIL	1,061	2,684	2,814	2,723	3,181	-3.2%	16.8%
Total—CIL	306,595	339,972	351,292	388,657	457,966	10.6%	17.8%

Australia—Coking Coal Export Prices

US\$/t, fob



realisation was Rs. 458 billion in FY2009 primarily because of higher growth in production and higher sales through e-auction. Total coal sold under e-auction increased from 26.4 mt in FY2008 to 38.6 mt in FY2009.

CIL made a profit before tax and dividend of Rs. 57.44 billion during FY2009, as compared with Rs. 87.39 billion during FY2008. The decline is because of an upward revision in wages. However, after taking into account

the impact of upward revision of wages, CIL reported a profit before tax and dividend of Rs. 42,386 million in FY2009. The upward revision of wages is from July 2006 and January 2007, respectively for wage board employees and executives. Except ECL and BCCL, all subsidiaries reported profits during FY2009.

Outlook

Rising prices, healthy demand growth, and improved productivity has ensured improved financials for CIL and SCCL since FY2004. Consistently increasing demand-supply gap, increased production, steady reduction in workforce, lower quantum of wage hike, productivity improvement measures and flexibility in changing coal prices are the factors which may have a positive impact on CIL's profitability on a consolidated basis. However, performance variations across subsidiaries may continue.

Trends in PBT of CIL and Subsidiaries

FY	Rs. Million					Growth	
	2005	2006	2007	2008	2009	2008	2009
ECL	-6,792	3,720	1,181	-10,267	-21,057		105.1%
BCCL	-9,594	2,051	523	971	-13,770	85.6%	
CCL	4,378	11,650	10,203	10,353	7,638	1.5%	-26.2%
NCL	19,760	21,163	21,776	27,638	31,310	26.9%	13.3%
WCL	9,353	14,470	10,544	9,302	5,161	-11.8%	-44.5%
SECL	15,809	12,861	17,778	20,674	18,179	16.3%	-12.1%
MCL	14,694	18,372	20,814	25,048	25,803	20.3%	3.0%
CMPDIL	17	39	45	50	67	11.9%	34.8%
CIL/NEC	13,283	19,793	28,648	26,426	36,577	-7.8%	38.4%
Total	60,908	104,118	111,513	110,194	89,908	-1.2%	-18.4%
Less Dividend from subsidiaries	12,893	17,351	26,291	23,783	33,297	-9.5%	40.0%
Adjustment for deferred Revenue Income	925	1,118	803	974	830	21.4%	-14.8%
Total—CIL	48,940	87,885	86,025	87,385	57,441	1.6%	-34.3%

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