Global Equity Research - India

Initiating Coverage

11 December 2006

Sector: Metal

KARVY STOCK BROKING LIMITED

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Hindalco Industries (Rs174)

Underperformer

Growth momentum unlikey to sustain

Target Price Rs165

We are initiating our coverage on Hindalco with an Underperformer rating, as we expect the LME Aluminium prices at best to hover around US$2,800 per ton, which we believe is the peak and there is little head room. Though the global demand would increase by an average of 5% p.a. and the supply is not likely to see any sudden spike, our fear stems from the fact that - China can play spoil sport. Consequently, we have factored a 15% reduction in the aluminum price in a staggered manner over the next 2 years. As a result, the growth in aluminium revenues for Hindalco would be driven only by muted volume growth of around 9%. Though copper (which accounts for 50% of revenues) is making a turnaround, is not likely to significantly boost the operating profit, as its current contribution is less than 10% of operating profit, which at best would go to 20%. Since both the businesses are unlikely to fire and both the businesses are likely to be capital guzzlers, we believe the valuations at the current levels are unsustainable.

Aluminium division to benefit from volume growth and high aluminium price: Our take is that the aluminium prices are likely to decline; nevertheless it is unlikely to go below US$2,000/ton levels. While doing our model, we have factored a base aluminium price of US$2,400/ton for FY07, FY08 and FY09. Assuming that, China does not play spoil sport, stable aluminium prices would ensure that it gets the full benefit of its capacity expansion. Our understanding is that Hindalco's alumina capacity is likely to increase from 1.16 mn ton in FY2006 to 1.5 mn ton by FY09, which is an increase of almost 30%. Aluminium capacity will go up by 18% from 0.45 mn ton in FY2006 to 0.54 mn ton per annum by FY2009. We estimate aluminium sales and EBIDTA to grow at a CAGR of 9% and 13% respectively over the next three years, aided only by volumes.

Copper capacity expansion to boost EBIDTA: The company has completed the expansion of copper smelting capacity at Dahej from 0.25 mn ton p.a. to 0.5 mn ton p.a. By having the largest single location smelter in the world helps it to gain from economies of scale by keeping the operating costs low. We, in our estimates for FY07, FY08 and FY09, expect copper division's capacity utilization rate at 60% (0.3 mn ton), 80% (0.4 mn ton) and 90% (0.45 mn ton) respectively. Further we have assumed constant EBIDTA of 15 cents / pound. Based on higher capacity utilization led volume growth, the revenues from copper sales and EBIDTA are expected to grow at a CAGR of 37% and 57% respectively over the next three years.

Risk reward ratio is unfavourable at current price: Based on our assumption that the LME aluminium prices are likely to decline by 15% from current level of US$2,800/ton in FY08 and FY09, the growth momentum would halt post FY07. Our fair price for the stock is Rs165 at P/E multiple of 7.5x of FY2008E EPS of Rs22 (Please refer to the PE band chart). At the current price of Rs183, we believe the stock is fully priced. We have also tried to find out whether the replacement cost is significantly higher. From our analysis, the replacement cost comes to Rs206 per share, which is marginally higher than the current market price. Consequently, we rate the stock as **Underperformer**.

Hindalco Industries

Reuters / Bloomberg code	HALC.BO / HNDL @ IN
Market cap (Rs. Bn)	188
Market cap (US$ mn)	4,174
Shares outstanding (mn)	1,044
52 - week High / Low (Rs.)	251/124
Major shareholders (%)	
Promoters	26.8
FIIs	33.3
Banks / MFs / Fis	17.9
Public	22.0

Y/E March (Rs. Mn)	FY2005	FY2006	FY2007E	FY2008E	FY2009E
Revenues	95,233	113,965	181,688	201,341	215,816
Operating profit	22,765	26,051	37,026	42,755	42,915
Net profit	12,669	16,525	21,701	25,449	25,726
EPS (Rs.)	13.7	16.8	20.8	22.0	22.2
EPS growth (%)	50.5	22.8	24.0	5.6	1.1
Operating margin (%)	23.9	22.9	20.4	21.2	19.9
PER (x)	13.2	10.7	8.7	8.2	8.1
EV / EBIDTA (x)	7.2	6.4	4.6	4.1	4.1
Price / Sales (x)	1.8	1.6	1.0	1.0	1.0
Dividend yield (%)	1.1	1.2	1.4	1.5	1.7
RoCE (%)	12.0	12.9	13.7	13.5	11.9
RoE (%)	17.5	19.2	20.1	18.6	15.7

Source: Company and Karvy Estimates

Investment Highlights

Aluminium division to benefit from volume growth and high aluminium price

The biggest worry in any commodity company is a possibility of a sharp correction in the price realization. Average LME aluminium price has been about US$2,600/ton till date in FY2007, up by 27% compared to FY2006. It touched a low of US$2,400/ton in May 2006 and is currently quoting at US$2,775/ton. The lowest price in FY2007 has been US$2,400/ton. We believe that the aluminium price is unlikely to go below US$2,000/ton as the cash manufacturing cost itself has gone up to US$2,000/ton as can be seen from the table given below. So, whenever aluminium price dips below US$2,000/ton, the non-integrated aluminium making companies will start making losses and demand-supply equilibrium will be restored.

Exhibit 1: Cash production cost estimate

Cash cost of production for a non-integrated aluminium smleter	(in US$)
2 ton of alumina @ 400 CIF per ton - for 1 ton of aluminium	800
Power cost - 16,000 kwh / unit @ 5 cents per kwh / unit	800
Calcined petroleum coke - 0.4 ton @ 400 per ton	160
Labour cost	100
Other manufacturing overheads - 10% of direct manufacturing costs	186
Total	2,046

Source: Industry and Karvy Estimates

Our take is that the aluminium prices are likely to decline, nevertheless it is unlikely to go below US$2,000/ton levels. While doing our model, we have factored a base aluminium price of US$2,400/ ton for FY07, FY08 and FY09. Assuming that, China does not play spoil sport, stable aluminium prices would ensure that it gets the full benefit of its capacity expansion. Our understanding is that Hindalco's alumina capacity is likely to increase from 1.16 mn ton in FY2006 to 1.5 mn ton by FY09, which is an increase of almost 30%. Aluminium capacity will go up by 18% from 0.45 mn ton in FY2006 to 0.54 mn ton per annum by FY2009. We estimate aluminium sales and EBIDTA to grow at a CAGR of 9% and 13% respectively over the next three years, aided only by volumes.

Copper capacity expansion to boost EBIDTA

The company has completed the expansion of copper smelting capacity at Dahej from 0.25 mn ton p.a. to 0.5 mn ton p.a. After completion, the copper smelter has achieved the distinction of being the largest single location smelter in the world and positioned it among top 10 global cost efficient copper makers. The TC / RC (the profitability indicator in copper smelting business) is likely to remain under pressure for the industry as a whole due to the uncertainty over copper concentrate availability. While the copper smelting capacities have increased, it has not been matched by a corresponding increase in copper concentrate supplies due to disruption in mining operations.

Hindalco is unlikely to be affected significantly by the shortage of copper concentrate. The company had taken the backward integration steps by buying Nifty and Mount Gordon copper mines in Australia. These mines are likely to supply 10% of its total copper concentrate requirements in FY2007 and expected to increase its share gradually in the years ahead. In addition to that, the company also has long term copper concentrate supply agreements. Moreover, having the largest single location smelter in the world helps the company to gain from economies of scale by keeping the operating costs low. In our estimates for FY2007, FY2008 and FY2009, we expect copper division's capacity utilization rate at 60% (0.3 mn ton), 80% (0.4 mn ton) and 90% (0.45 mn ton) respectively. We have assumed constant EBIDTA of 15 cents / pound. Copper sales and EBIDTA are expected to grow at a CAGR of 37% and 57% respectively over the next three years.

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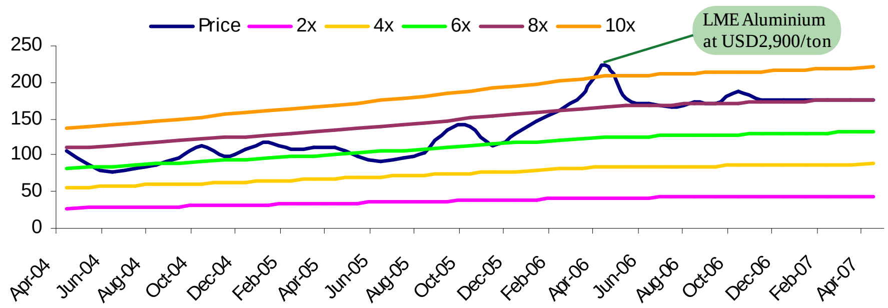
Risk reward ratio is unfavourable at current price

Based on our assumption that the LME aluminium prices are likely to decline by 15% from current level of US$2,800/ton in FY08 and FY09, the growth momentum would halt post FY07. Our fair price for the stock is Rs165 at P/E multiple of 7.5x of FY2008E EPS of Rs. 22. Except for a brief period in April 2006 when the stock was quoting at a P/E multiple of slightly above 10x, its sustained P/E multiple in the last one year has been 7.5x. The spurt in P/E multiple witnessed in April 2006 coincided with LME aluminium price touching all time high of US$2,900/ton. Hence, we have taken the sustainable P/E multiple of 8x for valuing the stock. (Please refer to the PE band chart). At the current price of Rs183, we believe the stock is fully priced. We have also tried to find out whether the replacement cost is significantly higher. From our analysis, the replacement cost comes to Rs 206 per share, which is marginally higher than the current market price. Consequently, we rate the stock as Underperformer.

Exhibit 2: PE Band



Source: KSBL Research

Exhibit 3: Replacement cost valuation

	Unit cost (Rs.)	Capacity	Cost (Rs. in mn)
Alumina (Ton)	35,000	1,160,000	40,600
Aluminium (Ton)	135,000	455,000	61,425
Value added products (Ton)	65,000	304,600	19,799
Power Plant (MW)	40,000,000	909	36,368
Copper Smelter (Ton)	75,000	500,000	37,500
Total replacement cost of fixed assets			195,692
Add: Capital WIP			8,329
Add: Investments (includes Aditya Birla Minerals investments at market price)			42,713
Add: Net working capital			41,500
Less: Debt			49,034
Total replacement value			239,200
Fully diluted equity shares outstanding			1,159
Replacement value per share (Rs.)			206
Market price per share			174
Premium / (Discount) to the Market Price (%)			18

Source: Industry and Karvy Estimates

Background of the company

We believe that Hindalco's integrated aluminium and copper business model from mines to value added products means that its leadership position in India is unlikely to be challenged in the near future. Aluminium and copper accounted for 53% and 47% of the company's sales respectively during FY06. But in terms of PBIT contribution, aluminium was at 99% and copper at 1%. However, FY2006 was the toughest year ever in the nine year history of copper division despite TC / RC (Treatment Charges / Refining Charges) margins recording an improvement. Maintenance shut-downs, refractory stabilization issues and a minor accident at the plant impaired the Dahej smelter's performance. This resulted in a production shortfall, which in turn coupled with high backwardation charges prevailing throughout the year affected profitability adversely.

Aluminium *(See Annexure 1 for aluminium manufacturing process)*

The key factors for low cost aluminium manufacturing is having own bauxite mines and low cost uninterrupted supply of power. Hindalco has got its own bauxite mines and captive power plants running on coal. As a result, its aluminium business remains largely insulated from the vagaries of the fluctuations in the aluminium price and cost pressures from the spiraling energy prices. Even when the average aluminium price on LME dipped to $1,291 in FY1998-99, Hindalco could maintain its EBIDTA margin at 44.8% and ROCE of 21.4%. Moreover, the company has also been expanding its value added products portfolio, which fetches much higher price realization than that of the primary metal. In FY2006, the share of value added products (ie flat rolled products, extrusions and foils) in tonnage terms extended from 47.3% to 49.4% while revenue share stood at 56.1% vis-a-vis 54-5% during the preceding fiscal. Value Added Products remain a key focus area for the Company to enhance profitability, de-risk product portfolio, and grow the market for aluminium products in the country.

Hindalco has been gradually ramping up its production capacity through brownfield expansion in the short to medium term. For long term growth, it has embarked on ambitious Greenfield projects. Some of them are as under:

Exhibit 4: Future Plans

	Capital Expenditure During			(Rs. in mn)
	FY2007	FY2008	Beyond FY2008	Total
Brownfield Expansions				
Muri Alumina	3,500	-	-	3,500
Hirakud Aluminium	4,710	1,840	260	6,810
Belgaum Alumina	1,020	5,010	2,400	8,430
Greenfield Projects				
Aditya Aluminium	3,860	8,580	34,730	47,170
Aditya Alumina	5,070	8,250	17,320	30,640
Joint Venture				
Utkal Alumina	2,435	3,750	6,115	12,300
Total	20,595	27,430	60,825	108,850

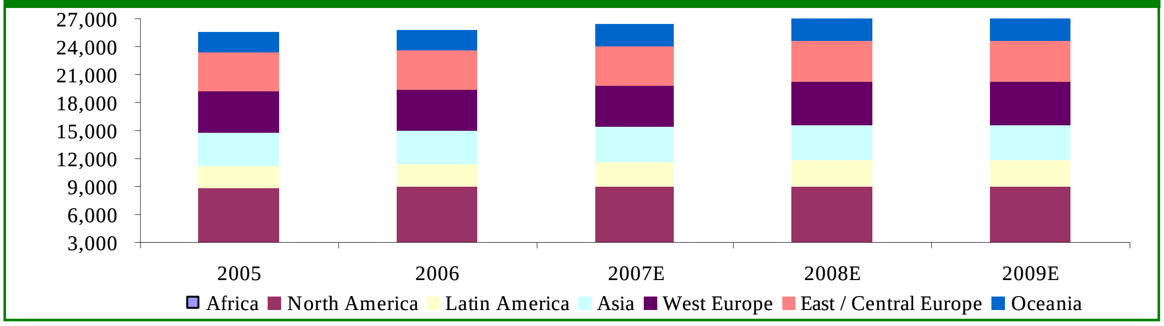
Source: Company

Global Aluminium Industry

Currently, the global aluminium production capacity or in other words, potential supply, is estimated at 25.84 million ton and the production for CY2006 is likely to be about 23.72 million ton. The global aluminium production in the first 9 months of CY2006 has been 17.79 million ton. (Source: International Aluminium Institute). It means that the industry, as a whole, is operating at close to 91.8% of the capacity. This could be the maximum possible capacity utilization level for the industry as some of the potential capacity may have become unviable due to technological obsolescence or financial constraints.

According to projections by the International Aluminium Institute (IAI), the capacity for CY2007, CY2008 and CY2009 is likely to be 26.38 million ton, 26.90 million ton and 26.95 million ton.

Exhibit 5: World Aluminium production capacity - Region wise



Source: International Aluminium Institute

Considering that the current apparent consumption of aluminium globally is likely to be 23 million ton for CY2006, the world demand needs to rise by a CAGR of only 5.4% from 2006 to 2009 to absorb the additional supply. The CAGR does not look unreasonably high in view of the 5.3% growth witnessed in global primary aluminium demand in CY2005 even though the CAGR will be on a higher base. In fact, there could be a scenario where the world demand growth for aluminium may exceed 5.4% and the announced capacity addition does not materialize fully. So, the demand-supply scenario for next three-four years looks very much in balance.

Copper *(See Annexure 2 for copper manufacturing process)*

Hindalco has a custom smelting capacity of 0.5 mn ton per annum at Dahej. The smelter is the largest single location smelter in the world and among top 10 global cost efficient copper makers. Since the company is a custom copper smelter (converter of copper concentrate into copper cathode and then producing value added products like copper rods from cathode), its performance of copper business is not directly linked to the LME copper price. It gets treatment charges or refining charges (called TC / RC in industry parlance) for converting copper concentrate into copper cathode and other value added products.

The copper division faced the toughest year ever in FY2006 in its nine year history despite TC/RC (Treatment Charges / Refining Charges) margins recording an improvement. Maintenance shutdowns, refractory stabilization issues and a minor accident at the plant impaired the Dahej smelter's performance. This resulted in a production shortfall, which in turn coupled with high backwardation charges prevailing throughout the year affected profitability adversely. Hindalco has taken the backward integration steps by buying Nifty and Mount Gordon copper mines in Australia. These mines are likely to supply 10% of its total copper concentrate requirements in FY2007 and expected to increase its share gradually in the years ahead. In addition to that, the company also has long term copper concentrate supply agreements. This should mean that the copper division is unlikely to see the low profitability of FY06 in the future.

Quarterly results update

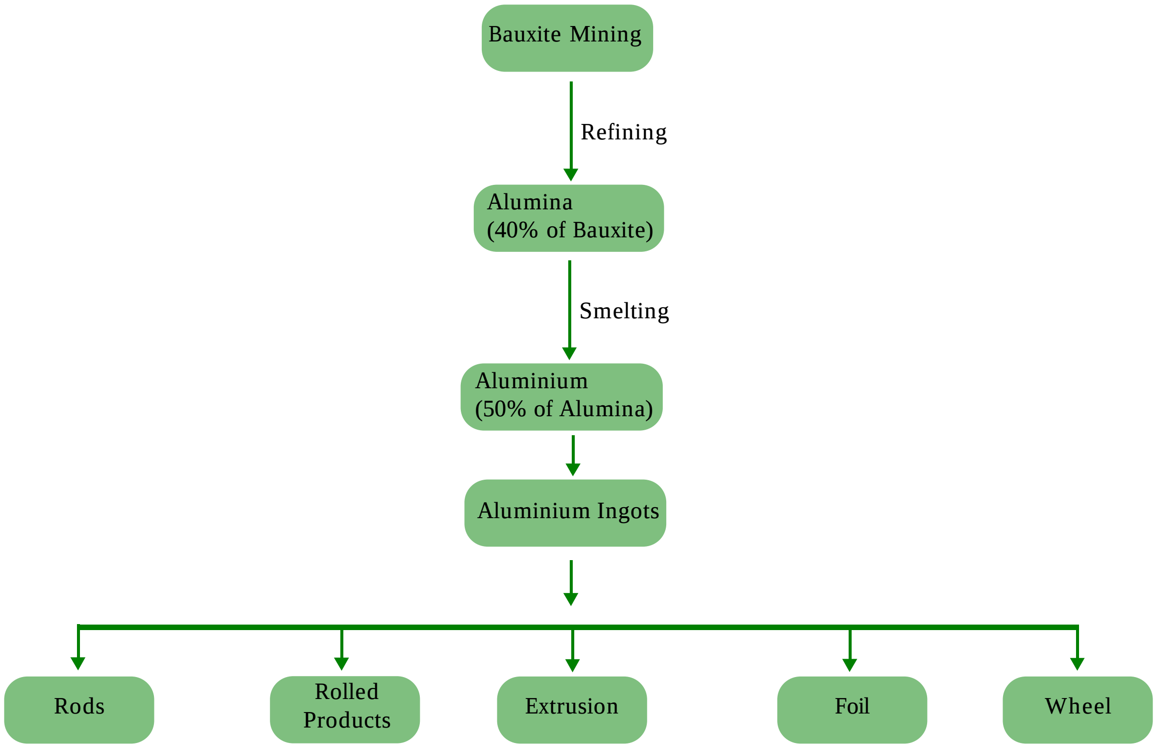
For Q2FY07, Hindalco reported revenue growth of 74% to Rs. 46,342 mn and EBIDTA growth of 102% to Rs. 9,864 mn on the back of strong growth in aluminium business. The growth was driven by a 25% YoY increase in aluminium prices. Copper business also posted a turnaround with EBIT of Rs. 1,233 mn as against loss of Rs. 692 mn in Q2FY06. Still, the contribution of aluminium business to EBIT at 85% outshined the copper business.

For H2FY07, Hindalco reported revenue growth of 83% to Rs. 89,079 mn on the back of strong growth in aluminium business. The growth was driven by a 30% YoY increase in aluminium prices. Copper business also posted a turnaround with EBIT of Rs. 2,211 mn as against loss of Rs. 163 mn in Q2FY06. Still, the contribution of aluminium business to EBIT at 86% outshined the copper business.

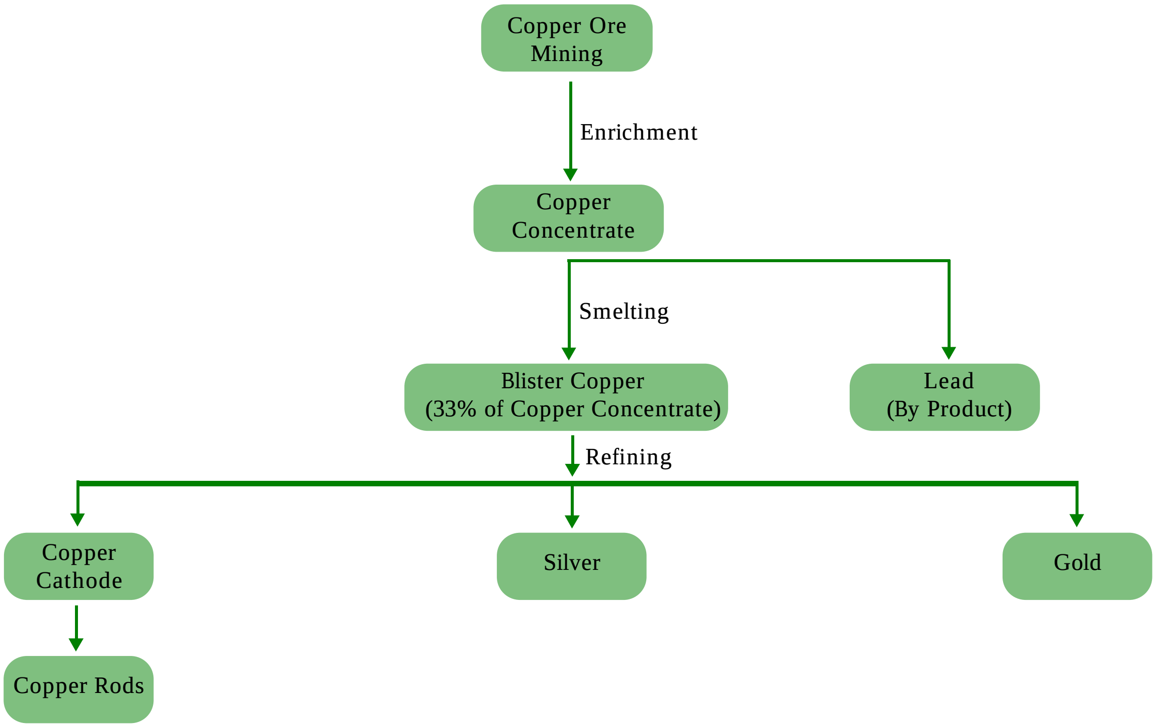
Quarterly

Rs Million	Q2FY2006	Q1FY2007	Q2FY2007	YoY Growth	QoQ Growth	H1FY2006	H1FY2007	YoY Growth
Revenues	26,608	42,737	46,342	74.2	8.4	48,686	89,079	83.0
Op expenses	21,729	33,403	36,478	67.9	9.2	37,763	69,881	85.1
Operating profit	4,879	9,334	9,864	102.2	5.7	10,923	19,198	75.8
Operating margin (%)	18.3	21.8	21.3	-	-	22.4	21.6	-
Other income	927.0	776.0	1,108.0	19.5	42.8	1,263	1,884	49.2
Interest	539	634	515	(4.5)	(18.8)	1,000	1,149	14.9
Depreciation	1,285	1,341	2,080	61.9	55.1	2,454	3,421	39.4
Pre-Tax profit	3,982	8,135	8,377	110.4	3.0	8,732	16,512	89.1
Tax provision	844	2,120	2,401	184.5	13.3	1,802	4,521	150.9
Tax rate (%)	21.2	26.1	28.7	-	-	20.6	27.4	-
Adjusted net profit	3,138	6,015	5,976	90.4	(0.6)	6,930	11,991	73.0
Extraordinary Income	-	-	-	-	-	-	-	-
Reported net profit	3,138	6,015	5,976	90.4	(0.6)	6,930	11,991	73.0

Annexure 1: Aluminium process cycle



Annexure 2: Copper process cycle



Profit & loss statement

(Rs. Mn)	FY2005	FY2006	FY2007E	FY2008E	FY2009E
Net revenues	95,233	113,965	181,688	201,341	215,816
% Growth	*53.4*	*19.7*	*59.4*	*10.8*	*7.2*
Raw material expenses	43,839	55,695	108,659	117,140	125,543
Staff cost	4,126	4,628	5,322	5,854	6,439
Manufacturing expenses	20,112	23,223	23,562	27,190	30,962
Other expenses	4,391	4,368	7,119	8,403	9,957
EBIDTA	22,765	26,051	37,026	42,755	42,915
% Growth	*51.7*	*14.4*	*42.1*	*15.5*	*0.4*
EBIDTA margin (%)	23.9	22.9	20.4	21.2	19.9
Other income	2,700	2,439	3,004	3,292	3,608
Interest	1,700	2,252	2,253	2,219	2,180
Depreciation	4,633	5,211	6,776	7,472	7,592
Pre-tax profit	19,133	21,027	31,001	36,355	36,751
% Growth	*53.6*	*9.9*	*47.4*	*17.3*	*1.1*
Provision for tax	6,464	4,501	9,300	10,907	11,025
Effective tax rate	33.8	21.4	30.0	30.0	30.0
Adjusted Net Profit	12,669	16,525	21,701	25,449	25,726
% Growth	*51.0*	*30.4*	*31.3*	*17.3*	*1.1*
Net Margin (%)	12.9	14.2	11.7	12.4	11.7
Extra-ordinary Inc / (Exp)	625	30	-	-	-
Reported Net Profit	13,294	16,556	21,701	25,449	25,726
% Growth	*58.5*	*24.5*	*31.1*	*17.3*	*1.1*
EPS (Rs.)	13.7	16.8	20.8	22.0	22.2
DPS (Rs.)	2.0	2.2	2.5	2.8	3.0
Dividend Payout (%)	16.7	15.0	13.7	14.3	15.4

Balance sheet

(Rs. Mn)	FY2005	FY2006	FY2007E	FY2008E	FY2009E
Equity share capital	928	986	1,044	1,159	1,159
Reserves & Surplus	75,644	95,017	119,297	152,102	173,855
Shareholders' funds	76,572	96,003	120,340	153,261	175,015
Long term loans	27,748	26,769	25,694	24,619	23,544
Short term loans	10,252	22,265	24,492	26,941	29,635
Total Loans	38,000	49,034	50,186	51,560	53,179
Deferred tax liability	11,297	12,334	12,334	12,334	12,334
Capital Employed	**125,869**	**157,370**	**182,860**	**217,155**	**240,528**
Gross Block	86,729	104,183	105,183	115,893	117,733
Depreciation	30,693	36,355	43,131	50,603	58,195
Net Block	56,035	67,828	62,052	65,289	59,537
Capital WIP	13,230	8,329	26,489	39,459	64,459
Investments	37,021	39,713	42,148	45,898	52,013
Inventory	23,745	40,951	51,706	54,076	56,460
Sundry Debtors	7,874	12,484	21,430	23,866	25,675
Cash & Bank	4,010	9,173	15,908	29,566	25,601
Loans & Advances	9,136	10,420	11,157	11,968	12,860
Current Assets	44,764	73,027	100,201	119,476	120,595
Sundry Creditors	14,574	19,745	32,491	35,027	37,540
Other liabilities	2,209	2,250	2,578	2,643	2,715
Provisions	8,399	9,532	12,961	15,297	15,822
Current Liabilities	25,182	31,527	48,030	52,968	56,077
Net current assets	19,582	41,500	52,171	66,508	64,518
Capital Deployed	**125,869**	**157,370**	**182,860**	**217,155**	**240,528**

Ratios

RATIO ANALYSIS	FY2005	FY2006	FY2007E	FY2008E	FY2009E
RoCE (%)	12.0	12.9	13.7	13.5	11.9
RoE (%)	17.5	19.2	20.1	18.6	15.7
Debt/Equity (x)	0.5	0.5	0.4	0.3	0.3
Interest Cover (x)	13.4	11.6	16.4	19.3	19.7
Raw mat / Sales (%)	46.0	48.9	59.8	58.2	58.2
Staff Cost / Sales (%)	4.3	4.1	2.9	2.9	3.0
Manufacturing exp. / Sales (%)	21.1	20.4	13.0	13.5	14.3
Other exp. / Sales (%)	4.6	3.8	3.9	4.2	4.6
Operating margin (%)	23.9	22.9	20.4	21.2	19.9
Pre-tax margin (%)	19.5	18.1	16.8	17.8	16.7
Net margin (%)	12.9	14.2	11.7	12.4	11.7
Total assets turnover ratio (x)	0.8	0.7	1.0	0.9	0.9
Avg. collection period (Days)	23.7	30.1	29.7	35.7	36.4
Avg. payment period (Days)	73.4	82.0	82.0	80.6	79.2
Cash & Bank / share (Rs.)	33.8	38.8	43.1	50.6	47.2
Other income / pre-tax profit (%)	14.1	11.6	9.7	9.1	9.8

Cash flow statement

(Rs. Mn)	FY2005	FY2006	FY2007E	FY2008E	FY2009E
EBIT	19,133	21,027	31,001	36,355	36,751
Depreciation	4,633	5,211	6,776	7,472	7,592
Other non-operating items	(837)	(85)	(691)	(1,073)	(1,428)
(Inc)/Dec in working capital	(5,878)	(16,085)	(7,303)	(2,947)	(2,425)
Cashflow from operations	17,050	10,068	29,784	39,808	40,490
Taxes paid (net of refund)	636	(2,968)	(6,440)	(9,300)	(10,907)
Net cash flow from op activities	17,686	7,100	23,344	30,507	29,584
Exceptional items	(77)	1	-	-	-
Net cash flow after exceptional act	17,609	7,101	23,344	30,507	29,584
Net capex and strategic investments	(11,092)	(12,276)	(19,160)	(23,680)	(26,840)
Net cash after capex	6,518	(5,176)	4,184	6,827	2,744
Inc/(Dec) in short term borrowing	(719)	12,059	2,227	2,449	2,694
Inc/(Dec) in long term borrowing	8,146	(1,189)	(1,075)	(1,075)	(1,075)
(Inc)/Dec in investments	(11,340)	(2,108)	(2,435)	(3,750)	(6,115)
Equity issue / (Buyback)	-	5,191	5,557	11,113	-
Cash flow from financial activities	(3,913)	13,952	4,273	8,737	(4,496)
Others	(1,124)	(4,001)	(1,722)	(1,907)	(2,213)
Opening Cash	2,917	4,398	9,173	15,908	29,566
Change in Cash	1,481	4,775	6,735	13,658	(3,965)
Closing Cash	4,398	9,173	15,908	29,566	25,601

KARVY
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Stock Ratings		**Absolute Returns**	**Stock Ratings**		**Absolute Returns**
Buy	:	> 25%	Market Performer	:	0 - 15%
Out Performer	:	16 - 25%	Under Performer	:	< 0%