



*Detailed Report*  
SECTOR: METALS

# Bhushan Steel



**Growing roots**

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## Bhushan Steel

STOCK INFO.	BLOOMBERG
BSE Sensex: 13,771	BHUS IN
S&P CNX: 4,067	REUTERS CODE
	BSSL.BO

Y/E MARCH	2007	2008E	2009E	2010E
Sales (Rs m)	38,377	47,316	51,198	62,282
EBITDA (Rs m)	6,281	8,191	9,035	22,527
NP (Rs m)	3,133	4,119	4,325	11,850
EPS (Rs)	73.8	97.0	101.8	279.0
EPS Growth (%)	97.1	31.5	5.0	174.0
BV/Share (Rs)	274.5	367.4	464.6	737.7
P/E (x)	7.4	5.7	5.4	2.0
P/BV (x)	2.0	1.5	1.2	0.7
EV/EBITDA (x)	8.1	7.1	7.9	2.5
EV/Sales (x)	1.3	1.2	1.4	0.9
RoE (%)	26.9	26.4	21.9	37.8
RoCE (%)	9.8	10.8	8.8	25.2
RoIC	23.7	30.7	17.0	26.9

## KEY FINANCIALS

Shares Outstanding (m)	42.5
Market Cap (Rs b)	23.3
Market Cap (US\$ b)	0.5
Past 3 yrs. Sales Growth (%)	34.9
Past 3 yrs. NP Growth (%)	51.4
Dividend Payout (%)	6.6
Dividend Yield (%)	0.5

## STOCK DATA

52-Week Range (H/L Rs)	577/155
Major Shareholders (as of March 2007)	(%)
Promoters	64.2
Domestic Institutions	1.2
FII/FDIs	1.9
Public	32.7
Average Daily Turnover	
Volume ('000 shares)	173.0
Value (Rs million)	57.8
1/6/12 Month Rel. Performance (%)	0/59/125
1/6/12 Month Abs. Performance (%)	5/62/134

10 May 2007

Buy

Initiating Coverage

Rs549

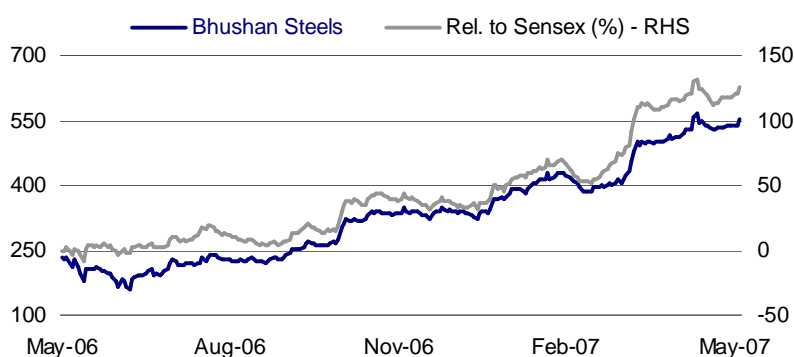
**Cold rolled product leader integrating backward; setting up state-of-the-art HRC mill:** Bhushan Steel Ltd (BSL) is the market leader in CR products in India, and value-added products contribute 60% to its revenues. A new 1.9m tpa capacity HRC mill is scheduled to be commissioned in the mineral-rich state of Orissa at a capex of Rs52b by March 2009 to meet its current and future internal requirements.

**HRC production cost will be amongst the lowest:** The strategically located steel and power plant in Orissa, close to iron and coal mines, will lower logistics costs. The chosen process will minimize exposure to imported raw materials. Waste gases from sponge iron production, rejects from coal washeries will be utilized in power production. All these will enable the cost of production of HRC to be amongst the lowest at Rs12,000 v/s industry average of Rs13,800 per ton.

**Raw material tie-up will reduce exposure to input price risk:** Coal blocks with 325m ton reserves have been allotted to the company within 65km from the project site. BSL is also expected to get iron ore mines, as the company has completed the investment requirement in accordance with the MoU signed with the Orissa government in 2004.

**Robust business model, attractive valuations:** We expect earnings to grow at 56% CAGR over FY07-FY10. The stock trades at a PE of 5.4x FY09 and P/B of 1.2x FY09; expect FY09 RoE at 22%. Valuations are attractive and the business model is robust. We initiate coverage on the stock and set a 12-month target price of Rs713/share (30% upside) based on P/E of 7x FY09.

## STOCK PERFORMANCE (1 YEAR)



## Investment positives

### **Cold rolled product leader**

BSL has a rich product mix — value added products (VAP) such as CRCA (cold rolled closed annealed), galume, color coated sheets, HTSS (high tensile steel straps), H&T (hardened and tempered steel), drawn tubes etc. constitute 55% of its revenue. CRCA is produced in its plant near Delhi to cater to customers like Maruti and other OEMs. Its galvanizing plants are located strategically close to HRC producers such as Ispat Industries and the ports of Mumbai, helping it to cater to global demand at competitive prices. BSL's total VAP volumes are next only to Tata Steel, but its product portfolio is wider in comparison.

### **Integrating backward; setting up state-of-the-art HRC mill**

BSL is currently undertaking a 1.9m tpa HR and 0.3m tpa billet greenfield project at a capex of Rs52b in the mineral-rich state of Orissa to meet the current and future raw material requirement of the cold rolling mill complexes. The HRC project is expected to be completed by March 2009. The HRC mill can be further expanded to 4m tpa capacity at lower capex of Rs25b.

### **HRC production cost will be amongst industry's lowest**

Strategic location of the project site close to iron and coal mines will result in significant savings in transportation costs. Further, the current export parity pricing makes iron ore purchases available at competitive rates. The chosen production process to make steel will partially use locally available coal and reduce dependence on imported coking coal. Waste gases from sponge iron production and rejects from coal washeries will be utilized to produce power. Hence cost of HRC production will be amongst the lowest in industry at Rs12,000 per ton v/s industry average of Rs13,800 per ton.

### **Raw material tie-up will reduce exposure to input price risk**

**Partial coal security:** BSL has got allotment of coal mines in joint allocation with a few other steel producers at New Patrapara, just 65km from the project site. BSL's share of the total reserves is 325m ton. This will meet its entire requirement of sponge iron production and power generation. Domestic coking coal has high ash content, hence can be used only after blending with low-ash imported coking coal. The methodology chosen for steel production mandates lower specific consumption of coking coal (400kg against 800kg per ton for pure blast furnace route); thereby BSL has lower exposure to volatility in imported raw material prices. These factors are very significant in view of rising freight, port congestion, increasing demand and stiff prices.

**Expected to get iron ore mines:** The company has identified an iron ore mine, with reserves of around 224m ton for captive consumption. BSL has also completed the eligibility criteria for the mine allocation and the document is at advanced stage of approval with the state government of Orissa for the next leg of recommendation to Government of India for allotment of the iron ore mine.

### **Strong steel demand growth in India; positive price outlook**

Despite the annual rate of growth for consumption of finished steel products having accelerated from 3.4% in FY02 to 10.8% in FY06, India continues to have low per capita consumption of 40kg, which is far below the global average of 185kg (China: 240kg, EU: 400kg, Japan: 600kg and Korea: 1,000kg). We note that consumption could accelerate further to support the envisaged strong GDP growth, on the back of ongoing US\$320b infrastructure investment planned for XI<sup>th</sup> Plan (2007-2012).

### **Fundamentals shifting in favor of Indian steel producers**

India has the seventh largest iron ore reserve in the world and the highest iron (Fe) content of 64%. Global prices of iron ore fines for long term contracts have moved by ~3x from 30 USc/dmtu during 1995-2002 to 85 USc/dmtu in 2007 and are likely to remain firm owing to: (a) oligopoly of miners; and (b) increasing dependence of China on imported iron ore; and (c) ocean freight too having moved up sharply due to increasing movement of commodities globally, fueled by demand from China.

We hence believe that the fundamentals are shifting in favor of steel producers that have advantages such as being in close proximity to raw material deposits and the markets. Bhushan Steel Ltd. (BSL) that boasts of captive raw materials would be a key beneficiary of the changing industry fundamentals.

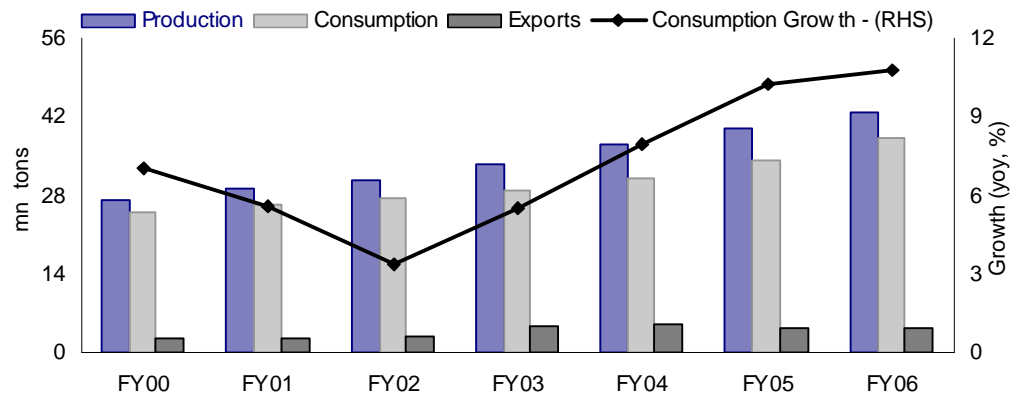
### **Robust business model, attractive valuations**

Over FY07-FY10 we expect net sales to grow at CAGR of 18%, EBITDA at CAGR of 53% based on likely margin expansion from 16% in FY07 to 36% in FY10; and PAT to grow at CAGR of 56%. The stock trades at a PE of 5.4x FY09 and P/B of 1.2x FY09; expect FY09 RoE at 22%. Valuations are attractive and the business model is robust. We initiate coverage on the stock and set a 12-month target price of Rs713/share (30% upside) based on P/E of 7x FY09.

## Strong steel demand growth in India; positive price outlook

The annual rate of growth for consumption of finished steel products has accelerated from 3.4% in FY02 to 10.8% in FY06. However, India continues to have a low per capita consumption of 40kg, far below the global average of 185kg (China: 240kg; EU: 400kg; Japan: 600kg; and Korea: 1,000kg). We believe that consumption in India would accelerate further to support the envisaged strong GDP growth, on the back of ongoing US\$320b infrastructure investment planned for XI<sup>th</sup> Plan (2007-2012).

DOMESTIC DEMAND AND SUPPLY OF STEEL (MILLION TON)



Source: JPC

The Indian steel industry has six dominant producers which contribute to about 70% of the total steel production in the country. There are only five producers that manufacture hot rolled coils (HRCs) for conversion into cold rolled products.

PROFILE AND GROWTH PLANS OF LEADING INDIAN STEEL PRODUCERS

PRODUCERS	PRODUCTION		PRODUCTS				GROWTH PLAN
	FY06	2007	FLAT	LONG	SPECIAL	VAP	CAPACITY
	(M TONS)	(MTPA)	(%)	(%)	(%)	(%)	BY 2010 (MTPA)
SAIL	13.5	14.0	51	35	14	19	22.0
Tata Steel	4.7	5.3	66	30	4	26	13.0
RINL, Vizag	3.5	3.5		100			6.5
JSW Steel	2.3	3.8	100				10.0
Essar Steel	2.7	4.5	100			20	7.5
Ispat Industries	2.1	2.5	100				2.5
Jindal Steel & Power	0.5			100			3.0
Bhushan Steel			100			60	2.2
Others	12.1			100			20.0
<b>Total</b>	<b>41.3</b>						<b>86.7</b>

Source: Industry; VAP=Value added products

*Brownfield expansions  
fueling growth*

Rashtriya Ispat Nigam Ltd. (RINL) and Steel Authority of India Ltd. (SAIL) are the largest producers of long products in the country. There are a large number of smaller steel producers that produce long products and utilize steel scrap/pig iron/sponge iron as input metal in electric furnaces to produce crude steel, as this process is less capital intensive.

HRC is first rolled into a cold rolled coil (CRC). During cold rolling, the material gets hard and brittle. The hard CRC is used to produce galvanized sheets that are used in roofing. For all other forming applications, CRC has to be annealed to soften the metal so as to make it suitable for forming. Thus softened, CRC is then galvanized (with zinc) for the forming applications. CRCA (cold rolled closed annealed) has extra deep drawing (EDD) properties for applications in auto and consumer durables. CRCA prices are less volatile and command a premium due to product differentiation.

#### COLD ROLLING MILL COMPLEXES IN INDIA

PRODUCERS	CAPACITY 2007 (MTPA)	PRODUCTS			
		CR (%)	GALVA (%)	OTHERS (%)	VAP (%)
Tata Steel	1.5	75	25		75
SAIL	1.3	72	28		20
Bhushan Steel Ltd.	1.0	37	33	30	60
JSW Steel	0.9	5	90	5	10
Essar Steel	1.2	60	40		50
Ispat	0.5	10	90		10
Uttam Galva	1.0	30	66	4	25
Shree Precoated	0.6	20	80		15
National Steel	0.3		100		10
Bhushan Ltd.	0.4	20	80		10
Others	1.4		100		10
<b>Total</b>	<b>10.1</b>	<b>38</b>	<b>50</b>	<b>4</b>	<b>29</b>

Source: Industry; VAP=Value added products, CR= Cold rolled products

*BSL is second largest  
producer of value added  
products*

There are only four main producers of CRCA viz. Tata Steel, SAIL, Essar Steel and Bhushan Steel. Other producers like, JSW Steel, Uttam Steel, Shree Precoated, Ispat and National Steel have focused primarily on galvanized products. Bhushan Steel is the first mover in the supply of CRCA products to the auto industry and has a tie-up with Sumitomo Metal of Japan for technical knowhow and supply of raw material i.e. IF grade HRC.

#### Setting up an HRC mill in mineral-rich Orissa has cost advantages

Cost of production for steel producers such as Tata Steel and JSW Steel is the lowest owing to: (a) employing efficient production processes; and (b) close proximity to iron ore mines. Tata Steel has captive mines for both coal and iron ore thereby it boasts the lowest cost of hot metal in the world. JSW Steel's low production cost can be attributed to proximity to mines thereby incurring spend of merely Rs2,000/ ton on iron ore.

## COST STRUCTURE OF HRC MILLS IN INDIA

PRODUCERS	LOCATION	CAPACITY		OPERATING COST (RS/TON)	REMARKS
		2007 (MTPA)	2010 (MTPA)		
SAIL	Jharkhand	5.0	5.0	15,000	Captive iron ore mines
Tata Steel	Jharkhand	3.5	3.5	10,000	Captive iron ore and coking coal mines
Essar Steel	Gujarat	3.2	3.2	14,000	Away from mines, Gas is purchased
Ispat Industries	Maharashtra	3.2	3.2	18,000	Away from mines, Purchased gas is in short supply
JSW Steel	Karnataka	2.5	5.0	12,000	Close to iron ore mines, Coal is imported
Bhushan Steel Ltd.	Orissa		1.9	12,000	Close to iron ore and coal mines, coking coal will be imported
Bhushan Ltd.	Orissa		0.9		
<b>Total</b>		<b>17.4</b>	<b>22.7</b>		

Source: Motilal Oswal Securities

*BSL's cost of HRC production will be among the lowest*

Essar Steel and Ispat Industries are located on the western coast, away from iron ore mines, and employ natural gas for reduction of iron ore into hot metal. However, they are impacted due to the rising cost of gas, disruption of gas supply due to shortages, higher sea freight to transport iron ore even within the country and rising electricity costs. Location-wise, Bhushan Steel's plant will enjoy strategic advantages due to its proximity to the iron ore and coal mines in Orissa; this parameter will keep cost of production the lowest amongst all domestic steel producers, trailed only by Tata Steel.

### Large-scale capacity additions planned, yet progress is slow

Realizing the advantages stated above, a large number of MoUs (for about 140 mt of capacity in next 10-15 years) have been signed with the state governments of Orissa, Jharkhand, Chhattisgarh and West Bengal to set up greenfield steel projects with the expectation of captive iron ore mines being allotted. Posco and Arcelor-Mittal too have planned a 12m tpa plant each in the state of Orissa. Recently, Sinosteel of China has announced a project of 10m tpa capacity in Jharkhand. However, the progress of these projects is uncertain, particularly in the absence of clarity on the part of the Central government on the country's iron ore policy. Progress on acquisition of land in Orissa too has been slow on two counts: (1) the displacement of tribals; and (2) rapid rise in land prices.



## MOU SIGNED WITH STATE GOVERNMENTS FOR GREENFIELD PROJECTS

PRODUCERS	PROJECT (MTPA)	LOCATION	YEAR OF MOU SIGNING	REMARKS
Tata Steel	6.0	Orissa	2004	Equipments ordered, Land related issues are still haunting the project
Sterlite Industries	5.0	Orissa	2004	No progress on project
<b>Bhushan Steel Ltd.</b>	<b>3.0</b>	<b>Orissa</b>	<b>2005</b>	<b>Progressing well</b>
Tata Steel	10.0	Jharkhand	2005	No progress on project
Tata Steel	5.0	Chhattisgarh	2005	No progress on project
SAIL	6.0	Jharkhand	2005	No progress on project
JSW Steel	10.0	Jharkhand	2005	No progress on project
Essar Steel	4.0	Orissa	2005	No progress on project
POSCO, Korea	12.0	Orissa	2005	Problems in mine allocation & land acquisition
Mittal Steel	10.0	Jharkhand	2005	No progress on project
Jindal Steel & Power	6.0	Orissa	2005	Land acquisition progressing slowly
Jindal Steel & Power	5.0	Jharkhand	2005	No progress on project
Mittal Steel	10.0	Orissa	2006	Site shifted due to poor progress in Jharkhand
JSW Steel	12.0	West Bengal	2007	Land is being allotted by state govt.
Sinosteel, China	10.0	Jharkhand	2007	Recent announcement
<b>Total</b>	<b>114.0</b>			

Source: Annual Reports, Orissa Govt. website and MOSL research

*BSL is the only one to set up greenfield project in Orissa*

Apart from the above list of mega projects, the Orissa government had signed another 37 MoUs during 2002-2005 with small steel producers for setting up a total capacity of 22m tpa at a capex of Rs285b. Progress on the smaller projects has improved, as these projects do not need large tracts of land in one single location. However, several players such as Maharashtra Seamless, Sunflag Steel etc. have formally dropped the projects. Bhushan Steel is the only one that has successfully acquired land and had put the project on track.

### **We have a positive outlook on steel prices**

Global demand for steel products grew by 8.5% in 2006 to 1,113m ton, led by strong demand growth in most regions. However, production in most of the global regions except China could not keep pace with demand growth. The United States of America (USA) was the largest importer in 2006 — total import of steel products grew 32% YoY to 41mt.

## DEMAND FOR FINISHED STEEL

REGIONS (M TONS)	2006	YOY(%)	2007	YOY(%)	2008	YOY(%)
EU (27)	185	11.2	187	1.5	191	1.9
Other Europe	28	14.9	30	6.4	32	6.4
CIS	48	12.9	51	6.0	54	6.0
NAFTA	155	11.1	150	-3.1	157	4.3
Central and South America	36	11.7	38	6.1	41	6.0
Africa	22	9.7	23	6.9	25	7.8
Middle East	37	10.3	40	9.2	44	8.5
Asia	603	6.1	659	9.2	708	7.5
<b>World</b>	<b>1,113</b>	<b>8.5</b>	<b>1,179</b>	<b>5.9</b>	<b>1,251</b>	<b>6.1</b>
China	356	9	403	13.0	443	10.0
<b>World (ex. China)</b>	<b>757</b>	<b>8.3</b>	<b>776</b>	<b>2.5</b>	<b>808</b>	<b>4.1</b>

Source: IISI Outlook March 2007

*Global demand outlook  
is positive*

Global demand outlook for 2007 and 2008 is positive. Global demand for steel products is expected to grow by 5.9% in 2007 driven by 13% growth in China, 9.2% in Asia, 9.2% in the Middle East countries and more than 6% in regions such as the CIS, Latin America, Africa and other European countries. However, demand is expected to decline by 3.1% in the North American countries in 2007 due to a possible economic slowdown.

Global steel consumption growth is expected to be even higher at 6.1% in 2008. We are currently in the middle of an upcycle due to strong growth being posted by all emerging regions after a decade of underinvestment on account of various political and economic failures. Growth of global GDP is arising from a larger population base coupled with a stable political scenario. Oil income in Russia and the Middle East countries too has been fueling demand growth.

### **Rising costs of global producers will provide a higher floor for steel prices in next five years**

Steel producers in Japan, China, Europe and North America depend on imported iron ore for production of steel through the blast furnace route. In 2006, 68% of crude steel was produced from pig iron; this translates into a requirement of 1,333m ton of 62.5% (Fe) iron ore. Of this, 750m ton (+11% YoY) was traded globally and transported via the sea. Rapid growth of traded volumes from 427m ton in 1998 to 750m ton in 2006 has resulted in a sharp rise in iron ore prices that are a part of long term contracts, from US\$30/dmtu to US\$85/dmtu during 2002-2007. Also, coal prices have moved from US\$40-US\$50 per ton in 2000 to US\$125 per ton in 2005 to US\$98 per ton in 2007.

*Iron ore prices have gone up  
by 3x during 2002-2007*

**Ocean freight too has risen.** The Baltic Dry Bulk Index had moved up from 1000 in 2001 to 6000 in 2005, thereafter it fell to 3000 in the first half of 2006 and is once again marching towards an all-time high of 6000. Therefore, cost of the raw material basket for one ton of crude steel has gone up from US\$100 in 2000 to US\$325 in 2007. Add another direct conversion cost of US\$100 per ton, and the marginal cost of HRC production for more than 80% of global volumes reaches a level well above US\$425 per ton. Therefore,

it will be difficult for any global player to supply HRC at below US\$500 per ton in next three to four years except for the producers in the CIS and Russia. Strong demand in these regions, structural change in ownership and buoyant economic conditions in Russia will ensure that cheap material is not dumped in ocean trade.

The steel industry is on the road to consolidation. Top 15 players in the world (ex-China) control 51% of global production against 35% in 2000. In the last two years, we have observed a greater discipline amongst steel producers as they reduce production during the slack demand period to prevent inventory build-up. The balance sheets of most steel companies are strong. Further, takeovers, mergers and alliances appear inevitable as producers look to integrate horizontally with other mills and vertically with raw material suppliers and steel distributors in an effort to secure their future.

### Imminent consolidation to drive valuations

We present a summary of our study of eight steel companies selected across the globe that have survived the cyclical downturn in the last 12 years. We have used historical market capitalization to analyze the historical valuations. The eight companies are POSCO (Korea), Baoshan Steel (China), US Steel (USA), AK Steel (USA), Nucor (USA), Thyssen-Krupp (Germany), Gerdau (Brazil) and CSN (Brazil).

KEY FINANCIALS OF EIGHT COMPANIES UNDER STUDY (US\$ M)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	CAGR (00-06)
Sales	21,122	20,237	20,041	23,609	59,418	64,492	63,481	66,660	80,790	107,574	131,147	149,828	155,061	15.1
EBITDA	6,429	5,624	6,203	5,257	8,240	10,389	7,621	9,595	11,455	20,766	25,361	25,407	26,544	16.1
PAT	2,229	1,720	2,202	2,178	2,252	3,922	1,683	1,514	2,859	9,707	10,964	11,990	12,297	20.5
Equity	17,859	17,026	14,227	17,394	26,557	27,745	28,034	28,308	31,260	43,242	51,427	59,688	66,762	13.6
Net Debt	6,841	7,701	7,007	7,895	15,207	17,904	17,049	14,323	14,124	8,334	6,189	4,494	3,335	-20.6
Market Cap	16,333	14,746	13,308	15,287	34,295	28,917	27,883	27,550	44,082	59,759	64,605	116,032	127,862	26.1
EV	23,477	22,866	20,643	23,707	50,279	47,656	46,219	42,936	59,281	69,699	73,322	125,331	135,849	17.5
Capacity (mt)	54	56	61	60	82	103	104	113	122	134	133	136	136	4.7
<b>Valuations</b>														
EV (US\$/ton)	436	411	341	395	615	464	447	381	488	522	551	924	1,002	
EV/EBITDA (x)	3.7	4.1	3.3	4.5	6.1	4.6	6.1	4.5	5.2	3.4	2.9	4.9	5.1	
EBITDA (US\$/ton)	119	101	102	88	101	101	74	85	94	155	191	187	196	
Debt/Equity (%)	38.3	45.2	49.2	45.4	57.3	64.5	60.8	50.6	45.2	19.3	12	7.5	5	

Source: Bloomberg, IISI and Motilal Oswal Securities

Net sales, EBITDA and PAT of the stated eight companies combined have grown at a CAGR of 15.1%, 16.1% and 20.5% respectively during 2000-2006, whereas volumes have grown at a CAGR of merely 4.7% from 103m ton in 2000 to 136m ton in 2006. The shareholders' equity, market capitalization and enterprise value of the eight companies combined have grown at CAGR of 13.6%, 26.1% and 17.5% over the same period.

However, net debt of the combined entity has come down at CAGR of 20.6% during the period and debt:equity ratio is down from its peak of 65% in 2000 to 8% in 2006. Valuations too have run up beyond the historical range. The companies have been trading at an average EV/ton from US\$400-US\$600 in the past decade. However, valuations have broken out of historical range and companies are trading at an average which is above replacement cost.

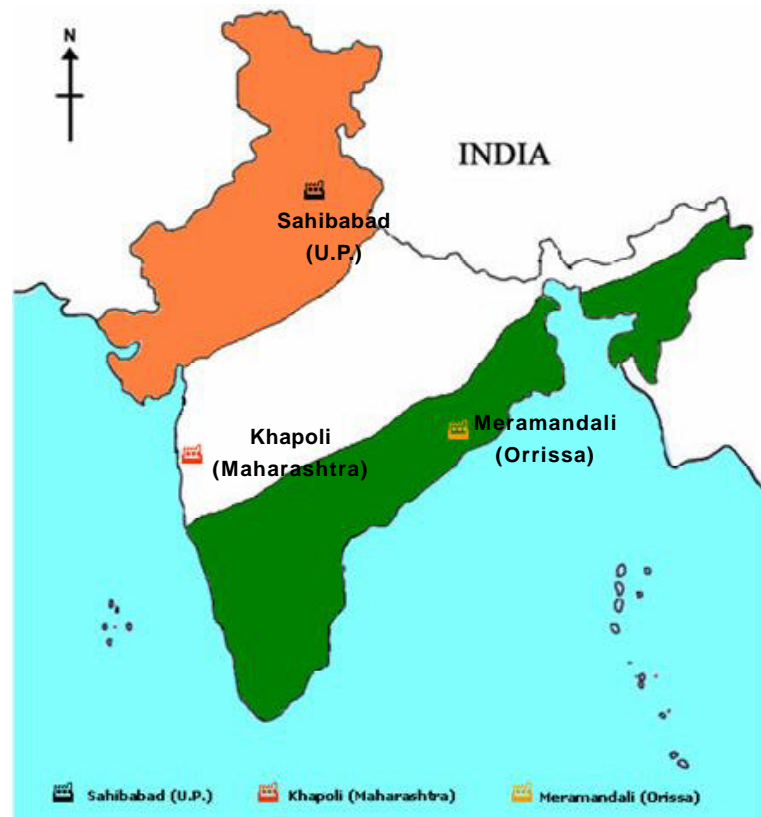
Rapid growth in steel production in China has left little room for companies outside China to invest significantly in organic growth. But rising cost of iron ore and ocean freight has forced China's steel producers to reconsider adding more capacity, as they will be unable to export economically post importing the required raw materials. The iron ore advantage is rising for companies in countries such as India and Brazil. Local consumption of steel in India and Brazil is growing rapidly, but on a smaller base. Falling debt:equity ratio and insufficient investment opportunities in organic growth is forcing mergers and acquisitions across the globe. We believe the process of consolidation is likely to intensify further in an effort to combine the best of technology in the Western world with the low-cost advantages of India, Brazil and Russia. Bottomline: industry has little choice but to consolidate.

## Bhushan Steel: Cold rolled product leader

Bhushan Steel Ltd. (BSL), promoted by Mr. B.B. Singhal and Mr. Niraj Singhal began operations in 1989 with a capacity of 60,000 tpa. Thereafter, given its technology focus, new product launches and project execution skills, it grew rapidly to post FY07 revenue of Rs42b. BSL is the third largest domestic cold roller trailed only by Tata Steel and SAIL.

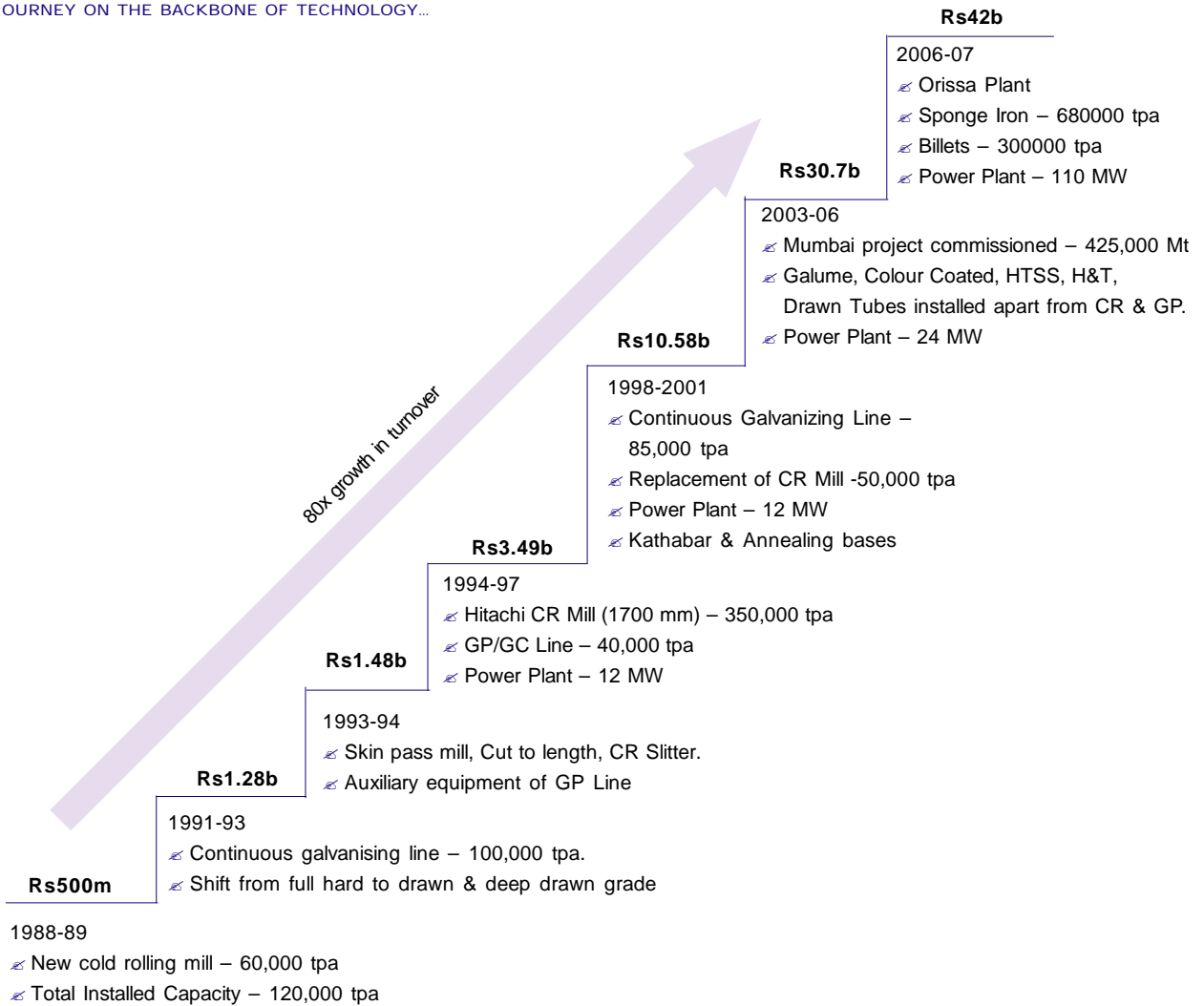
BSL was the first producer in the country to manufacture value-added cold rolled sheets for applications in the outer body panel of automobiles. Thereafter, it has mastered a number of products including galume (zinc and aluminium coated sheets). Value-added products contribute 60% to total revenue. BSL is currently producing 0.9m tpa of cold rolled and coated products at strategic locations of Sahibabad (near Delhi) and Khopoli (near Mumbai) and is simultaneously backward integrating into production of hot rolled coils (HRCs) to feed its cold rolling mills. Its HR mill project is being implemented at Angul in the mineral-rich state of Orissa at a capex of Rs52b and is expected to be completed by March 2009. The name of the company has recently undergone a change from Bhushan Steel and Strips Ltd. to Bhushan Steel Ltd., as it is transforming from a pure strip converter to an integrated steel producer.

LOCATION OF PRODUCTION UNITS AND HRC PROJECT



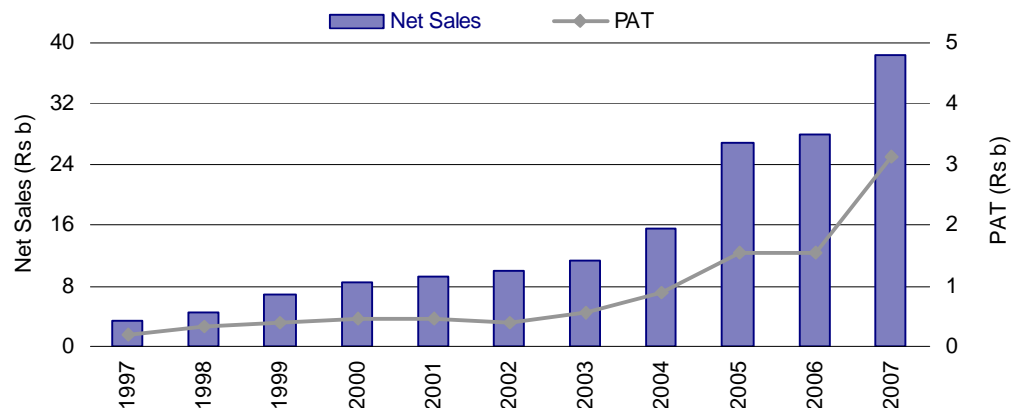
Source: Company

GROWTH JOURNEY ON THE BACKBONE OF TECHNOLOGY...



Source: Company

... LED TO CONSISTENT PERFORMANCE DESPITE CYCLICAL NATURE OF INDUSTRY

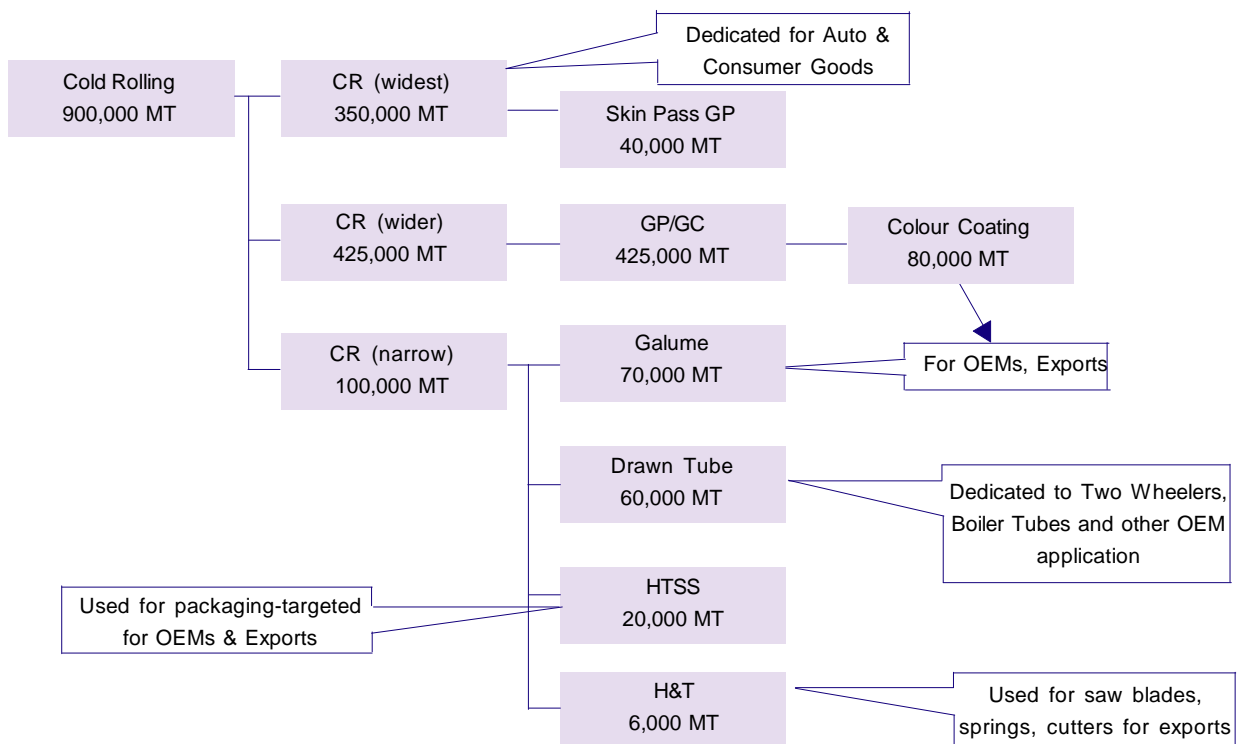


Source: Company/ Motilal Oswal Securities

Bhushan Steel is the first Indian company to set up a cold rolling mill with capability to roll out 1,700mm wide strips for application in the auto industry. The company can be credited with several firsts — products such as high tensile steel strap used in packaging and hardened & tempered steel used in making saw blades (these command a high premium).

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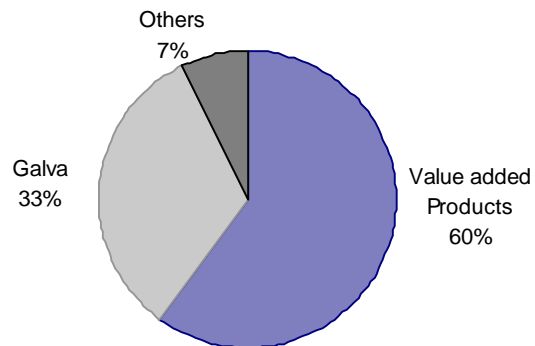
RICH PRODUCT PORTFOLIO OF COLD ROLLING MILL COMPLEX



Source: Company

Galume is a superior product to galvanized sheets thereby commanding a premium. Galume is a coating that is made up of aluminium and zinc. However the cost of coating products with galume is lower due to the sharp run up in zinc prices versus aluminum on the LME. Currently value-added products such as CRCA, galume, color coated sheets, HTSS, H&T, drawn tubes etc. constitute about 55% to total revenue. Its galvanizing facilities are located close to the sea ports of Mumbai in Khopoli for easy export and close to HRC producers such as Ispat Industries.

REVENUE MIX (%)



Source: Company

### Integrating backward; setting up state-of-the-art HRC mill

*Rightly initiated HRC project to backward integrate*

After having grown to a size of approximately 1m tpa in cold rolled and coated products, the company has rightly initiated a project to integrate backward into the production of HRC so that it may meet current and future internal requirements. Also, it plans to develop various EDD (extra deep drawing) grades used in the automobile's critical applications like outer body panels of cars (they are currently imported).

BSL is setting up a 1.9m tpa HRC plant at capex of Rs52b in the state of Orissa, which is resplendent in minerals such as iron ore and coal. In fact, BSL is the only large-sized steel project in Orissa, which has seen the light of day. In 2002, BSL commenced its project in Orissa far ahead of others who also signed MoUs with the Orissa government to set up projects (we note, none of these projects has taken off until now). BSL has been profitable even during the industry downcycle, 1997-2002, on the strength of its first mover advantage in a number of products, technology and availability of cheaper raw material. This helped them to conceive the project much earlier.



## STATUS OF HOT ROLLING MILL PROJECT IN ORISSA

DESCRIPTION	MAR-07 (TPA)	MAR-08 (TPA)	MAR-09 (TPA)	REMARKS
<b>Raw material</b>				
Iron ore mines		224 m tons Reserves identified, already completed the investment requirements for eligibilities		
Coal mines		New Patrapara in Orissa 65km from the site (325m tons Res. allotted)		
Coal washeries		5,000,000	5,000,000	Commissioning by May 2007
<b>Metallic</b>				
Sponge Iron	340,000	900,000	1,200,000	Started in phases
Hot Metal			1,200,000	Expected by Oct-08
<b>Steel making</b>				
Small shop	148,500	427,500	427,500	Started in phases
Main shop			2,000,000	Expected by Oct-08
<b>Casting</b>				
Billet Caster	120,000	300,000	300,000	Already commissioned
Slab Caster			2,000,000	Expected by Oct-08
<b>Rolling</b>				
Hot Rolling Mill			1,900,000	Expected by Mar-09
Power (MW)	33	110	110	77 MW to start by May 07

Source: Company/ Motilal Oswal Securities

*Modular structure of project*

The company has chosen the DRI-BF-Conarc route to manufacture steel, which uses sponge iron and hot metal (alternatively known as pig iron) as input metallic. Sponge iron is produced from domestically available iron ore and coal. Pig iron is produced in a blast furnace from locally available iron ore and imported coking coal. Therefore, the company's exposure to imported coking coal is 50% lower compared to other producers who are largely dependent on blast furnace route. Setting up of the project follows a modular structure. This allows sponge iron kilns to be set up in phases, thereby generating cash flows even during the execution stage.



## Robust business model, undemanding valuations

Bhushan Steel is executing the 2.2m tpa steel project in Orissa that follows a modular structure. Three sponge iron kilns of 500t per day each, steel melting of 120,000t p.a., billet caster of 300,000t p.a. and captive power of 110MW have already been commissioned. Even before the start of the HRC mill, which is scheduled for March 2009, the project has already started generating cash flows. The remaining five sponge iron kilns will be commissioned sequentially by October 2008 resulting in increasing production. We expect production to ramp up in the following manner:

PRODUCTION VOLUMES OF ORRISA PROJECT (TONS)

	FY08	FY09	FY10	FY11
Billet	250,000	300,000	300,000	300,000
Sponge Iron	500,000	800,000	1,200,000	1,200,000
Power (MU)	193	578	771	771
Hot Metal	-	-	1,000,000	1,300,000
Slabs			1,500,000	2,000,000
HRC			1,200,000	1,900,000

Source: Company/Motilal Oswal Securities

*Sponge iron and billet production to generate cashflows during project implementation*

The cold rolling division is primarily engaged in the HRC conversion business and is hedged against volatility in global steel prices. However, the HRC project has huge fixed costs and input costs are fairly stable therefore its profitability is exposed to volatility in steel prices.

SALES PRICE ASSUMPTIONS FOR ORRISA PROJECT (RS/TONS)

	FY08	FY09	FY10
Billet	19,000	18,000	17,000
Sponge Iron	11,000	11,000	11,000
Pig Iron	15,000	14,000	13,000
Slabs	23,000	22,000	21,000
HRC	27,000	26,000	25,000

Source: Motilal Oswal Securities

We expect steel prices to remain firm over next five years due to strong demand growth being posted by all emerging economies with a large population base, rising cost structure of steel producers globally and intensifying consolidation of industry. However, we are factoring a decline in steel prices by Rs1,000 per ton YoY in each of the years FY09 and FY10.

*We are factoring purchased iron ore costs*

## RAW MATERIAL COST ASSUMPTIONS FOR ORISSA PROJECT (RS/TONS)

	FY08	FY09	FY10
Iron ore for sponge iron	2,500	2,750	2,888
Iron ore for Hot metal	800	880	968
Coal for sponge iron ore	1,500	1,500	1,500
Coking coal for hot metal	6,031	6,031	6,031
Power (Rs/Kwh)	3	3	3

Source: Motilal Oswal Securities

Although the company has been allotted captive coal mines and is in an advanced stage of iron ore mining leases being allotted, we are factoring in only prevailing prices of the raw material, as it will take time before the mines become fully operational.

## COMPARATIVE VALUATIONS

	CMP (RS)	EPS (RS)		PER (X)		EV/EBITDA (X)	
		FY08E	FY09E	FY08E	FY09E	FY08E	FY09E
Bhushan Steel	549.0	97.0	101.8	5.7	5.4	7.1	7.9
JSW Steel	599.7	99.3	106.1	6.0	5.7	3.8	4.0
SAIL	135.1	19.0	21.1	7.1	6.4	3.6	3.2

Source: Motilal Oswal Securities

During FY07-FY10, we expect net sales to grow at CAGR of 18%, EBITDA at CAGR of 53% owing to expectation of margin expansion from 16% in FY07 to 37% in FY10; and PAT to grow at CAGR of 56%. The stock trades at a PE of 5.4x FY09 and P/B of 1.2x FY09; expect FY09 RoE at 22%. Valuations are attractive and the business model is robust. We initiate coverage on the stock and set a 12-month target price of Rs713/share (30% upside) based on P/E of 7x FY09.

## SENSITIVITY OF PAT FOR FY10 WITH HRC PRICES

HRC PRICES (RS/TON)	PAT (RS M)	DIFF.	EPS (RS)	DIFF.
27,000	14,535	1,343	342	31
26,000	13,192	1,342	311	32
<b>25,000</b>	<b>11,850</b>	<b>0</b>	<b>279</b>	<b>0</b>
24,000	10,507	-1,343	247	-32
23,000	9,165	-1,342	215	-32
22,000	7,822	-1,343	184	-31

Base case

Source: Motilal Oswal Securities

INCOME STATEMENT							(RS M)
Y/E MARCH	2005	2006	2007	2008E	2009E	2010E	
<b>Net sales</b>	<b>26,750</b>	<b>27,940</b>	<b>38,377</b>	<b>47,316</b>	<b>51,198</b>	<b>62,282</b>	
<i>Change (%)</i>	71.0	4.4	37.4	23.3	8.2	21.7	
Total Expenses	22,721	24,081	32,096	39,125	42,163	39,755	
Raw materials	20,444	21,437	28,301	34,779	37,378	26,024	
<i>% of Net Sales</i>	76.4	76.7	73.7	73.5	73.0	41.8	
Power & Fuel	1,083	1,266	1,636	1,840	1,731	3,936	
Employee Cost	233	360	283	506	770	1,567	
Other Manufacturing Expenses	960	1,019	1,876	1,999	2,284	8,228	
<b>EBITDA</b>	<b>4,030</b>	<b>3,859</b>	<b>6,281</b>	<b>8,191</b>	<b>9,035</b>	<b>22,527</b>	
<i>% of Net Sales</i>	15.1	13.8	16.4	17.3	17.6	36.2	
Depn. & Amortization	1,647	1,658	2,089	2,400	2,800	5,500	
EBIT	2,382	2,201	4,192	5,791	6,235	17,027	
Net Interest	794	754	773	1,200	1,400	3,250	
Other income	68	149	304	304	304	304	
<b>PBT before EO</b>	<b>1,657</b>	<b>1,597</b>	<b>3,724</b>	<b>4,895</b>	<b>5,139</b>	<b>14,082</b>	
<b>PBT after EO</b>	<b>1,657</b>	<b>1,597</b>	<b>3,724</b>	<b>4,895</b>	<b>5,139</b>	<b>14,082</b>	
Tax	123	52	591	776	815	2,232	
<i>Rate (%)</i>	7.4	3.3	15.9	15.9	15.9	15.9	
<b>Reported PAT</b>	<b>1,534</b>	<b>1,545</b>	<b>3,133</b>	<b>4,119</b>	<b>4,325</b>	<b>11,850</b>	
<b>Adjusted PAT</b>	<b>1,534</b>	<b>1,545</b>	<b>3,133</b>	<b>4,119</b>	<b>4,325</b>	<b>11,850</b>	
<i>Change (%)</i>	69.8	0.7	102.8	31.5	5.0	174.0	

E: MOST Estimates

BALANCE SHEET							(RS M)
Y/E MARCH	2005	2006	2007	2008E	2009E	2010E	
Share Capital	405	413	425	425	425	425	
Reserves	6,901	8,484	11,660	15,605	19,731	31,332	
Share holders funds	7,306	8,897	12,084	16,030	20,156	31,757	
Loans	<b>13,175</b>	<b>20,362</b>	<b>29,362</b>	<b>36,362</b>	<b>49,362</b>	<b>33,362</b>	
Secured	10,898	16,509	25,509	32,509	45,509	29,509	
Unsecured	2,277	3,853	3,853	3,853	3,853	3,853	
Deffered tax liability (net)	749	663	1,237	1,463	1,699	2,347	
<b>Capital Employed</b>	<b>21,229</b>	<b>29,922</b>	<b>42,683</b>	<b>53,854</b>	<b>71,216</b>	<b>67,465</b>	
Gross Block	16,578	17,959	18,959	20,959	40,959	70,959	
Less: Accum. Deprn.	6,108	7,758	9,848	12,248	15,048	20,548	
<b>Net Fixed Assets</b>	<b>10,470</b>	<b>10,201</b>	<b>9,112</b>	<b>8,712</b>	<b>25,912</b>	<b>50,412</b>	
Capital WIP	3,857	12,952	22,952	32,952	32,952	2,952	
Investments	190	192	192	192	192	192	
<b>Curr. Assets</b>	<b>10,683</b>	<b>12,019</b>	<b>17,401</b>	<b>20,441</b>	<b>21,242</b>	<b>24,813</b>	
Inventories	5,817	4,748	7,360	9,074	9,819	11,945	
Sundry Debtors	3,394	4,045	5,783	7,130	7,715	9,385	
Cash and Bank	174	815	1,847	1,826	1,297	1,072	
Loans and Advances	1,298	2,411	2,411	2,411	2,411	2,411	
<b>Curr. Liability &amp; Prov.</b>	<b>3,970</b>	<b>5,442</b>	<b>6,973</b>	<b>8,443</b>	<b>9,081</b>	<b>10,903</b>	
Sundry Creditors	3,504	4,778	6,309	7,778	8,416	10,238	
Other Liabilities & prov.	466	665	665	665	665	665	
<b>Net Current Assets</b>	<b>6,712</b>	<b>6,577</b>	<b>10,428</b>	<b>11,999</b>	<b>12,161</b>	<b>13,910</b>	
<b>Application of Funds</b>	<b>21,229</b>	<b>29,922</b>	<b>42,683</b>	<b>53,854</b>	<b>71,216</b>	<b>67,465</b>	

**E: MOST Estimates**

*Debt is expected to decline sharply in FY10*

## RATIOS

Y/E MARCH	2005	2006	2007	2008E	2009E	2010E
<b>Basic (Rs)</b>						
<b>EPS</b>	<b>37.9</b>	<b>37.4</b>	<b>73.8</b>	<b>97.0</b>	<b>101.8</b>	<b>279.0</b>
<b>Cash EPS</b>	<b>78.6</b>	<b>77.6</b>	<b>123.0</b>	<b>153.5</b>	<b>167.8</b>	<b>408.5</b>
BV/Share	170.5	205.6	274.5	367.4	464.6	737.7
DPS	2.5	2.5	3.0	3.5	4.0	5.0
<i>Payout (%)</i>	7.5	7.7	4.8	4.2	4.6	2.1

**Valuation (x)**

P/E	14.5	14.7	7.4	5.7	5.4	2.0
Cash P/E	7.0	7.1	4.5	3.6	3.3	1.3
P/BV	3.2	2.7	2.0	1.5	1.2	0.7
EV/Sales	1.3	1.5	1.3	1.2	1.4	0.9
EV/EBITDA	8.7	10.9	8.1	7.1	7.9	2.5
Dividend Yield (%)	0.5	0.5	0.5	0.6	0.7	0.9
EV/ton (US\$/ton)	-	-	537	612	755	588

*FY10 valuations are extremely attractive*

**Return Ratios (%)**

EBITDA Margins	15.1	13.8	16.4	17.3	17.6	36.2
Net Profit Margins	5.7	5.5	8.2	8.7	8.4	19.0
RoE	22.2	18.2	26.9	26.4	21.9	37.8
RoCE	11.2	7.4	9.8	10.8	8.8	25.2
RoIC	14.0	13.8	23.7	30.7	17.0	26.9

*Margins expansion*

**Working Capital Ratios**

Fixed Asset Turnover (x)	1.6	1.6	2.0	2.3	1.2	0.9
Asset Turnover (x)	1.3	0.9	0.9	0.9	0.7	0.9
Debtor (Days)	46	53	55	55	55	55
Inventory (Days)	79	62	70	70	70	70
Creditors (Days)	48	62	60	60	60	60

**Growth (%)**

Sales	71.0	4.4	37.4	23.3	8.2	21.7
EBITDA	55.9	-4.2	62.8	30.4	10.3	149.3
PAT	69.8	0.7	102.8	31.5	5.0	174.0

*Strong PAT growth in FY10*

**Leverage Ratio (x)**

Current Ratio	2.7	2.2	2.5	2.4	2.3	2.3
Interest Cover Ratio	3.0	2.9	5.4	4.8	4.5	5.2
Debt/Equity	1.9	2.3	2.4	2.2	2.4	1.0

*E: MOST Estimates*

CASHFLOW STATEMENT						(RS M)
Y/E MARCH	2005	2006	2007	2008E	2009E	2010E
Pre-tax profit	1,657	1,597	3,724	4,895	5,139	14,082
Depreciation	1,465	1,650	2,089	2,400	2,800	5,500
(Inc)/Dec in Wkg. Cap.	-1,540	777	-2,819	-1,592	-691	-1,974
Tax paid	-131	-138	-17	-551	-578	-1,584
<b>CF from Op. Activity</b>	<b>1,451</b>	<b>3,886</b>	<b>2,977</b>	<b>5,153</b>	<b>6,670</b>	<b>16,023</b>
(Inc)/Dec in FA + CWIP	-5,144	-10,476	-11,000	-12,000	-20,000	-
(Pur)/Sale of Investments	0	-2	-	-	-	-
<b>CF from Inv. Activity</b>	<b>-5,144</b>	<b>-10,478</b>	<b>-11,000</b>	<b>-12,000</b>	<b>-20,000</b>	<b>-</b>
Equity raised/(repaid)	-	8	204	-	-	-
Debt raised/(repaid)	3,869	7,187	9,000	7,000	13,000	-16,000
Dividend (incl. tax)	-114	-119	-149	-174	-199	-248
Other financing activities	-	157.1	-	-	-	-
<b>CF from Fin. Activity</b>	<b>3,754</b>	<b>7,233</b>	<b>9,055</b>	<b>6,826</b>	<b>12,801</b>	<b>-16,248</b>
<b>(Inc)/Dec in Cash</b>	<b>61</b>	<b>641</b>	<b>1,032</b>	<b>-21</b>	<b>-529</b>	<b>-225</b>
Add: opening Balance	113	174	815	1,847	1,826	1,297
Closing Balance	174	815	1,847	1,826	1,297	1,072

E: MOST Estimates



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**Disclosure of Interest Statement**

**Bhushan Steel**

- |   |     |
|---|-----|
| 1. Analyst ownership of the stock                       | No  |
| 2. Group/Directors ownership of the stock               | No  |
| 3. Broking relationship with company covered            | No  |
| 4. Investment Banking relationship with company covered | Yes |

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