Company Focus

26 March 2009 | 28 pages

Steel Authority of India (SAIL.BO)

Initiation of coverage

Initiating at Buy: Safety in Challenging Times

- **Target price Rs116** — We initiate on SAIL at Buy (1M) despite EPS degrowth and our conservative steel outlook because SAIL 1) is better geared to current and expected prices; 2) has a strong balance sheet (net cash); 3) has a 97% domestic exposure (better growth); 4) it offers relative value on EV/EBITDA.
- **Best play on current/forecast prices** — We see absolute share price return at current steel prices and relatively better returns (vs peers) if prices weaken. However if there is a meaningful sudden upturn in the steel cycle, stocks with higher indebtedness (JSW Steel and Tata Steel) would offer more upside.
- **Preferred steel pick** — Our target price is at 5x March 10 EV/EBITDA, higher than SAIL's 3-year avg but lower than peaks of 8-10x. This is at a discount to JSW Steel's target multiple of 5.5x as SAIL offers lower volume growth and a PSU-tag, although both offer largely domestic exposure. It is at a meaningful premium to Tata Steel's 4x target multiple and high international exposure. SAIL trades at a discount to global peers – now at 5.4x CY09 EV/EBITDA.
- **Steady growth; strong balance sheet** — We expect sales volumes to grow by 7% in FY10 and 9% in FY11. Saleable steel capacity should grow from 13m tpa to 23m tpa by 2012. Of the three domestic steel majors, SAIL is the only one with a net cash position (Rs32/share as of Dec 2008). SAIL's net debt/equity ratio was -0.5x as of March 2008 versus 1.7x for TSL and 1.5x for JSTL.
- **Risk factors** — 1) Further steel price declines; 2) Delays in access to captive iron ore; 3) FX rate changes; 4) Lower volume growth; and 5) Govt. ownership.

Buy/Medium Risk	1M
Price (25 Mar 09)	Rs94.40
Target price	Rs116.00
Expected share price return	22.9%
Expected dividend yield	2.6%
Expected total return	**25.5%**
Market Cap	Rs389,910M US$7,732M

Price Performance (RIC: SAIL.BO, BB: SAIL IN)

Figure 1. SAIL – Statistical Abstract

YE 31 Mar	Net Profit (Rsm)	EPS (Rs)	EPS growth (%)	P/E (x)	EV/EBITDA (x)	ROE (%)
FY06	40,130	9.7	-41%	9.7	5.0	32%
FY07	62,023	15.0	55%	6.3	3.1	36%
FY08	75,368	18.2	22%	5.2	2.2	33%
FY09E	57,316	13.9	-24%	6.8	2.7	21%
FY10E	46,065	11.2	-20%	8.5	3.9	15%
FY11E	35,931	8.7	-22%	10.9	6.1	11%

Source: Company Reports and CIRA estimates. Priced as on 25 March 2009.

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See Appendix A-1 for Analyst Certification and important disclosures.

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Fiscal year end 31-Mar	2007	2008	2009E	2010E	2011E
Valuation Ratios					
P/E adjusted (x)	6.3	5.2	6.8	8.5	10.9
EV/EBITDA adjusted (x)	3.7	2.8	3.4	4.3	6.1
P/BV (x)	2.3	1.7	1.4	1.2	1.1
Dividend yield (%)	3.3	3.9	2.6	2.1	1.5
Per Share Data (Rs)					
EPS adjusted	15.02	18.25	13.88	11.15	8.70
EPS reported	15.02	18.25	13.88	11.15	8.70
BVPS	41.92	55.84	66.79	75.60	82.66
DPS	3.10	3.70	2.50	2.00	1.40
Profit & Loss (RsM)					
Net sales	351,128	406,455	414,655	350,882	346,417
Operating expenses	-253,576	-289,259	-325,470	-279,182	-288,586
EBIT	**97,552**	**117,197**	**89,185**	**71,699**	**57,831**
Net interest expense	-3,321	-2,509	-2,995	-2,945	-4,990
Non-operating/exceptionals	0	0	0	0	0
Pre-tax profit	**94,231**	**114,687**	**86,190**	**68,754**	**52,840**
Tax	-32,208	-39,320	-28,874	-22,689	-16,909
Extraord./Min.Int./Pref.div.	0	0	0	0	0
Reported net income	**62,023**	**75,368**	**57,316**	**46,065**	**35,931**
Adjusted earnings	62,023	75,368	57,316	46,065	35,931
Adjusted EBITDA	109,667	129,552	101,935	84,549	72,599
Growth Rates (%)					
Sales	21.6	15.8	2.0	-15.4	-1.3
EBIT adjusted	58.0	20.1	-23.9	-19.6	-19.3
EBITDA adjusted	48.6	18.1	-21.3	-17.1	-14.1
EPS adjusted	54.6	21.5	-24.0	-19.6	-22.0
Cash Flow (RsM)					
Operating cash flow	**56,329**	**83,782**	**49,044**	**57,887**	**49,930**
Depreciation/amortization	12,115	12,355	12,750	12,850	14,769
Net working capital	-9,763	-7,434	-6,718	9,229	-115
Investing cash flow	**-5,875**	**-11,399**	**-31,208**	**-96,763**	**-147,834**
Capital expenditure	-9,928	-22,011	-50,000	-110,000	-153,190
Acquisitions/disposals	-2,218	-244	0	0	0
Financing cash flow	**-16,082**	**-30,887**	**-12,685**	**-15,027**	**17,344**
Borrowings	-1,171	-11,353	-1,000	0	32,000
Dividends paid	-11,068	-16,439	-8,690	-12,081	-9,665
Change in cash	**34,372**	**41,496**	**5,151**	**-53,902**	**-80,559**
Balance Sheet (RsM)					
Total assets	**338,178**	**408,762**	**462,729**	**485,269**	**540,882**
Cash & cash equivalent	96,098	137,594	142,745	88,843	8,284
Accounts receivable	23,148	30,481	31,387	27,441	26,967
Net fixed assets	127,962	139,609	176,859	274,009	412,430
Total liabilities	**165,046**	**178,126**	**186,859**	**172,998**	**199,445**
Accounts payable	25,451	29,816	34,764	25,286	24,921
Total Debt	41,805	30,452	29,452	29,452	61,452
Shareholders' funds	**173,132**	**230,636**	**275,870**	**312,271**	**341,437**
Profitability/Solvency Ratios (%)					
EBITDA margin adjusted	31.2	31.9	24.6	24.1	21.0
ROE adjusted	41.5	37.3	22.6	15.7	11.0
ROIC adjusted	36.6	40.5	27.0	17.1	10.3
Net debt to equity	-31.4	-46.5	-41.1	-19.0	15.6
Total debt to capital	19.5	11.7	9.6	8.6	15.3

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Investment Thesis

We initiate coverage on SAIL at Buy/Medium Risk (1M) despite an expected decline in profits based on our conservative view on the steel markets. We forecast a HRC price of US$550/t (-26% YoY) for FY10 and US$450/t for FY11.

SAIL is better positioned based on our steel outlook, net cash position and 97% domestic exposure.

We prefer SAIL as 1) it is better positioned in the current and expected price environment; 2) it now has a net cash position; 3) its operations are largely based in India (other majors are more exposed to international markets); and 4) it offers relative value on EV/EBITDA. SAIL's prospective EBITDA margins compare favorably versus its domestic peers and its EBITDA/tonne is in line with JSW Steel (JSTL) and higher than Tata Steel (TSL). SAIL has some flexibility to postpone capex depending on the likely steel outlook.

SAIL likely to offer better returns with current/weaker steel prices.

We expect SAIL to offer absolute share price returns if steel prices remain around current levels and relatively better returns (vs TSL and JSTL) if steel prices weaken. However in case of a meaningful upturn in the steel cycle, it would likely underperform TSL and JSTL, which have higher levels of indebtedness. Other concerns for SAIL include high manpower costs and its government ownership (slower decision-making; less pricing freedom likely).

SAIL's target multiple is at a premium to Tata Steel and a discount to JSW Steel.

Our target price of Rs116 is based on 12-month forward EV/EBITDA of 5x, at a discount to JSTL's target multiple of 5.5x and a premium to TSL's target multiple of 4x. SAIL offers lower volume growth than JSTL and has a PSU-tag, although both offer a largely domestic exposure. The premium to TSL accounts for TSL's 60%+ European exposure. SAIL's target EV/EBITDA multiple is at a premium to its 3-year average EV/EBITDA of 4.2x but lower than peaks of 8-10x. SAIL trades at a discount to global steel peers – currently at 5.4x CY09 EV/EBITDA. At our target price, the stock would trade at a P/E of 10.4x.

Figure 2. JSW Steel, SAIL and Tata Steel – Valuation Metrics and Ratios

EBITDA margins are higher and EBITDA/t is in line.

Attractive on net debt to equity and net debt to EBITDA.

Valuations favourable on EV/EBITDA.

	FY08	FY09E	FY10E	FY11E
EBITDA margin (%)				
JSW Steel	29%	21%	23%	23%
SAIL	32%	25%	24%	21%
Tata Steel	14%	12%	11%	10%
EBITDA/t (Rs)				
JSW Steel	9,829	9,531	6,862	6,265
SAIL	10,520	9,347	7,239	5,722
Tata Steel	7,014	8,349	5,296	4,697
Net debt/Equity (x)				
JSW Steel	1.5	2.0	2.0	2.3
SAIL	-0.5	-0.4	-0.2	0.2
Tata Steel	1.7	1.7	1.1	1.1
Net debt/EBITDA (x)				
JSW Steel	3.2	4.5	4.3	5.2
SAIL	-0.8	-1.1	-0.7	0.7
Tata Steel	2.6	2.5	3.3	4.0
P/E (x)				
JSW Steel	2.4	3.9	4.4	4.6
SAIL	5.2	6.8	8.5	10.9
Tata Steel	1.9	1.5	4.2	5.2
EV/EBITDA (x)				
JSW Steel	4.3	5.8	5.5	6.4
SAIL	2.2	2.7	3.9	6.1
Tata Steel	3.7	3.5	4.6	5.5
EV/t (US$)				
JSW Steel	848	1,109	760	802
SAIL	434	455	528	671
Tata Steel	520	579	491	513

Source: Citi Investment Research and Analysis estimates. Prices as on 25 March 2009.

Company background

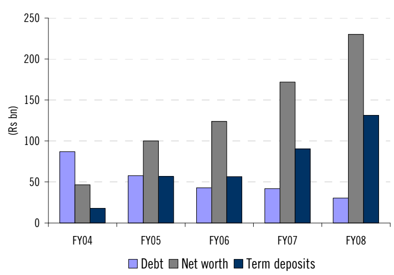
Steel Authority of India (SAIL) is India's largest integrated steel producer with hot metal capacity of 15mtpa and crude steel capacity of 13mtpa. It has five integrated steel plants and three special steel plants, most of which are located in eastern and central India, close to its own iron ore, limestone and dolomite mines. SAIL is a Public Sector Undertaking in which the Government of India owns 85.8%. It plans to expand its capacity gradually taking its hot metal capacity to 26mtpa and saleable steel capacity to 23m tpa by 2012 at a total capex of Rs540bn. SAIL also plans to increase its iron ore mining capacity and power capacity (through JVs) to match its expansion plans. SAIL makes both flat (52% of sales) and long (36%) products. It makes value added products such as pipes, plates and coated products. Alloys and special steels make up about 6% of sales. Most of SAIL's output is sold within India and exports account for only 3% of sales. SAIL's planned capex will also help reduce costs as existing facilities are being modernized and upgraded. Once the capex is completed, SAIL will move to 100% continuous casting, not producing steel using the twin hearth process and not needing to sell any semi-finished steel.

Competitively positioned

1. Balance sheet strength

Net cash position

Figure 3. SAIL's Balance Sheet Position



Source: Company Reports

Net cash per share is Rs32 as of Dec 2008 (Rs26 as of March 2008). The high cash level adds to other income. Cash on SAIL's books is currently at Rs160bn. As it has an expected capex of Rs540bn over the next four years, we expect cash to be gradually utilized for funding SAIL's growth. SAIL's net debt/equity ratio was -0.5x as of March 2008 versus 1.7x for TSL and 1.5x for JSTL.

Attractive relative to other majors

Among the three domestic steel majors, SAIL is the only one with a net cash position, increasing its attractiveness and safety given the uncertain steel outlook. Generally speaking, during an upturn in a commodity cycle, investors generally prefer stocks with high debt levels. This is because as free cash flow is generated, debt is paid down and equity values expand. However during a downturn in a commodity cycle, as we are now experiencing , the focus changes to companies like SAIL with low debt/net cash, which offer relative safety.

2. Competitiveness

Integrated steel producer but lacks coal

SAIL has 100% captive iron ore.

SAIL is India's largest integrated steel producer and has access to captive iron ore and low cost power. It produces all the 25-26m tonnes of iron ore that it requires for its blast furnaces internally from captive mines and also produces limestone and dolomite from captive mines.

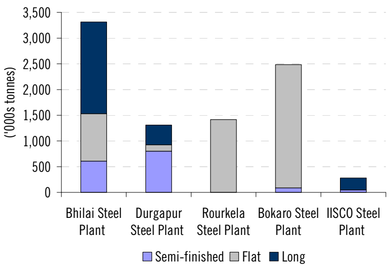
Full benefit of coking coal price reduction may not come in FY10.

However SAIL only produces 5-7% of its coal and coking coal requirements from captive sources. It purchases about 20% of its coking coal requirements from within India and 70% is imported. This adversely impacted its cost in FY09 but should give some benefit in FY10 as we expect that coking coal prices should fall from US$305/t in FY09 to US$120/t in FY10. The lower cost impact in FY10 may be reduced somewhat and SAIL will still need to buy older contracted coking coal volume (likely to be ~3.5m tonnes upto June 2009) at the old rate of US$305/t. The company is in negotiations to spread out the off-take of the higher price coking coal over a few years. SAIL's coking coal contracts run from July to June.

Captive power meets ~60-65% of its needs.

About 60-65% of SAIL's power requirements is provided by captive power plants (including from JVs). This proportion is likely to increase due to captive power plants set up by its joint venture companies. 500 MW of power capacity is being commissioned in FY10 at Bhilai and another 500MW is expected at Bokaro in the next 2-3 years.

Figure 4. Production of saleable steel – Plant-wise – Category-wise: 9MFY09



Source: Citi Investment Research and Analysis

Figure 5. SAIL – Existing capacities

Plant	Location	FY08 Saleable steel capacity (mtpa)	PBIT (Rs m)	PBIT margin (%)	As a percentage of total PBIT (%)	PBIT/t (Rs)
Bhilai Steel Plant (BSP)	Chhattisgarh	4.43	54,253	32%	46%	12,979
Durgapur Steel Plant (DSP)	West Bengal	1.72	10,363	18%	9%	6,281
Rourkela Steel Plant (RSP)	Orissa	2.07	14,810	20%	13%	7,368
Bokaro Steel Plant (BSL)	Jharkhand	3.90	28,708	23%	24%	7,952
IISCO Steel Plant (ISP)	West Bengal	0.41	-2,801	-15%	-2%	-7,370
Alloy Steels Plant (ASP)*	West Bengal	0.15	84	1%	0%	557
Salem Steel Plant (SSP)*	Tamil Nadu	0.23	1,077	8%	1%	4,682
Visvesvaraya Iron and Steel Plant (VISL)*	Karnataka	0.13	-521	-7%	0%	-4,004

Source: Company Reports and Citi Investment Research. * PBIT/t based on capacity

■ Iron ore should be available for growth plans

SAIL is making efforts to enhance its mining capacity to match its expansion plans. In case of iron ore, although the leases on the Chiria (Jharkhand) mines have not yet been renewed, SAIL has been assured that they will get adequate iron ore for their expansions. It expects that its requirement of iron ore will go to 42mtpa post modernization and expansion by FY13. The Chiria mines reportedly have 1.7 to 2.0bn tonnes of reserves (Hindustan Times).

In an effort to reach self-sufficiency in coking coal, five PSUs (SAIL, Rashtriya Ispat Nigam, Coal India, National Thermal Power Corp and NMDC) formed a Special Purpose Vehicle (SPV) in FY08 with an initial equity capital base of Rs35bn. This SPV will scout for coking coal asserts abroad. In January 2008, SAIL also signed a JV agreement with Tata Steel for joint development of coal blocks. These initiatives will help reduce costs only in the long term. There has been limited progress so far.

(Figure 6. Raw materials required (m tonnes)

	FY08	FY09E	FY10E	FY11E
Iron ore	25.4	23.7	24.2	25.4
Coking Coal	14.0	12.9	13.2	13.8

Source: Company Reports and Citi Investment Research and Analysis estimates

SAIL has some flexibility to postpone capex in case demand revival takes longer.

- **Some flexibility in capex plans**

SAIL's ambitious expansion plans (capex Rs540bn) envisage raising hot metal capacity from ~15m tpa in FY08 to 26m tpa and saleable steel capacity from 13m tpa to 23m tpa by FY12-13.

The initial plan was to complete most of the expansions by 2010, despite cost escalation. However given the sluggish market situation, the expansions are being rolled out slower. We estimate that saleable steel capacity would increase by 2.1mtpa (16%) in FY11, 3mtpa (20%) by FY12 and 5mtpa (28%) in FY13.

Management is also in discussion with machinery suppliers to see if savings are possible on capex costs. As orders for machinery have not yet been placed for some plants, SAIL has some flexibility to postpone capex in case demand revival takes longer and would instead use capex for asset renewal and refurbishment. We estimate capex of Rs50bn in FY09, Rs110bn in FY10 and Rs150bn in FY11.

Figure 7. SAIL – Expected capacity expansion and capex

Plant	Completion date	Capex (Rs bn)	Increase in saleable steel capacity (m tpa)	Capex/t (US$)	Saleable steel capacity post expansion (mtpa)
Bhilai Steel Plant (BSP)	Apr-12	130.0	2.10	1,238	6.53
Durgapur Steel Plant (DSP)	Jul-12	57.0	1.10	1,036	2.83
Rourkela Steel Plant (RSP)	May-12	88.0	1.80	978	3.88
Bokaro Steel Plant (BSL)	Dec-11	111.0	2.60	854	6.53
IISCO Steel Plant (ISP)	Dec-10	132.0	2.00	1,320	2.37
Alloy Steels Plant (ASP)	Dec-11	0.5	0.28	35	0.43
Salem Steel Plant (SSP)	Dec-10	19.0	0.11	3,455	0.34
Visvesvaraya Iron and Steel Plant (VISL)	Dec-11	1.2	0.09	267	0.22
Others		4.8			

Source: Company Reports and Citi Investment Research. Note - Completion dates assume some delays to dates announced by the company.

The domestic market accounts for 97% of SAIL's sales.

- **Low exposure to international markets**

Most of SAIL's output is sold within India and exports account for only 3% of sales. Other steel majors are exposed to markets in Europe and the US, which are experiencing a far bigger downturn than India. Tata Steel (60%+ exposure to Europe) has cut production by 30-40% at its UK/European operations, due to the sharp fall in demand. JSW Steel's US pipe and plate operations are operating at only around 20% utilization levels. Steel demand in India saw a negative YoY growth ranging from 13-18% during Sep-Dec 2008, but demand has recovered with YoY growth hitting 4% in February 2009. We expect domestic demand to fall by 1% in FY09 and grow by 4.5% in FY10.

3. Operationally well-positioned

- **Relatively higher margins and EBITDA/t**

SAIL's EBITDA margins compare favorably versus its domestic peers. This is a function of its ongoing technological upgradation, integrated operations and higher other income. Its focus on the domestic market is helping keep EBITDA/t higher than the other producers in FY10 but slightly lower than JSW Steel in FY11 when the latter benefits from lower raw material costs and higher volumes.

Figure 8. India steel majors – Relative profitability

	FY06	FY07	FY08	FY09E	FY10E	FY11E
EBITDA margin (%)						
JSW Steel	26%	32%	29%	21%	23%	23%
SAIL	26%	31%	32%	25%	24%	21%
Tata Steel	32%	31%	14%	12%	11%	10%
EBITDA/t (US$)						
JSW Steel	7,213	10,284	9,829	9,531	6,862	6,265
SAIL	6,525	9,239	10,520	9,347	7,239	5,722
Tata Steel	14,462	15,690	7,014	8,349	5,296	4,697

Source: Company Reports and Citi Investment Research and Analysis estimates

Steady volume growth

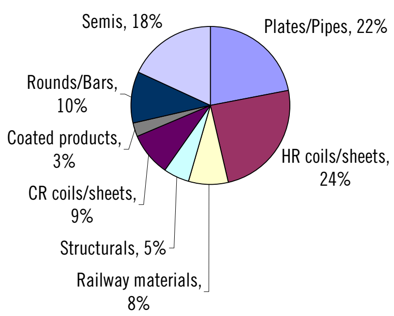
SAIL makes both flat (52% of sales volumes) and long (36%) products. It also makes value added products such as pipes, plates and coated products. Alloys and special steels make up about 6% of sales. Unlike the two other Indian steel majors, SAIL has not recently expanded capacity. Hence we expect its saleable steel volumes to grow by 7% in FY10 (after a 11% drop in FY09) and by 9% in FY11 and subsequently by a higher rate as its new capacity is expected to be commissioned FY12 onwards. There is adequate land for expansions even beyond 26m tpa of hot metal.

Figure 9. SAIL – Product-wise sales turnover, FY08

Flats	51.7%
Longs	36.2%
Pipes, electrical sheets, tin plates	1.6%
Alloy and special steel plants	5.7%
Secondary products (ingots, pig iron)	4.8%
Total	100.0%

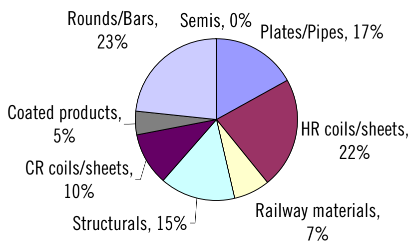
Source: Company Reports

Figure 10. SAIL – Product mix: Saleable steel production, FY08



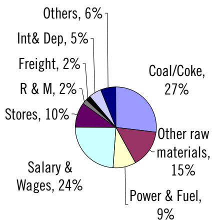
Source: Company Reports

Figure 11. SAIL – Product mix: Saleable steel production, Post expansions



Source: Company Reports

Figure 12. SAIL – FY08 Breakdown of expenses



Source: Citi Investment Research and Analysis

■ **Further cost savings possible**

In addition to helping raise volumes, SAIL's planned capex will also help reduce costs. This is because existing facilities are being modernized and upgraded and will improve productivity and reduce energy consumption. Once capex is complete SAIL will have eliminated technologically obsolete processes such as ingot casting (move to 100% continuous casting) and use of twin hearth furnaces.

SAIL will also be able to raise the share of finished steel in saleable steel to almost 100% from the current level of 83% and increase the proportion of value added steel in the overall sales mix.

Sensitivity to steel prices

Our estimates for SAIL are largely based on price forecasts provided by our European steel team and based on recent price trends in India. For Hot Rolled Coils, we have used US$550/tonne for FY10E and US$450/tonne for FY11E. We give below the sensitivity of SAIL's profits based on different HRC prices for FY10E and FY11E. If there is a sudden upturn in the steel cycle, then stocks with higher indebtedness will offer bigger upside.

Figure 13. SAIL – Sensitivity to Steel Prices, FY10E

US$/t (HRC)	450	500	550*	600
EBITDA (Rs bn)	22.3	53.4	84.5	115.7
EBITDA margin (%)	8%	17%	24%	30%
PAT (Rs bn)	4.3	25.2	46.1	66.9
EPS (Rs)	1.0	6.1	11.2	16.2

Source: Citi Investment Research and Analysis estimates. *Base case

Figure 14. SAIL – Sensitivity to Steel Prices, FY11E

US$/t (HRC)	400	425	450*	500
EBITDA (Rs bn)	39.6	56.1	72.6	105.6
EBITDA margin (%)	13%	17%	21%	28%
PAT (Rs bn)	13.5	24.7	35.9	58.4
EPS (Rs)	3.3	6.0	8.7	14.1

Source: Citi Investment Research and Analysis estimates. *Base case

Risk factors

Trends in US$ exchange rates

A key factor for SAIL's profit forecasts is the likely trend in the Rs/US$ rate as domestic prices are based on the landed cost of imported steel. Our economics team forecasts average Rs/US$ rates of 48 for FY10E and 47 for FY11E. We give below the sensitivity of SAIL's profits to different FX rates.

Figure 15. SAIL – Sensitivity to Rs/US$ Rate, FY10E

Rs/US$	47.0	48.0*	49.0
EBITDA (Rs bn)	79.1	84.5	90.0
EBITDA margin (%)	23%	24%	25%
PAT (Rs bn)	42.4	46.1	49.7
EPS (Rs)	10.3	11.2	12.0

Source: Citi Investment Research and Analysis estimates. *Base case

Figure 16. SAIL – Sensitivity to Rs/US$ Rate, FY11E

Rs/US$	46.0	47.0*	48
EBITDA (Rs bn)	67.9	72.6	77.3
EBITDA margin (%)	20%	21%	22%
PAT (Rs bn)	32.8	35.9	39.1
EPS (Rs)	7.9	8.7	9.5

Source: Citi Investment Research and Analysis estimates. *Base case

Delay in availability of iron ore

Renewal of Chiria mines is key for future expansions.

SAIL currently meets all its iron ore requirements of ~25mtpa from captive sources. Once its hot metal capacity is fully commissioned, its iron ore requirement will rise to ~42mtpa. SAIL has been looking for new mines to meet its additional requirements. There has been a delay in renewal of leases of the Chiria mines (Jharkhand). While further delays could be a risk, SAIL is confident of getting additional ore by the time its expansions are completed.

Impact of old coking coal rates in FY10

Around 3.5m tonnes of coking coal contracted till June 2009 remains to be picked up.

We estimate that FY10 contracts will be signed at US$120/t (negotiations ongoing), substantially lower than the US$305/t contracted for FY09. Most domestic steel companies produced below targets in FY09 and have outstanding coking coal quantity to be lifted at FY09 prices. Most companies (including SAIL) are trying to spread this remaining quantity over a 2-3 year period. In case they are unable to convince the coking coal companies to give this relief, FY10 profits would be adversely impacted. For SAIL, ~3.5m tonnes of coking coal are still remaining to be picked up at the old rates.

Government ownership

SAIL is susceptible to procedural formalities.

The Government of India holds 85.8% of SAIL's equity making it a Public Sector Undertaking (PSU) and subject to several rules and procedures, which can have an adverse impact as it slows business decisions (including approvals for expansions) considerably. There is also the risk of price direction to which a government company would be more susceptible particularly when prices are rising in an inflationary environment as was the case in 1HFY09.

Valuations

SAIL has changed substantially from FY05 onwards. Prior to this it was highly indebted, relatively less efficient and loss making. Its D/E ranged from 2x to 6.5x during FY99 to FY04. It reported net losses during FY99 to FY03 – a period characterized by low EBITDA margins (7-15%). SAIL's earnings profile improved dramatically from FY05 when EBITDA margin jumped to 38% due to a combination of cost cutting and better steel prices. It also managed to reduce total debt substantially from a high of Rs159bn in FY00 to Rs58bn in FY05.

EV/EBITDA

EV/EBITDA is our preferred steel valuation metric.

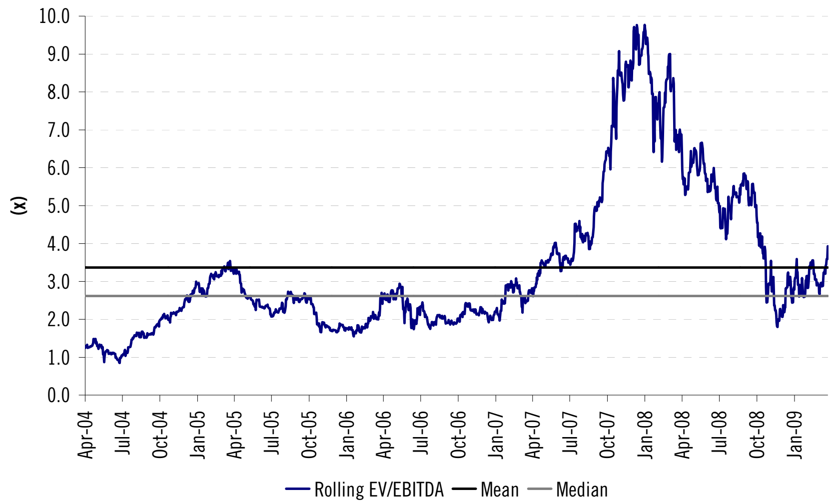
We use EV/EBITDA as our preferred valuation metric for the Indian steel companies given the high debt-equity levels for two of the three steel majors under coverage. SAIL has traditionally traded at a discount to both Tata Steel and JSW Steel based on its history, its status as a government company and its lower volume growth.

In the current environment we value SAIL at a premium to Tata Steel given Tata Steel's international market exposure. We value SAIL at a discount to JSW Steel. Both have a primarily domestic exposure, but SAIL offers lower volume growth and continues to be a government company.

Our target multiple of 5x for SAIL is higher than 4x for Tata Steel and lower than the 5.5x for JSW Steel.

We have used a target multiple of 5x for SAIL, higher than 4x for Tata Steel but lower than the 5.5x we use for JSW Steel. The target EV/EBITDA multiple of 5x is at a premium to SAIL's 3-year average EV/EBITDA of 3.4x and 5-year average EV/EBITDA of 4.2x. We arrive at a target price of Rs116 and recommend Buy/Medium Risk. SAIL's net cash position, its flexibility on some of its expansions gives it a relative advantage and makes it less risky than companies that have high debt-equity given our sluggish outlook for steel prices.

Figure 17. SAIL – Rolling EV/EBITDA chart



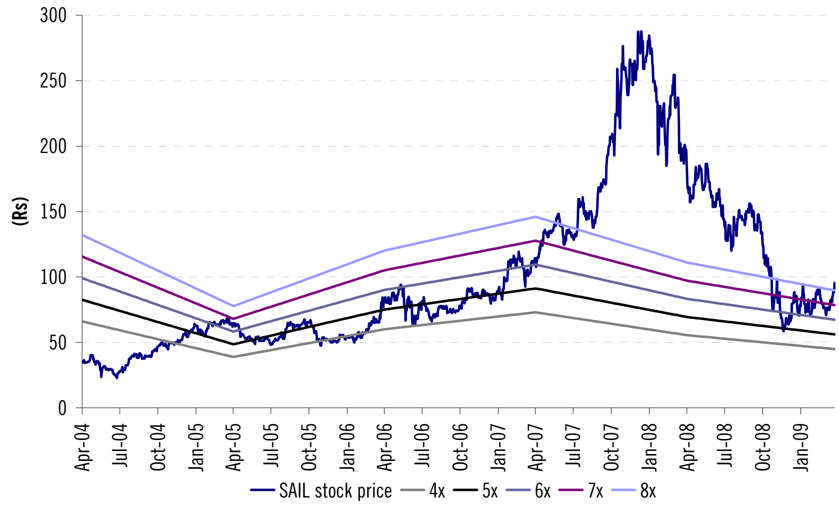
Source: Company Reports, Datastream, Citi Investment Research and Analysis

P/E

Our target PE is at a discount to peak multiples and Citi's universe of global steel stocks.

SAIL's rolling forward P/E has largely been trading in a range of 4x to 8x since FY05. The mean during this period has been 7.1x, but the stock has also traded as high as 14-18x. At our target price, the stock would trade at a P/E multiple of 10.4x. This is at a discount to the average CY2009 PE multiple of 11.5x for Citi's universe of global steel stocks.

Figure 18. SAIL Rolling PE band chart



Source: Company Reports, Datastream, Citi Investment Research and Analysis

SAIL appears cheap in comparison with global peers

Figure 19. Ferrous metals – Global Valuations

Company Name	RIC Code	Rating	Mkt Cap		Share			P/E (x)			EV/EBITDA (x)			P/BVPS (x)		
			USD $m	Ccy	Price	Target	Upside	2008A	2009E	2010E	2008A	2009E	2010E	2008A	2009E	2010E
UK/Europe																
Acerinox	ACX.MC	2M	3,157	EUR	9.14	13.00	42%	13.6	8.2	6.9	7.8	5.0	4.2	1.0	0.9	0.9
ArcelorMittal	ISPA.AS	2M	27,827	EUR	14.14	15.00	6%	9.6	35.2	22.8	4.7	6.4	5.3	0.5	0.5	0.5
SSAB Svenskt Stal AB	SSABa.ST	2M	2,851	SEK	72.75	80.00	10%	6.4	5.1	10.7	5.1	3.0	4.1	0.7	0.6	0.6
Salzgitter AG	SZGG.DE	2M	3,538	EUR	43.35	55.00	27%	6.9	5.9	16.9	4.6	3.0	4.1	0.6	0.5	0.5
ThyssenKrupp AG	TKAG.DE	1M	8,874	EUR	13.51	17.00	26%	9.7	58.1	15.6	7.2	10.4	8.7	0.6	0.6	0.6
voestalpine AG	VOES.VI	2M	2,247	EUR	10.05	17.00	69%	11.9	5.3	6.6	6.0	4.5	4.5	0.4	0.3	0.3
Eastern Europe, South Africa & Latin America																
Severstal	CHMF.RTS	1M	4,031	USD	4.00	5.60	40%	5.7	7.5	15.7	4.0	3.9	4.0	0.5	0.4	0.4
CSN	CSNA3.SA	2H	11,494	BRL	33.80	46.00	36%	15.5	9.5	6.8	6.4	4.2	3.3	1.6	1.4	1.2
Erdemir	EREGL.IS	2M	1,998	TRY	2.94	3.86	31%	6.3	23.5	14.8	4.7	8.5	7.3	0.5	0.5	0.5
Gerdau SA	GGBR4.SA	1H	4,758	BRL	11.56	28.00	142%	6.3	7.0	3.1	4.4	5.6	3.5	0.5	0.5	0.4
Evraz Group	HK1q.L	3H	3,106	USD	8.75	6.90	(21%)	7.4	4.8	38.9	5.2	4.8	6.3	0.4	0.4	0.4
Kumba Iron Ore Ltd	KIOJ.J	1M	5,161	ZAR	156.3	218.0	40%	7.4	6.5	7.1	4.3	3.6	4.1	5.6	4.5	3.9
MMK	MAGNq.L	1M	2,886	USD	3.36	5.20	55%	4.7	4.4	4.9	3.0	2.8	2.1	0.4	0.4	0.4
ArcelorMittal S Africa Ltd	ACLJ.J	2M	3,065	ZAR	66.00	80.00	21%	7.2	6.7	13.2	4.4	2.9	4.7	1.0	1.0	1.0
Mechel	MTL.N	3H	1,782	USD	4.28	3.00	(30%)	6.3	4.7	20.1	4.5	5.2	8.0	0.4	0.4	0.4
NLMK	NLMK.RTS	1H	8,091	USD	1.35	1.40	4%	6.2	13.7	229.3	4.1	4.5	6.2	0.7	0.6	0.6
TMK	TRMKq.L	2H	839	USD	3.85	3.00	(22%)	10.4	1.2	1.1	7.6	2.4	1.2	0.4	0.2	0.2
Ternium SA	TX.N	2S	1,393	USD	6.95	13.50	94%	7.3	32.6	3.2	4.7	7.9	3.4	0.3	0.3	0.2
Usiminas	USIM5.SA	1H	5,599	BRL	25.76	54.00	110%	8.6	6.9	6.9	4.5	3.5	3.9	0.8	0.6	0.5
Vale	RIO.N	1M	72,692	USD	13.93	28.00	101%	10.3	11.9	12.8	8.7	7.8	7.6	1.6	1.5	1.3
Australia																
Bluescope Steel Ltd	BSL.AX	2H	1,569	AUD	2.52	2.50	(1%)	11.4	6.8	8.3	6.2	4.7	5.2	0.5	0.5	0.5
Fortescue Metals Group	FMG.AX	3H	4,231	AUD	2.18	2.50	15%	68.6	9.1	9.7	29.0	5.0	4.4	(9.4)	10.2	5.0
OneSteel Ltd	OST.AX	2H	1,279	AUD	2.11	2.10	(0%)	16.1	7.7	10.6	8.2	5.2	5.9	0.5	0.5	0.5
Sims Group Ltd	SGM.AX	3H	2,297	AUD	18.39	12.00	(35%)	15.1	17.5	15.3	7.7	6.7	6.2	1.1	1.0	0.9
North America																
AK Steel Holding Corp	AKS.N	2S	766	USD	6.91	9.00	30%	11.1	(13.4)	7.2	7.6	18.8	6.8	0.8	0.9	0.8
Allegheny Technologies	ATI.N	2S	2,006	USD	20.58	26.00	26%	9.9	10.3	5.6	6.2	6.7	4.4	1.0	1.0	0.9
Cliffs Natural Resources	CLF.N	1S	1,597	USD	14.07	34.00	142%	9.9	14.1	4.3	5.7	4.2	2.4	0.9	0.9	0.8
Commercial Metals Co	CMC.N	1S	1,193	USD	10.62	16.00	51%	16.7	12.0	6.1	7.9	5.2	3.8	0.8	0.8	0.7
Carpenter Technology	CRS.N	2S	645	USD	14.64	24.00	64%	12.7	6.5	5.9	6.9	2.9	2.6	0.8	0.8	0.7
Gerdau Ameristeel Corp	GNA.N	1S	1,338	USD	3.09	9.00	191%	7.5	26.1	3.9	5.4	6.8	3.2	0.5	0.5	0.4
Nucor Corporation	NUE.N	2H	11,767	USD	37.47	36.00	(4%)	9.1	58.0	12.5	4.8	10.4	5.1	1.5	1.5	1.5
Steel Dynamics Inc	STLD.O	1S	1,363	USD	7.49	15.00	100%	10.0	51.4	4.2	6.7	9.3	4.0	0.8	0.9	0.8
United States Steel	X.N	1S	2,291	USD	19.72	37.00	88%	6.5	(40.8)	4.9	4.3	5.7	2.8	0.5	0.5	0.5
Asia Pacific & Japan																
Dongkuk Steel Mill	001230.KS	3H	1,028	KRW	23,300	17,000	(27%)	11.6	5.2	4.9	2.5	2.8	2.8	0.6	0.5	0.5
Hyundai Steel	004020.KS	3H	2,426	KRW	40,050	25,000	(38%)	5.9	6.6	7.1	3.9	5.4	5.8	0.7	0.6	0.6
POSCO	005490.KS	1M	22,212	KRW	357,000	454,000	27%	8.1	7.9	6.8	3.9	3.3	2.8	1.2	1.0	0.9
Maanshan Iron and Steel	0323.HK	3M	2,623	HKD	2.64	1.84	(30%)	9.3	7.3	8.3	4.8	4.8	4.6	0.7	0.7	0.7
Angang Steel	0347.HK	3M	7,048	HKD	7.55	4.60	(39%)	10.4	10.1	7.7	6.4	4.8	3.7	0.8	0.8	0.7
Nippon Steel	5401.T	2H	16,854	JPY	257.0	260.0	1%	13.8	3937.0	21.4	4.6	6.1	4.4	0.9	1.0	0.9
Sumitomo Metal	5405.T	1M	9,622	JPY	199.0	250.0	26%	15.0	19.0	10.2	6.1	5.3	4.3	1.1	1.1	1.0
Kobe Steel	5406.T	2H	3,787	JPY	121.0	130.0	7%	24.0	(13.7)	28.5	3.7	4.7	3.9	0.7	0.7	0.7
Nisshin Steel	5407.T	2H	1,586	JPY	168.0	130.0	(23%)	14.0	12.8	9.8	2.4	1.3	1.2	0.4	0.4	0.4
JFE Holdings	5411.T	1M	12,067	JPY	2,175	2,500	15%	14.5	21.6	12.1	4.8	5.0	4.4	0.9	0.9	0.8
Tokyo Steel	5423.T	2H	1,466	JPY	944.0	900.0	(5%)	6.4	11.3	95.1	0.7	1.2	2.5	0.6	0.5	0.5
Daido Steel	5471.T	2H	1,140	JPY	252.0	300.0	19%	(1014.9)	(127.9)	28.1	8.9	8.9	7.7	0.6	0.6	0.6
Sanyo Special Steel	5481.T	2H	406	JPY	241.0	300.0	24%	46.3	53.4	11.9	5.8	4.8	3.9	0.4	0.4	0.4
Wuhan Iron And Steel	600005.SS	3M	7,645	CNY	6.66	4.20	(37%)	13.4	11.8	9.1	8.4	6.7	5.5	1.7	1.7	1.5
Baoshan Iron & Steel	600019.SS	3M	14,645	CNY	5.71	4.30	(25%)	16.5	8.5	6.2	5.9	3.0	2.2	1.1	1.0	0.9
JSW Steel	JSTL.BO	3H	691	INR	186.7	185.0	(1%)	13.1	3.8	4.0	6.9	4.2	4.7	0.5	0.4	0.4
Sesa Goa	SESA.BO	3H	1,357	INR	87.10	75.00	(14%)	5.8	4.8	6.6	3.4	1.9	2.1	1.7	1.3	1.1
Tata Steel	TISC.BO	3H	2,547	INR	176.1	125.0	(29%)	9.2	3.2	4.6	5.3	0.3	(0.5)	0.5	0.4	0.4
Steel								**9.6**	**11.5**	**9.9**	**5.7**	**5.4**	**4.8**	**1.0**	**1.2**	**1.0**

Source: Citi Investment Research and Analysis estimates; Priced as of 25 March 2009

Financial Summary

Figure 20. SAIL – Operating Data

YE March 31	FY05	FY06	FY07	FY08	FY09E	FY10E	FY11E
Average Rs/US$ Rate	44.9	44.3	45.3	40.2	46.0	48.0	47.0
HRC (US$/t)	566	448	545	608	740	550	450
Volumes (m tonnes)							
Saleable steel produced	11.03	12.05	12.58	13.04	12.16	12.52	13.20
Saleable steel sold	10.76	11.31	11.87	12.31	10.91	11.68	12.69

Source: Company Reports, Citi Investment Research and Analysis estimates

Figure 21. SAIL – Profit and Loss Statement (Rs m)

YE March 31	FY05	FY06	FY07	FY08	FY09E	FY10E	FY11E
Steel Gross Sales	**318,050**	**322,798**	**391,887**	**455,553**	**451,181**	**364,163**	**357,981**
Other Sales (Finished Prods Consumed Internally)	2,850	4,280	4,100	4,908	3,436	3,264	3,101
Total Gross Sales	320,900	327,078	395,987	460,462	454,617	367,427	361,082
Excise duty	32,822	44,194	52,655	60,469	45,462	22,046	21,665
Net sales	288,079	282,883	343,331	399,993	409,155	345,382	339,417
Other revenues	5,040	5,892	7,797	6,463	5,500	5,500	7,000
Total net sales	**293,118**	**288,775**	**351,128**	**406,455**	**414,655**	**350,882**	**346,417**
Operating expenses	186,698	220,384	249,574	289,358	331,513	279,570	279,174
Operating profit	**106,420**	**68,391**	**101,554**	**117,098**	**83,143**	**71,312**	**67,243**
Other income	4,553	5,417	8,113	12,454	18,792	13,237	5,356
EBITDA	**110,974**	**73,808**	**109,667**	**129,552**	**101,935**	**84,549**	**72,599**
EBITDA margin (%)	**38%**	**26%**	**31%**	**32%**	**25%**	**24%**	**21%**
EBITDA/tonne	**10,315**	**6,525**	**9,239**	**10,520**	**9,347**	**7,239**	**5,722**
Depreciation	11,270	12,073	12,115	12,355	12,750	12,850	14,769
PBIT	99,704	61,735	97,552	117,197	89,185	71,699	57,831
Interest	6,051	4,678	3,321	2,509	2,995	2,945	4,990
PBT	93,654	57,057	94,231	114,687	86,190	68,754	52,840
Total Tax	25,484	16,928	32,208	39,320	28,874	22,689	16,909
Effective tax rate (%)	27%	30%	34%	34%	34%	33%	32%
Reported PAT	**68,170**	**40,130**	**62,023**	**75,368**	**57,316**	**46,065**	**35,931**

Source: Company Reports, Citi Investment Research and Analysis estimates

Figure 22. SAIL – Balance Sheet (Rs m)

YE March 31	FY05	FY06	FY07	FY08	FY09E	FY10E	FY11E
Net fixed Assets	**128,516**	**129,201**	**127,962**	**139,609**	**176,859**	**274,009**	**412,430**
Gross Block	280,435	293,605	299,127	309,227	321,313	323,313	475,313
Acc. Depreciation	155,584	171,983	183,150	193,514	206,264	219,114	233,882
Net Block	124,851	121,621	115,977	115,713	115,049	104,199	241,430
CWIP	3,665	7,579	11,985	23,896	61,810	169,810	171,000
Investments	**6,067**	**2,920**	**5,138**	**5,382**	**5,382**	**5,382**	**5,382**
Current Assets	**143,336**	**156,308**	**203,786**	**263,176**	**279,893**	**205,283**	**122,475**
Inventories	42,207	62,101	66,515	68,572	80,164	64,402	63,626
Debtors	19,085	18,817	23,148	30,481	31,387	27,441	26,967
Cash And Bank Balance	61,321	61,726	96,098	137,594	142,745	88,843	8,284
Other current assets	1,422	855	1,526	2,731	2,800	2,800	2,800
Loans & Advances	19,302	12,809	16,500	23,798	22,798	21,798	20,798
Current Liabilities and provisions	**101,661**	**106,752**	**109,115**	**131,988**	**141,289**	**127,085**	**121,532**
Sundry Creditors	22,075	24,274	25,451	29,816	34,764	25,286	24,921
Other Liabilities	25,732	27,643	28,527	34,194	35,000	36,000	37,000
Provision for Dividend	8,477	3,532	7,249	8,690	12,081	9,665	6,766
Provision for Taxation	7,481	1,869	448	382	1,444	1,134	845
Other provisions	37,896	49,435	47,441	58,906	58,000	55,000	52,000
Misc Expenditure	**2,949**	**2,158**	**1,292**	**595**	**595**	**595**	**595**
Overall Capital employed	**179,208**	**183,835**	**229,063**	**276,774**	**321,440**	**358,184**	**419,350**
Shareholders Funds	**103,067**	**126,014**	**173,132**	**230,636**	**275,870**	**312,271**	**341,437**
Share capital	41,304	41,304	41,304	41,304	41,304	41,304	41,304
Reserves and surplus	61,763	84,710	131,828	189,332	234,566	270,967	300,133
Loan Funds	**57,698**	**42,976**	**41,805**	**30,452**	**29,452**	**29,452**	**61,452**
Deferred tax liability	**18,443**	**14,845**	**14,127**	**15,686**	**16,117**	**16,461**	**16,461**
Total sources of Funds	**179,208**	**183,835**	**229,063**	**276,774**	**321,440**	**358,184**	**419,350**

Source: Company Reports, Citi Investment Research and Analysis estimates

Figure 23. SAIL – Cash Flow Statement (Rs m)

YE March 31	FY05	FY06	FY07	FY08	FY09E	FY10E	FY11E
Cash from operations	88,995	39,520	56,329	83,782	49,044	57,887	49,930
Cash flow from investments	-2,865	-3,372	-5,875	-11,399	-31,208	-96,763	-147,834
Cash flow from financing	-45,166	-35,743	-16,082	-30,887	-12,685	-15,027	17,344
Net cash flow	**40,963**	**405**	**34,372**	**41,496**	**5,151**	**-53,902**	**-80,559**

Source: Company Reports, Citi Investment Research and Analysis estimates

Figure 24. SAIL – Stock Metrics and Ratios

YE March 31	FY05	FY06	FY07	FY08	FY09E	FY10E	FY11E
No. of shares (m)	4,130	4,130	4,130	4,130	4,130	4,130	4,130
EPS (Rs)	16.5	9.7	15.0	18.2	13.9	11.2	8.7
Book value per share (Rs)	25.0	30.5	41.9	55.8	66.8	75.6	82.7
Net Debt/EBITDA (x)	0.0	-0.3	-0.5	-0.8	-1.1	-0.7	0.7
Total debt/Net worth (x)	0.6	0.3	0.2	0.1	0.1	0.1	0.2
Net debt/equity (x)	0.0	-0.1	-0.3	-0.5	-0.4	-0.2	0.2
ROE (%)	66%	32%	36%	33%	21%	15%	11%
ROCE (%)	41%	24%	29%	28%	19%	14%	10%
Total dividend (Rs m)	15,483	9,419	14,784	17,881	12,081	9,665	6,766
DPS (Rs)	3.3	2.0	3.1	3.7	2.5	2.0	1.4
Dividend payout (%)	23%	23%	24%	24%	21%	21%	19%

Source: Company Reports, Citi Investment Research and Analysis estimates

Quant View - Contrarian

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SAIL lies in the contrarian quadrant of our value-momentum map with a strong relative valuation and poor momentum scores. With recent positive earnings revisions and a steadily strengthening long-term price momentum, the composite momentum though still weak overall, has improved lately. The relative valuation score continues to look cheap. The stock's migration within the contrarian quadrant can be attributed to the steady improvement of the stock's long-term price momentum.

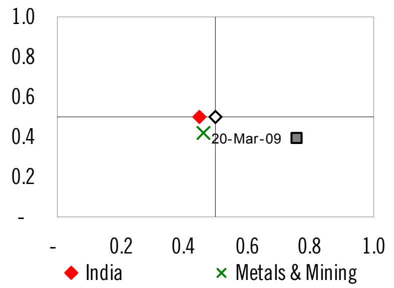
In both the India market and the Metals & Mining sector, SAIL ranks higher than its peers on the valuation front but lags behind its peers on the momentum front.

From a systematic macro exposure analysis, SAIL being a high beta stock will outperform in rising markets. Moreover, the stock favours narrowing US credit spreads; rising interest rates in Asia and falling yields in the emerging markets.

Rader Screen Quadrant Definitions

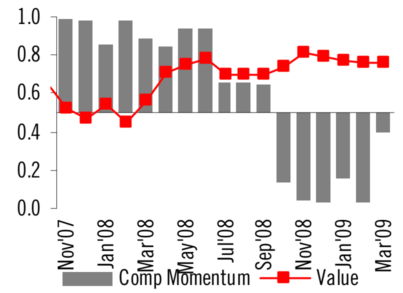
Glamor *Poor relative value but superior relative momentum*	**Attractive** *Superior relative value and superior relative momentum*
Unattractive *Poor relative value and poor relative momentum*	**Contrarian** *Superior relative value but poor relative momentum*

Figure 25. Radar Quadrant Chart History



Source: Citigroup Investment Research

Figure 26. Radar Valuation Momentum Ranks



Source: Citigroup Investment Research

Figure 27. Radar Model Inputs

IBES EPS (Actual and Estimates)

FY(-2)	9.86	Implied Trend Growth %	(0.6)
FY(-1)	15.16	Trailing PE (x)	4.8
FY0	18.39	Implied Cost of Debt (%)	8.28
FY1	13.93	StdMktCap	0.14
FY2	10.08		

Source: Worldscope, I/B/E/S

Figure 28. Macro Sensitivity

Region	1.88	Commodity ex Oil	0.26
Local Market	1.07	Rising Oil Prices	0.18
Sector	0.66	Rising Asian IR's	0.61
Growth Outperforms Value	(0.47)	Rising EM Yields	(0.65)
SmallCaps Outperform LargeCaps	0.28	Weaker US$ (vs Asia)	1.11
Widening US Credit Spreads	(0.44)	Weaker ¥ (vs US$)	(0.27)

Source: Citigroup Investment Research

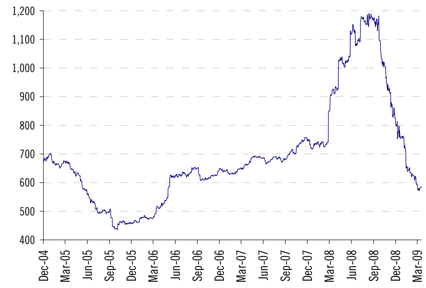
India Steel Outlook

We have a cautious view on the Indian steel stocks as we expect an extended global slowdown, declining global steel prices and falling margins. The India fiscal stimulus package would help demand but with a lag and China's stimulus package cannot offset worsening trends in other markets. Both Tata Steel and JSW Steel are highly leveraged, increasing their risk in the downturn that we envisage. SAIL has net cash, sells almost all its output in the domestic market, offers steady growth and has potential for further cost cutting. Hence it is our favoured steel play in India.

Domestic prices – flattish in the last few months

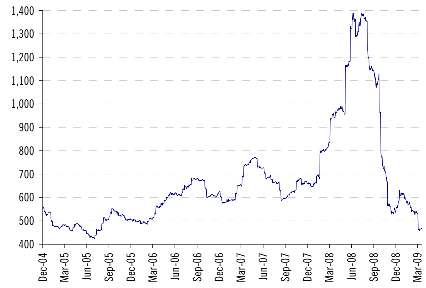
Indian steel prices are linked to global prices and despite better domestic demand in recent months; prices have not recovered due to the threat of imports. We expect some more weakness in global prices. Alex Hacking, our Latin American steel analyst feels that a collapse of global production discipline has emerged as a key concern for investors. He states that cheap Russian steel ($400/t HRC) is a threat to all markets and Chinese inventory is building. Domestic HRC steel prices have come off from Rs30,000-32,000/t at end-November to Rs24,000-25,000/t currently. Producers and steel users seem to feel that prices have bottomed and re-stocking is underway.

Figure 29. European HRC prices (US$/t)



Source: Bloomberg

Figure 30. European Rebar prices (US$/t)



Source: Bloomberg

Demand – picking up due to restocking

Provisional data indicates that India's steel demand has recovered with YoY growth hitting ~4% in February 2009. Monthly steel demand has moved erratically during FY09. Demand growth during 1H FY09 (Apr-Sep 2008) was 5%, good, but lower than the 11-14% p.a. growth in the past three years. Over September–December 2008 period the industry reported negative monthly YoY demand growth ranging from 13-18%. The de-growth in demand during September-December 2008 was largely due to: 1) large scale destocking as customers had built up inventories and waited for high steel prices to correct, and 2) a slowdown across almost all user segments.

Figure 31. India – Domestic Steel production and Consumption

	Feb-09		Apr08-Feb 09		Apr08-Jan 09		FY08	
	m tonnes	YoY chg	m tonnes	YoY chg	m tonnes	YoY chg	m tonnes	YoY chg
Total production	4.5	2.6%	48.3	0.8%	43.9	0.6%	52.7	6.0%
Imports	0.5	5.7%	5.0	-18.0%	4.5	-19.9%	6.5	45.9%
Exports	0.3	-16.1%	3.2	-23.8%	3.0	-24.4%	4.6	-6.0%
Inter plant Transfer/Stock Variation	0.5	-	6.3	-	5.8	-	5.5	-
Total consumption	**4.3**	**4.1%**	**43.9**	**-2.5%**	**39.6**	**-3.2%**	**49.0**	**10.6%**

Source: Joint Plant Committee, Citi Investment Research

Domestic steel demand improved in January and February 2009, but steel demand YTD (April 2008 to Feb 2009) declined 2.5% YoY. The improvement in steel demand in the past two months has come from: 1) the infrastructure sector – due to pressure to speed up ongoing government-funded infrastructure projects, 2) better demand from rural India, and 3) consumers believing steel prices are close to their bottom – leading to inventory restocking. The general consensus is that while better steel demand is a relief, most people are unconvinced of its sustainability, except in government-funded projects/infrastructure sector.

Figure 32. India – Domestic steel demand-supply

YE March 31	FY 01	FY 02	FY03	FY04	FY05	FY06	FY07	FY08	FY09E	FY10E
Finished Steel Production	29.27	30.64	33.67	36.96	40.06	44.54	49.70	52.66	53.30	57.40
Growth (%)	7.7%	4.7%	9.9%	9.8%	8.4%	11.2%	11.6%	6.0%	1.2%	7.7%
Imports	1.42	1.27	1.51	1.54	2.11	3.85	4.44	6.47	5.45	3.82
Exports	2.66	2.70	4.51	4.84	4.38	4.48	4.89	4.60	3.49	3.60
Inter plant Transfer/Stock Variation	1.49	1.76	1.78	2.49	3.39	4.73	4.91	5.51	6.82	7.00
Finished Steel Consumption	**26.53**	**27.44**	**28.90**	**31.17**	**34.39**	**39.19**	**44.33**	**49.02**	**48.45**	**50.62**
Growth (%)	**5.7%**	**3.4%**	**5.3%**	**7.9%**	**10.3%**	**13.9%**	**13.1%**	**10.6%**	**-1.2%**	**4.5%**

Source: JPC, Industry Reports, Citi Investment Research and Analysis estimates

Domestic steel majors are adopting the following strategies to raise volumes: 1) import substitution, 2) improved product mix – greater stress on downstream products, 3) increasing semi-urban and rural focus, and 4) capturing market share of higher cost producers who have shut down/cut production.

Some delays in steel expansions

Due to the sluggish outlook for steel in international markets and likely downside to prices, many steel producers are going slow with their expansion plans. For example, companies such as Tata Steel, SAIL and JSW Steel, have pushed forward their steel expansion completion dates from 2009-10 to 2011-12. They are going ahead with brownfield expansions but they are not aggressively pursuing greenfield projects. Companies are taking the opportunity to re-negotiate capex costs and are hopeful of lowering these by 10-20%.

Focus shifting to leverage from raw material self-sufficiency

When the cycle was in an upswing, raw material prices were rising substantially and the key focus of companies and investors was on raw material integration. With the reversal of the steel cycle, the value of raw material integration has diminished as raw material prices are declining. Thus we shift focus from raw materials to leverage and as a theme prefer companies with a strong balance sheet, higher domestic market exposure, and avoid those with high debt levels and aggressive near term funding requirements.

With weaker steel prices, raw material prices have also been falling. This will benefit SAIL in case of coking coal, as it purchases around 70% of its coking coal from the international market and about 20-25% from domestic sources. On a consolidated basis, Tata Steel can source 20% of its iron and 15% of its coking coal from its own mines. On the other hand, JSTL is only able to meet 22% of its iron ore needs and does not have access to captive coal.

Indian companies acquiring assets abroad

There has hardly been any recent M&A activity in the domestic steel industry. However prior to FY09, we saw Indian companies scouting for and acquiring targets abroad. For example: Tata Steel's acquisition of Corus, NatSteel and Tata Steel Thailand; and JSW Steel's acquisition of plate and pipe capacity in the USA.

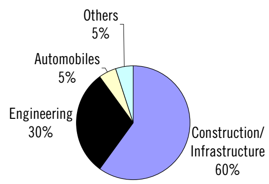
Foreign acquisitions were driven by the search for advanced technology and broader markets (Tata Steel-Corus); and also value addition (JSW Steel). We expect acquisitions by Indian companies to slow down given the high level of indebtedness for majors such as Tata Steel and JSW Steel, the weak economic outlook, and hardly any benefit from acquiring mining assets.

Analysis of steel demand and outlook

We recently spoke to manufacturers and dealers of steel, as well as CIRA analysts, to better understand the main sources of consumption, and current and future demand trends,. In the absence of definitive industry data for a breakdown in demand we rely on anecdotal data provided by our sources.

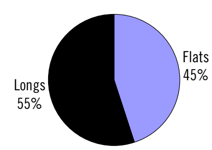
Construction/infrastructure accounts for 60% of domestic steel demand, followed by engineering (30%) and the auto sector (5-8%). While sectors such as infrastructure/construction and power saw some demand weakness, they were relatively stable. The slowdown in the steel sector during Oct-Dec 2008 was driven by general engineering, real estate (10-15%) and the auto sector. We also learnt that demand for long steel products (used mainly for construction) was holding up better than flat products (used for general engineering, auto and cap goods).

Figure 33. Sector wise steel consumption



Source: Industry sources, Citi Investment Research

Figure 34. Product wise steel consumption



Source: Industry sources, Citi Investment Research

Figure 35. Examples of sector usage

Construction/ Infrastructure	Engineering
Power, transmission lines	Fabrication
Ports	Boiler & pressure vessels
Real estate	Wagons, locomotives
Rail tracks	Bicycles
Tubes	Shipbuilding
Oil & water transportation	Plant and machinery
Wire drawing	Agriculture
	Packaging

Source: Industry sources, Citi Investment Research

Figure 36. Examples of product usage

Flats	Longs
Automobiles	Construction
Capital goods	Automobiles
Construction	General engineering
General engineering	Power
Infrastructure	Others
Others	

Source: Industry sources, Citi Investment Research

Construction/Infrastructure (60% of steel demand)

This segment includes demand from projects (infrastructure, railways, power, airports, ports, transport of petroleum and water) and real estate. This segment largely uses long products.

Projects (45-50% of steel demand)

Demand from the on-going government projects has been fairly stable. Future growth and demand from new projects would depend on the election outcome.

We saw a slight slowdown in some projects in Sep-Oct 2008 due to a slowdown in credit. Since January there has been some pick-up in long steel demand for the construction sector in case of ongoing government funded projects and the growth in roads, railways, airports and ports continues. Future growth is dependent on the outcome of general election. It is difficult to calculate the extent of steel demand from projects going forward. Project demand could dry up if ongoing projects get completed and no new projects are announced.

- **Infrastructure:** There appears to be a region-wise variation in demand in the infrastructure sector, with hardly any slowdown in the north and continuing steady demand in the east. There was a significant slowdown in the west and the south, particularly in cities such as Mumbai and Pune. However, demand has also picked up in the past few months due to orders placed by government/semi-government organizations such as the railways, municipal corporations in Mumbai and Pune, infrastructure projects such as the Mumbai Metro.

- **Power:** Our power analyst, Venkatesh Balasubramaniam states that power capex is still holding up but with a short-term slowdown because of imminent elections. Post elections power capex cycle revival is contingent on who comes to power at the centre and how focused that political party is on infrastructure capex. While India's power capex is a multi-year theme, we expect power/industrial capex will slow over the next three quarters.

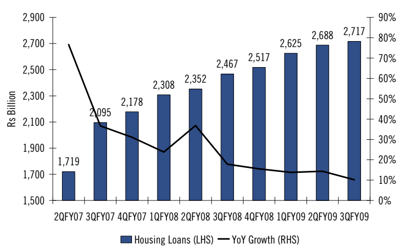
Real estate demand (10-15% of steel demand)

- Anecdotally while real estate demand in tier 2 and 3 cities and rural areas is holding up, urban real estate demand is down by some 30-35% and urban demand is not expected to get better in the next 6-9 months. Urban housing involves more vertical construction and hence uses more steel than rural houses which tend to be horizontal. The per capita consumption of steel varies from 3-5kgs per square foot, going up as high as 8-10kgs as buildings become taller, depending on the load factor.

- Though government efforts to lower interest rates, boost affordable housing, and developers starting to cut prices are positive measures, our real estate analyst, Ashish Jagnani believes these may be insufficient to stimulate residential demand over next few quarters given rising job insecurity across sectors, particularly IT/BPO. For instance, PSU banks' disbursal of home loans <Rs2m in past 2-months, after lowering rates, is only ~Rs15.5bn i.e. 0.6% of outstanding home loans in Dec 2008, is insignificant.

- Better demand from the rural sector has led to most companies changing focus to concentrate on this market, however it is not clear whether this will be adequate to meet the shortfall in other segments or be sustainable over the long term.

Figure 37. India – Home Loans Outstanding (Quarterly) and YoY Growth



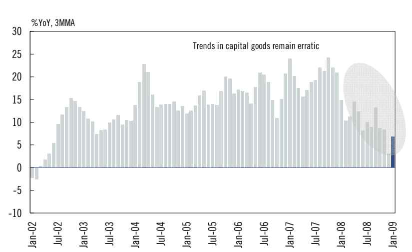
Source: RBI, Citi Investment Research and Analysis

Manufacturing and Engineering (30% of steel demand)

This segment has seen significant slowdown in the past few months and largely consumes flat products. It includes fabrication, boiler, wagons, locomotives, shipbuilding, agricultural equipment, packaging and containers. While there is near-term visibility, steel producers are uncertain whether this will grow as overall volumes continue to be stagnant in case of flat products.

- Companies such as L&T and ABB have reported their lowest order inflow growth in the past 11 and 28 quarters respectively. L& T's order inflow fell 12% in the Dec quarter and ABB's order inflow fell 37% YoY as ABB decided to withdraw from rural electrification works and some large substation orders were deferred until the next quarter.

Figure 38. India – Capital Goods Trends (% YoY)



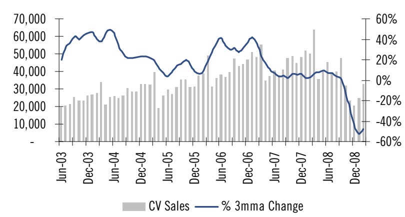
Source: CSO

- Private capex and fixed asset investment have declined. Citi's capital goods team (Venkatesh Balasubramaniam and Deepal Delivala) expect at least three more quarters of YoY order inflow de-growth given a spate of order cancellations/deferments. While cement sector investment continues, we have seen postponements in expansion plans in the steel sector. For example, companies such as Tata Steel, SAIL and JSW Steel, have pushed forward their steel expansion completion dates from 2009-2010 to 2011-2012. Companies are also taking the opportunity to re-negotiate capex costs and are hopeful of lowering these by 15-20%.

- Our economics team (Rohini Malkani & Anushka Shah) is of the view that while the current capex cycle is far healthier than the one in the 1990s, the strong headwinds are taking their toll on investments. Although public sector investment, which comprises 9% of GDP may hold, private sector investment, which is 28.5% of GDP, is decelerating sharply due to headwinds on account of higher cost of capital, prolonged working capital cycles, slowing demand and limited fiscal maneuverability.

Automobile sector (5-8% of steel demand)

Figure 39. India – Total Commercial Vehicle Sales Trend



Source: SIAM

Steel demand from the auto sector (one of the largest consumers of flat steel) has been depressed in the past few months. Examining trends across the 3 months (Sept-Nov; to better understand the reasons for demand decline in steel) we see that 2 wheeler sales declined 5%, Maruti's car sales declined 11% (proxy for the sector), whilst M&M's UV sales declined 10%.

- Auto demand has bounced since mid-Jan due to impact of the arrears to government employees due to the pay commission, reduced interest rates offered by PSU banks, better demand for tier 2 cities.

- We expect mixed demand trends for various segments. Our auto team forecast 0-2% growth in demand for cars and ~5% for trucks/two wheelers. However as trucks consume 6-8x more metal than cars, the overall metal consumption is expected to be at the higher end for the auto sector.

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Steel Authority of India

Company description

Steel Authority of India (SAIL) is India's largest integrated steel producer with hot metal capacity of 15mtpa and crude steel capacity of 13mtpa. It has five integrated steel plants and three special steel plants, mostly located in eastern and central India, near its own iron ore, limestone and dolomite mines. SAIL is a Public Sector Undertaking in which the Government of India owns 85.8%. It plans to expand its capacity gradually, taking its hot metal capacity to 26mtpa and saleable steel capacity to 23m tpa by 2012 at a total capex of Rs540bn. SAIL also plans to increase its iron ore mining capacity and power capacity (through JVs) to match its expansion plans. SAIL makes both flat (52% of sales) and long (36%) products. It also makes value added products such as pipes, plates and coated products. Alloys and special steels make up about 6% of sales. Most of SAIL's output is sold within India and exports account for only 3% of sales. SAIL's planned capex will also help reduce costs as existing facilities are being modernized and upgraded. Once the capex is complete, SAIL will move to 100% continuous casting, not producing any steel using the twin hearth process and not needing to sell any semi-finished steel.

Investment strategy

We rate SAIL Buy/Medium Risk (1M) despite an expected decline in profits due to our conservative view on steel markets. We prefer SAIL as: 1) it is better positioned in the current and expected price environment; 2) it has a net cash position; 3) its operations are largely based in India (other majors are more exposed to international markets); 4) it offers relative value on EV/EBITDA. SAIL's prospective EBITDA margins compare favorably with its domestic peers and its EBITDA/tonne is in line with JSW Steel (JSTL) and higher than Tata Steel (TSL). SAIL has some flexibility to postpone capex depending on the likely steel outlook. We expect SAIL to offer absolute share price returns if steel prices remain around current levels and better returns (vs TSL and JSTL) if steel prices weaken. However a meaningful upturn in the steel cycle, means it would likely underperform TSL and JSTL with higher levels of indebtedness. Other concerns include high manpower costs and government ownership, which could lead to slower decision making and less pricing freedom as PSUs need to abide by certain rules and procedures. Based on some delays to SAIL's expansion plans we estimate steel capacity will rise by 16% in FY11 and the rest gradually by FY13, with some scope to negotiate lower capex costs. We expect sales volumes to fall by 11% in FY09, rise by 7% in FY10E and 9% in FY11E. While further technological improvements are likely, we do not expect success in acquiring captive coal mines in the near term.

Valuation

We use EV/EBITDA as our preferred valuation metric for the Indian steel companies given the high debt-equity levels for two of the three steel majors under coverage. SAIL has traditionally traded at a discount to both Tata Steel and JSW Steel based on its history, status as a government company and lower volume growth. Our Rs116 target price is based on 12-month forward EV/EBITDA of 5x, at a discount to JSTL's target multiple of 5.5x and a premium to TSL's target multiple of 4x. SAIL offers lower volume growth than JSTL and has a PSU-tag, although both offer largely domestic exposure. The premium to TSL accounts for TSL's 60%+ European exposure. SAIL's target EV/EBITDA multiple is at a premium to its 3-year average EV/EBITDA of 4.2x but lower than peaks of 8-10x. SAIL trades at a discount to global steel peers – currently at 5.4x CY09 EV/EBITDA. At our target price, the stock would trade at a P/E of 10.4x.

Risks

We rate SAIL Medium Risk as opposed to the High Risk rating suggested by our quantitative risk-rating system, which tracks 260-day historical share price volatility. SAIL's exposure to the Indian market, net cash position and potential for cost cutting, warrant a Medium Risk, in our view. Possible downside risk factors to our target price are: 1) Further weakness in steel prices; 2) Appreciation of the rupee vs the US$; 3) Delays in access to captive iron ore; 4) Volume growth below forecasts; and 5) Government ownership.

Appendix A-1

Analyst Certification

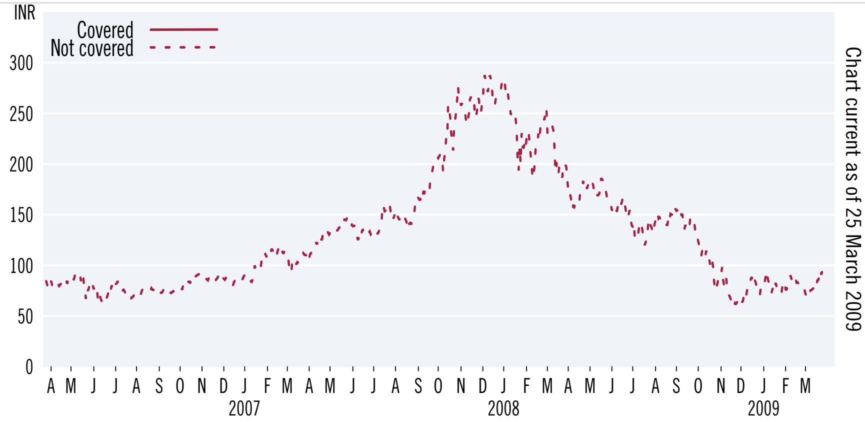
Each research analyst(s) principally responsible for the preparation and content of all or any identified portion of this research report hereby certifies that, with respect to each issuer or security or any identified portion of the report with respect to an issuer or security that the research analyst covers in this research report, all of the views expressed in this research report accurately reflect their personal views about those issuer(s) or securities. Each research analyst(s) also certify that no part of their compensation was, is, or will be, directly or indirectly, related to the specific recommendation(s) or view(s) expressed by that research analyst in this research report.

IMPORTANT DISCLOSURES

Steel Authority of India (SAIL.BO)

Ratings and Target Price History

Fundamental Research



* Indicates change

Rating/target price changes above reflect Eastern Standard Time

Citigroup Global Markets Korea Securities Limited (CGMK) performs the role of liquidity provider on the warrants of which the underlying asset is Dongkuk Steel. As at 26 Mar 09, CGMK holds 3,000,000 Citi ELW 8246, 2,999,780 Citi ELW 9020 Call warrants & 4,246 shares of Dongkuk Steel.

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Citigroup Global Markets Korea Securities Limited (CGMK) performs the role of liquidity provider on the warrants of which the underlying asset is POSCO. As at 26 Mar 09, CGMK holds 3,000,000 Citi ELW 8233, 2,999,000 Citi ELW 8271, 2,961,510 Citi ELW 9001, 2,921,470 Citi ELW 9045, 3,000,000 Citi ELW 9051, 3,340,000 Citi ELW 9052, 2,999,890 Citi ELW 9106 Call warrants of POSCO.

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Citi Investment Research Ratings Distribution

Data current as of 31 Dec 2008	**Buy**	**Hold**	**Sell**
Citi Investment Research Global Fundamental Coverage	46%	37%	17%
% of companies in each rating category that are investment banking clients	48%	43%	38%

Guide to Fundamental Research Investment Ratings:

Citi Investment Research's stock recommendations include a risk rating and an investment rating.

Risk ratings, which take into account both price volatility and fundamental criteria, are: Low (L), Medium (M), High (H), and Speculative (S).

Investment ratings are a function of Citi Investment Research's expectation of total return (forecast price appreciation and dividend yield within the next 12 months) and risk rating.

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Investment ratings are determined by the ranges described above at the time of initiation of coverage, a change in investment and/or risk rating, or a change in target price (subject to limited management discretion). At other times, the expected total returns may fall outside of these ranges because of market price movements and/or other short-term volatility or trading patterns. Such interim deviations from specified ranges will be permitted but will become subject to review by Research Management. Your decision to buy or sell a security should be based upon your personal investment objectives and should be made only after evaluating the stock's expected performance and risk.

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