Steel

On the edge

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Steel prices likely to soften further

Asian steel prices have corrected by around US$100/tonne from their peak of US$600/tonne in the past three months. We expect the slide in prices to continue, as apparent consumption is slowing down and inventory levels remain high. Meanwhile, supply continues to grow unabated as production in China increases, and producers in other regions overcome supply disruptions. Prices of raw material such as scrap and iron ore—which are leading indicators of trends in steel prices—have started falling. Current steel prices are significantly above cash cost of production, which means there is no cost support at current levels of steel prices.

Earnings at risk, as steel price is only earnings driver in the medium term

There's little scope left for an earnings increase from an improvement in the product mix, or cost reduction. Volume growth for both SAIL and TATA is some time away. As such, Indian steel companies' earnings in the medium term will depend primarily on steel prices.

TATA: Risk reward becoming unfavourable – downgrade to Sell

TATA is already one of the lowest-cost producers of steel, with high proportion of value-added products in its portfolio. Further gains from efficiency improvements are not expected, and volume growth is some time away. Accordingly, earnings hinge on steel prices, for which the outlook is weak. This makes risk reward unfavourable, as the stock's performance is closely linked to news on steel prices. Further, the company has embarked on a significant capacity expansion plan, which may result in further dilution, although returns may be back-ended. We downgrade the stock to SELL with a price target of Rs525.

SAIL: Earnings most vulnerable to slide in steel price - downgrade to Sell

SAIL, despite its cost advantage on account of captive resources, is not the country's most competitive steel producers. That's because of its use of outdated technology, huge work force, and a high proportion of commodity grade products. To address these isuues the it has planned capacity expansion & modernisation programme, however, benefit from the same is some time away. SAIL's high cost base makes its earnings particularly sensitive to steel prices, so earnings will be hit hard as prices soften over the next 12 months. We downgrade the stock to Sell with a price target of Rs76.

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Weakness in global steel prices

International steel prices have been sliding after reaching a high of US$600/tonne in the month of June 2006. Prices have been correcting across regions, but particularly sharply in Asia, where they have already fallen by US$100/tonne in the past three months. We expect prices to correct further, as apparent consumption, especially for steel sheets, is slowing down and inventory levels are running high.

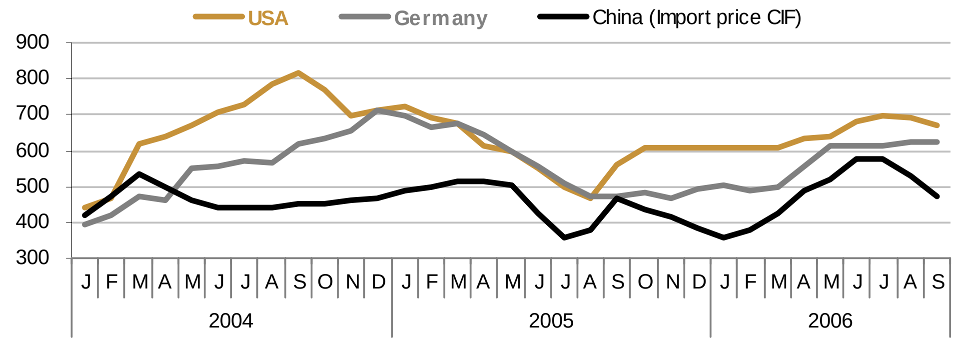
Meanwhile, supply continues to grow unabated as production in China increases, and producers in other regions overcome supply disruptions. Prices of raw material such as scrap and iron ore—which are lead indicators of trends in steel prices—have started falling. Current steel prices are significantly above cash cost of production, which means there is no cost support at current levels of steel prices.

We expect international prices of steel to continue to fall for a while before they stabilise. That means domestic prices of steel also have room to fall. The discount of domestic steel prices to landed cost of imports has shrunk to marginal levels from US$60/tonne as at end-July. As such, any further slide in international steel prices represents a downside risk to domestic prices, and hence to earnings of Indian steelmakers.

Steel prices weakening, expect further declines

Steel prices saw a strong recovery during the first half of CY06, with prices bouncing back to US$600/tonne from their November 2005 bottom of US$360/tonne. This rally was driven by combination of strong growth in apparent consumption and low inventory levels. Prices were also supported by production disruption in North America and maintenance shutdowns in Asia (which explains how the market so easily absorbed the increase in China's production from 30m tonnes in January to 37m tonnes in August 2006).

Figure 1: Declining HR prices in key regions



Source: CRU, Brics Research

Apparent consumption weakening

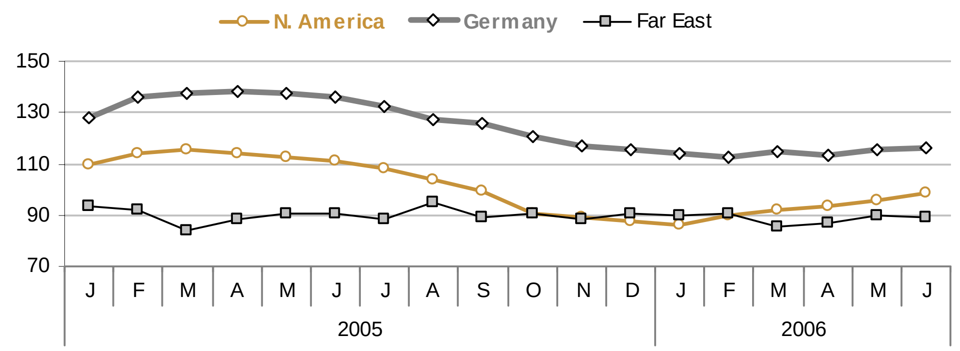
According to CRU, apparent consumption of steel in key regions is slowing down, especially for flat products. There is no significant decline in demand for plates and long products. It is this weakening in demand that has caused steel prices to fall in the past three months.

Steel demand is slowing down in many key consuming regions. In North America, demand for sheet products as has been weakening on account of declining slowdown in housing starts. Besides housing slow down recently there has been decline in orders from other major users, such as, automobile. In Europe, steel consumption is likely decline on account of a reduction in real demand as well as seasonal factors. This slackening in western markets, together with the Chinese government's increasing efforts on reducing investments in fixed assets (by raising deposit and lending rates) will also drag steel prices down.

Inventory levels have been rising

Steel inventories have been rising in most regions over the past few months. Inventories in North America and Asia are now much higher than they were at the beginning of the year. The chart below shows some increase in inventory levels till June, but does not capture the increase over the subsequent months. According to CRU, inventory service centres' and customers' inventories have risen further over the past two months. In most regions, customers have large enough inventories to wait and watch the price trend before they make fresh purchases.

Figure 2: Increasing Inventory levels

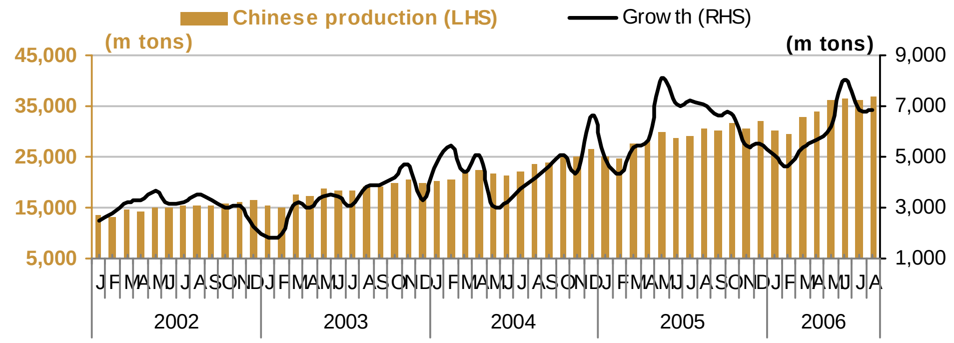


CRU steel inventory index based on inventory levels in 1999
Source: CRU

Production growth to remain strong

According to IISI, steel production has increased by 9.4% in the year to date, driven by a 19% growth in China. The increase in Chinese steel production this time is telling on prices. In contrast, impact of rising production in China in first half was partly offset by maintenance shutdowns in Asia and production disruption in other regions. Production in China continues to grow, and the current annual run rate is over 440m tonnes. Additionally, there is a huge amount of new capacity that is due to come on stream in the second half of the year. We expect this to put significant pressure on regional steel price.

Figure 3: Chinese production growth remains strong



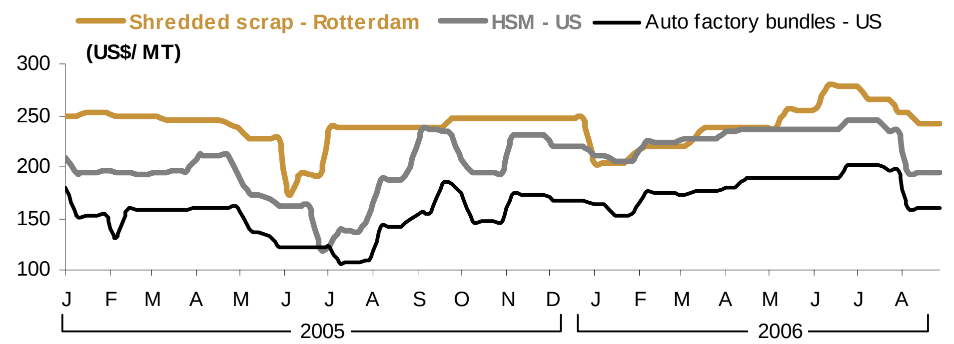
Source: IISI, Brics Research

Leading indicators turning negative—prices of raw material falling

Prices of raw material, which are leading indicators of steel prices, have been falling. All the important raw materials—iron ore, coke, and scrap—have seen price declines in the past month. Import prices of iron ore at China's Qingdao and Beilun ports have declined by 7-8% over the past one month to RMB620/tonne. Scrap and iron ore prices have marginally recovered in past one month. However, prices coke and coking coal continue to soften.

Similarly, price of heavy melting scrap (HMS) has come off significantly, by 20%, over the past two months. US auto factory bundles have come off by over 22% over the same period.

Figure 4: Declining scrap prices



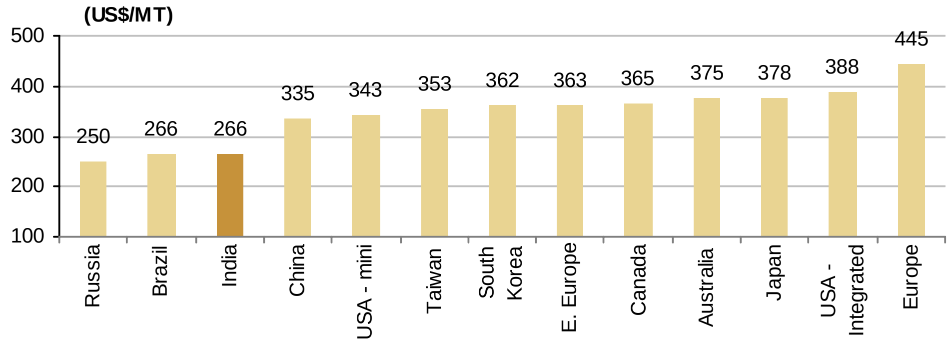
Source: Company, Brics Research

In China, prices of coke have declined by ~15% over the past couple of months to US$155/tonne, after steadily rising for six months. This decline is due to easing of demand in China, and the seasonal impact on exports.

No support from cost side at current levels

Steel prices had risen strongly in the first half of the year, and even after the recent decline are significantly above operating cost of production. Steel is currently selling at around US$480/tonne in Asia, compared with the business operating cost of US$350/tonne. Current prices in Europe and the US are also significantly higher than the cost of production in these regions. Hence, decline in apparent demand and inventory build up seen in recent past can significantly impact steel prices.

Figure 5: Average operating cost in different regions



Source: Brics Research

We cut our average steel price assumptions for FY07 and FY08

We are cutting our average steel price assumption for FY07 and FY08 because we expect demand to continue trailing supply over the months ahead. We are cutting our steel price assumption for FY07 from US$500-520/tonne to US$460-480/tonne. For FY08 we are factoring in steel price of around US$450/tonne. However, continued production growth pause a downward risk to our steel price assumption.

Domestic steel prices

Prices of steel in India follow those in the CIS region and Asia, with a lag. Prices in these regions have come off significantly form their peaks, unlike in Europe and North America, where they are stable. After Indian steelmakers cut prices around the beginning of September 2006, domestic prices are at a slight discount to landed cost. The discount has shrunk significantly over the past month, from US$80/tonne in end-July to US$10-15 at present.

Figure 6: Domestic prices at marginal discount to landed cost

CIS HR price (US$/tonne)	**480**
Freight (US$/tonne)	20
Total cost (US$/tonne)	500
Improt duty (@ 5%)	25
Total cost (US$/tonne)	525
Exchange rate (Rs/US$)	46
Cost (Rs/tonne)	24,255
Handling, local transportation etc (Rs/tonne)	1,000
Landed cost (Rs/tonne)	25,255
Current price (Rs/tonne)	24,500
Discount (%)	3

Source: Company, Brics Research

Expect steel prices to correct in Q3 and Q4

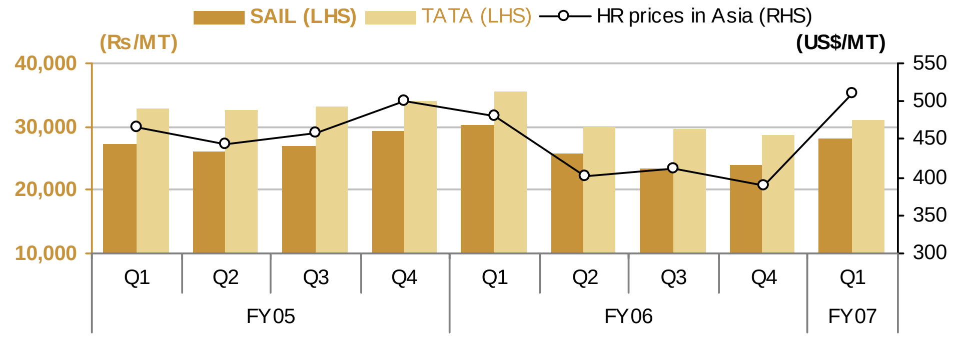
As domestic prices are at a discount to landed cost of imports at present, we do not expect any further cut in the current month. But a further fall in Asia and CIS countries over the next few months will lead to a correction in Indian prices as well. As demand in the domestic market remains strong, we expect domestic prices to go into a marginal premium to landed cost of imports, once prices stabilise.

Indian steelmakers may not realise full benefit of rise in international steel prices

Price realisation of domestic steelmakers for the year is likely to be lower than the year's average price. That's because of 1) monthly adjustment of steel prices; and 2) seasonal pattern of steel sales volumes.

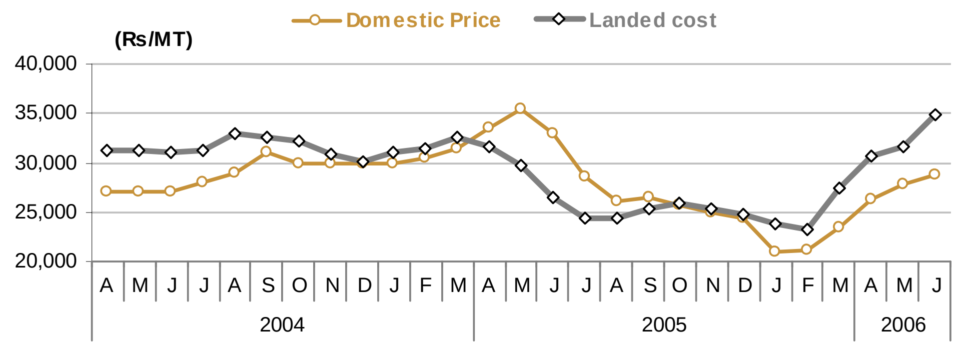
Monthly price adjustment: Prices of steel in India are set on a monthly basis. As such, any rise or fall in international prices reflects on Indian prices only in the subsequent month. During last year domestic steel prices were at a premium to landed cost. In contrast in the current year so far, domestic prices have been below landed cost—and the discount was as high as US$60/tonne in June and July 2006.

Figure 7: Quarterly realisations of steel companies



Source: Company, Brics Research

Figure 8: Domestic steel prices moving into discount



Source: Company, Brics Research

It is evident from the chart above that price increases in the domestic market have trailed those in international markets, especially in Q1FY07. So even if average international prices are expected to be higher in the current year, there may not be a similar increase in domestic realisations.

Seasonal pattern in steel consumption: In nine of the last 12 years, average steel prices have been lower in the second half than in the first. However, in the domestic market, sales volumes are significantly lower in the first half, when prices are higher. Consequently, Indian producer's price realisations for the year tend to be lower than the year's average, as most of the sales take place when prices are lower.

Accordingly, prices in the last two quarters of a given fiscal are more important for earnings of Indian steel producers. For instance, as shown in the table below, the first half of FY06 accounted for only 41% of the company's volumes for the full fiscal.

Figure 9: Quarterly volumes and weighted price

	Q1FY06	Q2FY06	Q3FY06	Q4FY06
TATA sales volumes	0.85	1.18	1.11	1.26
As % of total sales	*19*	*27*	*25*	*29*
SAIL sales volumes	1.78	2.74	2.7	3.85
As % of total sales	*16*	*25*	*24*	*35*
Price China CIF (US$/MT)	482	402	412	388
Average price				421
Weighted average price				
TATA				416
SAIL				412

Source: Company, Brics Research

Steel prices are likely to weaken in the months ahead, and average prices may fall significantly in the next two quarters. This would have a disproportionate impact on earnings of Indian steel companies.

Expect robust earnings in Q2FY07

Steel companies are likely to report very strong earnings in Q2. Pricing for Q2FY06 is likely top remain flat on a QoQ basis. This is because the full impact of the prices hikes taken in Q1 will be evident only in the subsequent quarter, which will more than offset price cuts in the month of September 2006. Additionally, sales volumes in Q2 are generally higher than in Q1. Lastly, savings on account of the reduction in coal prices will come through only in Q2.

Companies

Tata Steel

Bloomberg: TATA IN
Reuters: TISC.NS
Mkt cap: Rs278.3bn/US$6.1bn

SELL

(Revised from Buy)

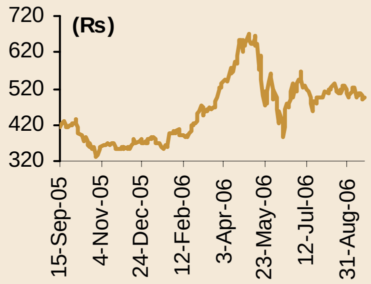
Current price: Rs503
Target price: Rs525
(Revised from Rs698)

Losing sheen

Key data

52-week range	679/329
Outstanding shares (m)	553.5
Avg. daily volume (6 m - Rs m)	3,313

Stock performance



(%)	Absolute	Relative
3 months	5.1	(14.0)
6 months	(2.9)	(12.4)
12 months	22.1	(18.2)

Risk reward becoming unfavourable

TATA's stock price has appreciated by 33% YTD. At the current price, the stock is trading at a P/E of 8.0 and EV/EBITDA of 3.9 on FY08E. The stock's current multiples are at premium to peer group and its average one-year-forward P/E for the past 10 years. The stock is not exactly cheap at the current price, considering that globally, steel prices are significantly higher than cash cost of production, making them vulnerable to any slowdown in demand growth. This makes risk reward unfavourable, as stock returns are closely linked to news on steel prices.

Not much scope left for efficiency improvement, volume growth some time away, earnings dependant on steel price

TATA's business model has improved significantly over the past four years, with a shift towards high-value-added products, cost reduction, and capacity expansion. Most of the gains from improving operational efficiency have already been achieved. From here on, any meaningful growth in earnings will come only from an increase in volumes or prices. Since volume growth is a few years away, earnings in medium term will depend primarily on steel prices.

Significant capex plans, dilution worries to hamper stock's performance

TATA has embarked on a massive expansion plan, and has announced capex of close to US$20bn over the next 10 years. It has already announced plans for a 10% equity dilution through a preferential issue, and there is talk of another round of dilution through a GDR offering. Investments in new projects will be value-accretive, but returns will be back ended. In the near term, this dilution is likely to dampen valuations.

We cut earnings estimates, downgrade stock to Sell

We are cutting our profit estimate for FY07 by 7%, as we reduce our steel rpice assumptions. Additionally, the significant discount of domestic steel prices to landed cost also contributes towards the same. We revise our price target to Rs525, which is based on 8x FY08E EPS plus Rs20 for subsidiaries valued at book. We downgrade the stock to Sell.

Key financials

Y/E 31 Mar	FY04	FY05	FY06E	FY07E*	FY08E*
Net sales (Rs m)	107,024	144,990	151,394	167,847	164,945
Net profit (Rs m)	17,469	34,749	35,064	42,163	38,393
Adj EPS (Rs)	47.3	62.8	63.3	69.2	63.0
PER (x)	**10.6**	**8.0**	**7.9**	**7.3**	**8.0**
PCE (x)	7.8	6.8	6.5	6.1	6.6
EV/Core EBITDA (x)	9.9	5.3	5.2	4.3	4.2
Price/Book (x)	4.3	4.1	2.9	2.1	1.6
ROE (%)	46.3	62.0	42.9	35.1	22.7
ROCE (%)	27.2	48.9	40.7	38.0	27.7
Consensus EPS (Rs) *(Bloomberg)*				72.7	67.8

**Earnings adjusted for announced preferential issue*

Business outlook

TATA is already one of the lowest-cost steelmakers in the world. The company has significantly improved its operating efficiencies over the past few years. Volume growth is likely to be muted over the next two years, which means that earnings will depend primarily on steel prices.

The company is now entering a phase of substantial capex, with an estimated outgo of more than US$7bn over the next five years. We are not negative on the company's capex plan, but wish to point out that this capex will necessitate an upfront dilution of equity, but will pay off in earnings only after 4-5 years.

TATA is one of the lowest-cost producers of steel…

TATA's captive resource base (iron ore and coal mines) has made it one of the lowest-cost producers of steel in the world. The company's product mix is significantly better than that of any other steelmaker in India.

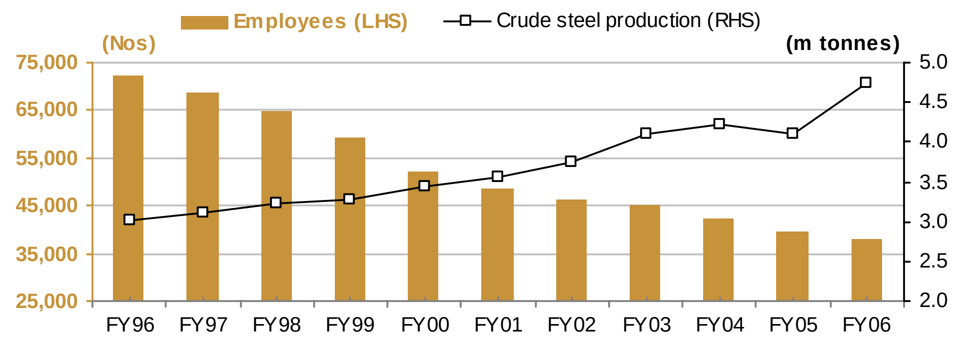
TATA's profitability has increased significantly over the past four years, thanks to three initiatives: 1) capacity expansion; 2) cost reduction; and 3) shift towards higher-value-added products. The improvement in profitability from these initiatives has made the company's earnings more resilient to a fall in steel prices.

Figure 1.1: Declining proportion of semis

	FY02	FY03	FY04	FY05	FY06
Hot-rolled (HR)	44	36	36	28	28
Cold-rolled (CR)	17	21	23	26	27
Galvanised steel	5	9	10	14	12
Longs	21	26	27	31	31
Semis	12	7	4	1	2

Source: Company, Brics Research

Figure 1.2: Improving employee productivity



Source: Company, Brics Research

…but cost structure cannot improve much now; earnings hinge on steel prices

TATA's cost structure and product mix have improved significantly over the past four years, and we do not expect any further material improvement in near term. Any meaningful earnings growth from current levels would come only from an increase in volumes or a rise in steel prices. Volume growth is likely to remain muted until FY09, as expansion of the Jamshedpur plant is to be completed in FY09, but it will show on volume sales only from FY10 onwards. Until then, earnings will depend almost solely on steel prices.

Significant capex resulting in dilution worries

TATA has embarked on a massive capacity expansion plan. The company intends to expand its steel production capacity from the current 5mtpa to 15mtpa by FY10 and to over 30mtpa by FY15. Capex is likely to increase substantially over the next few years as greenfield projects start getting executed. In addition, the company is exploring options to acquire downstream facilities in overseas markets, which could further stretch its cash flow.

We are not negative on the company's capex plan, but wish to point out that this capex will necessitate an upfront dilution of equity, but will pay off in earnings only after 4-5 years.

Figure 1.3: TATA's project stream

Project	Status	Commencement	Capex (Rs m)
Jamshedpur (1.8mtpa)	Under implementation	Q3FY09	45,000
Jamshedpur (10mtpa)	MoU signed	FY11	60,000
Orissa - Kalinganagar (6mtpa)	Land acquisition completed	FY11	154,000
Chhattisgarh (5mtpa)	MoU signed – feasibility study under way	FY12	120,000
Jharkhand (12mtpa)	MoU signed	FY13	400,000
Iran (3mtpa)	Agreement signed	NA	45,000
Bangladesh (3mtpa)	Gas price negotiation on	NA	60,000

Source: Company, Brics Research

Financial outlook

Production ramp-ups will be the biggest driver of TATA's earnings in FY08. We expect TATA's volumes to grow by 9.9% in FY07 and by 2% in FY08. However, we are cutting our earnings estimate for FY07 by 7% to Rs42.2bn, mainly because we expect a fall in steel prices in the second half of the year. We cut our estimate of blended realisation for FY07 by around 3%.

Our earnings estimate for FY07 represents a 20% growth over FY06. This increase would be driven a rise in volumes and realisations and a marginal improvement on the cost side. For FY08, we are factoring in a 5% decline in realisation, which would translate to a 9% decline in earnings to Rs38.3bn.

We cut earnings estimates in line with our view on steel price

The downward revision in earnings estimates is mainly to factor in a cut in our assumption on steel prices, which in turn is partly due to the significant discount of domestic steel prices to landed cost (which prevailed in the till months of August 2006). We have cut our assumption on blended realisation for FY07 by around 3%. Accordingly, we cut our PAT estimate for FY07 by 7% to Rs42.2bn, but this still represents a growth of 20% over FY06. However, dilution on account of a preferential allotment would restrict EPS growth to 9%, to Rs69.2.

For FY08, we are factoring in a 5% decline in realisation, which would translate to a 9% decline in earnings to Rs38.3bn.

Figure 1.4: Earnings downgrade table

	FY07			FY08		
	Now	Earlier	Change	Now	Earlier	Change
Revenues	167,847	171,386	-2.1	164,945	168,375	-2.0
EBIDTA	67,540	72,180	-6.4	62,011	66,509	-6.8
PAT	42,163	45,225	-6.8	38,393	41,362	-7.2
EPS (Rs)	69.2	74.2	-6.7	63.0	67.9	-7.2

Source: Company, Brics Research

Figure 1.5: Key assumptions

	FY04	FY05	FY06	FY07E	FY08E
Sales volume	3,856,979	3,928,157	4,417,137	4,817,137	4,913,480
Change (%)	-3.2	1.8	12.4	9.1	2.0
Realisation	23,227	29,369	29,118	30,625	29,094
Change (%)	23.9	26.4	-0.9	5.2	-5.0

Source: Company, Brics Research

Earnings drivers for FY07

Saleable steel production to increase by 10%

TATA produced 4.55m tonnes of saleable steel in FY06. The company increased its steel-making capacity by 1mtpa in FY06. However, gains from this expansion could not be realised in FY06 on account of shutdowns. The full benefit of expanded capacity will be seen in FY07. We expect TATA's sales volumes to ramp up from Q2FY07 onwards.

Improvement in realisation over FY06

Globally, steel prices have increased by US$100-120/tonne since they bottomed out at US$360/tonne in November 2005. Although prices are expected to fall in the quarters ahead, average ralisations are likely to be higher in FY07 than in FY06. We expect average steel prices to be 5% higher in FY07 than in FY06. However, the improvement is likely to be lower than that in international price for the reasons in the report.

Cost savings

In FY07, we expect a decline in TATA's costs, thanks mainly to: 1) production ramping up from Q2FY07 onwards, reducing per-tonne fixed cost; and 2) a decline in coking coal prices. The company indicated that prices of soft coking coal (which it imports) have declined by around US$30/tonne to US$85/tonne. Further, the company plans to reduce its imports of coking coal from 1.7m tonnes in FY06 to 1.3m tonnes in FY07. However, this reduction will kick in only in Q2FY07, as coal contracts run from July to June.

Valuation and recommendation

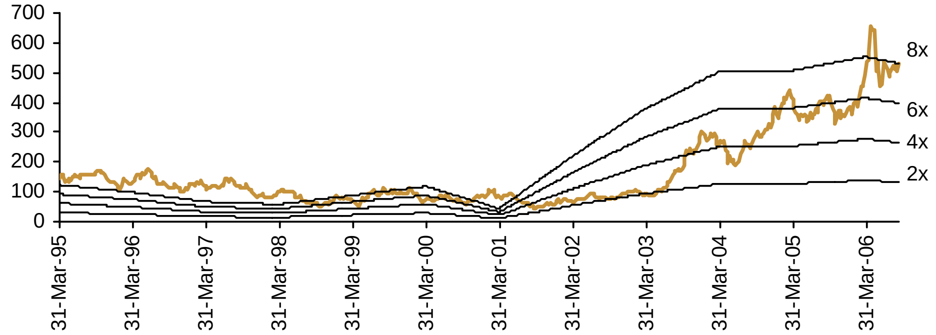
TATA has appreciated by 31% in the year so far, after underperforming the market by 30% during CY05. At Rs497, the stock is trading at a P/E of 7.2x and EV/EBITDA of 4.0x on FY07E. On FY08E, the stock's P/E and EV/EBITDA work out to 7.9x and 3.9x, respectively.

Valuations in line with global peers & historic multiples

TATA's one-year-forward average P/E multiple over a cycle has been 7.5x over the past 10 years. Over this period, the company's average P/BV stood at 1.2x. Current valuation are in line with valuation of its global peers. During up-cycle in steel the company has traded at PE of around 6-7x. At the current price, the stock is not inexpensive, considering the fact that steel prices are significantly above cash cost of operations for marginal players. In our view, a re-rating of the stock from current levels is unlikely, because:

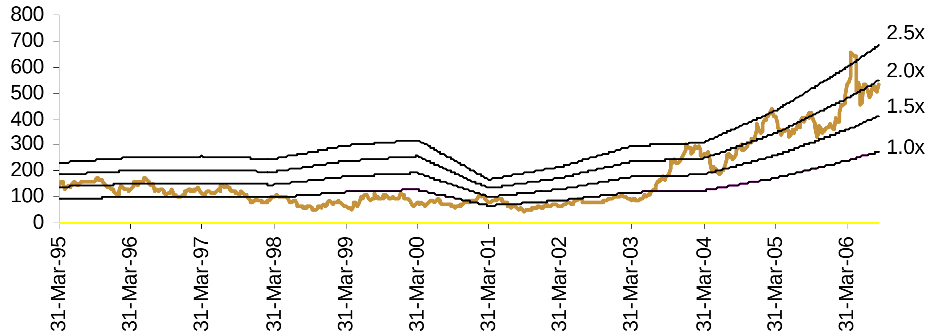
- **Steel prices are not sustainable at current levels:** The current price of US$500/tonne is significantly above cash operating cost of marginal players in Asia, which is around US$375/tonne. This indicates that prices can come off significantly as fundamentals for suppliers turn unfavourable. Accordingly, steel companies' current earnings cannot be taken as sustainable.
- **Near-term risk to steel price has increased:** Apparent demand seems to be slowing down in most regions, while production growth continues unabated. Steel prices in most regions are coming off. Moreover, prices of raw material—which are a leading indicator of steel prices—are falling.
- **Preferential allotment will lead to equity dilution:** TATA has already announced plans to dilute its equity by 10% through preferential allotment to promoters. The company is embarking on a huge expansion plan, and is open to more acquisitions. Accordingly, there is a possibility of additional equity dilution. Earnings stream from these projects will be back-ended, and this will tend to dampen valuations in the near term.

Figure 1.6: One year forward PER graph



Source: Company, Brics Research

Figure 1.7: P/BV graph



Source: Company, Brics Research

Figure 1.8: Relative valuation

	PER (x)		EV/EBIDTA (x)	
	2006E	**2007E**	**2006E**	**2007E**
POSCO	6.4	5.8	3.7	3.4
Baoshan Steel	7.7	6.4	3.9	3.4
Bluescope Steel	8.5	8.8	5.3	5.5
China Steel	9.4	9.0	5.5	4.0
Nuecor Steel	8.7	10.2	4.4	5.1
Hyundai Steel	5.7	6.1	5.6	5.5
Thyssenkrupp	9.1	9.1	3.0	3.1
Usiminas	5.6	4.7	3.8	3.7
US Steel	5.4	6.7	3.2	3.7
Gerdau	5.0	4.5	4.6	4.2
Wuhan	5.7	5.0	3.3	3.0
Maanshan Iron & Steel	8.7	6.9	5.6	4.4
Average	***7.2***	***6.9***	***4.3***	***4.1***
Median	***7.1***	***6.6***	***4.2***	***3.9***
Tata Steel	**7.1**	**7.8**	**4.0**	**3.8**

Source: Bloomberg, BRICS Research

We value TATA at Rs525, downgrade stock to Sell

We value TATA at 8x its FY08E EPS of Rs63.0, to which we add Rs20/share for subsidiaries (valuing these investments as book value). We have assigned a higher earnings multiple to TATA than to its peers, to factor in the company's cost advantage owing to captive resources. We downgrade our recommendation on the stock to Sell, because our price target of Rs525 represents an upside of only 4% to the stock's current price.

Income statement

Rs m					
Year ended 31 Mar	**FY04**	**FY05**	**FY06E**	**FY07E**	**FY08E**
Net sales	**107,024**	**144,990**	**151,394**	**167,847**	**164,945**
growth (%)	*22.7*	*35.5*	*4.4*	*10.9*	*(1.7)*
Operating expenses	(75,890)	(87,769)	(93,733)	(100,307)	(102,934)
Core EBITDA	**31,134**	**57,221**	**57,661**	**67,540**	**62,011**
Other income	1,487	1,766	2,548	4,120	4,150
EBITDA	**32,620**	**58,987**	**60,209**	**71,660**	**66,161**
Depreciation	(6,251)	(6,188)	(7,751)	(7,695)	(7,988)
Expenses capitalised	1,518	2,048	1,126	1,024	1,024
EBIT	**27,888**	**54,847**	**53,584**	**64,988**	**59,198**
Interest paid	(1,222)	(1,868)	(1,184)	(1,178)	(349)
Pre-tax profit	**26,666**	**52,979**	**52,400**	**63,810**	**58,849**
Tax (current + deferred)	(9,197)	(18,230)	(17,336)	(21,647)	(20,456)
Profit after tax	**17,469**	**34,749**	**35,064**	**42,163**	**38,393**
Net profit	**17,469**	**34,749**	**35,064**	**42,163**	**38,393**
Adjusted net profit	**17,469**	**34,749**	**35,064**	**42,163**	**38,393**
growth (%)	*72.5*	*98.9*	*0.9*	*20.2*	*(8.9)*

Balance sheet

Rs m					
Year ended 31 Mar	**FY04**	**FY05**	**FY06E**	**FY07E**	**FY08E**
Current assets	40,830	40,836	42,376	58,684	71,838
Investments	21,941	24,327	40,700	50,700	60,700
Fixed assets	78,579	91,122	98,650	127,389	135,401
Total assets	**141,350**	**156,285**	**181,726**	**236,772**	**267,939**
Current liabilities	36,298	36,932	38,079	38,725	38,108
Total Debt	33,733	27,397	25,162	29,407	14,016
Other liabilities	27,720	23,505	23,465	23,465	23,465
Total liabilities	**97,751**	**87,834**	**86,706**	**91,597**	**75,590**
Paid-up capital	3,692	5,537	5,537	5,807	6,092
Reserves & surplus	39,907	62,914	89,484	139,368	186,257
Shareholders' funds	**43,599**	**68,451**	**95,020**	**145,175**	**192,349**
Total equity & liabilities	**141,350**	**156,285**	**181,726**	**236,772**	**267,939**

Cash-flow

Rs m					
Year ended 31 Mar	**FY04**	**FY05**	**FY06E**	**FY07E**	**FY08E**
Pre-tax profit	26,666	52,979	52,400	63,810	58,849
Depreciation	6,251	6,188	7,751	7,695	7,988
Tax paid	(9,162)	(15,553)	(16,375)	(24,172)	(20,456)
Chg in working capital	**(636)**	**559**	**(977)**	**1,064**	**1,220**
Other operating activities	(2,202)	(5,536)	(2,434)	0	0
Cash flow from operations (a)	**20,917**	**38,637**	**40,365**	**48,398**	**47,601**
Capital expenditure	(8,757)	(16,883)	(15,130)	(36,434)	(16,000)
Chg in investments	(9,996)	(2,385)	(16,373)	(10,000)	(10,000)
CF from investing (b)	**(18,753)**	**(19,268)**	**(31,503)**	**(46,434)**	**(26,000)**
Free cash flow (a+b)	**2,165**	**19,369**	**8,862**	**1,964**	**21,601**
Equity raised/(repaid)	0	0	0	14,202	14,991
Debt raised/(repaid)	(8,523)	(6,336)	(2,236)	4,246	(15,391)
Dividend (incl. tax)	5,135	(13,074)	(6,210)	(6,210)	(6,210)
CF from financing (c)	**(3,389)**	**(19,409)**	**(8,446)**	**12,238**	**(6,610)**
Net chg in cash (a+b+c)	**(1,224)**	**(40)**	**417**	**14,202**	**14,991**

Key ratios

Year ended 31 Mar	**FY04**	**FY05**	**FY06E**	**FY07E**	**FY08E**
Adjusted EPS (Rs)	47.3	62.8	63.3	69.2	63.0
Adjusted EPS growth (%)	72.5	32.6	0.9	9.3	(8.9)
Core EBITDA growth (%)	54.7	83.8	0.8	17.1	(8.2)
Core EBITDA margin (%)	29.1	39.5	38.1	40.2	37.6
Pre-tax margin (%)	24.9	36.5	34.6	38.0	35.7
ROE (%)	46.3	62.0	42.9	35.1	22.7
ROCE (%)	27.2	48.9	40.7	38.0	27.7
Net debt/Equity (%)	71.6	36.4	23.4	8.5	(9.4)

Valuation parameters

Year ended 31 Mar	**FY04**	**FY05**	**FY06E**	**FY07E**	**FY08E**
PER (x)	10.6	8.0	7.9	7.3	8.0
PCE (x)	7.8	6.8	6.5	6.1	6.6
Price/Book (x)	4.3	4.1	2.9	2.1	1.6
Yield (%)	2.0	2.2	2.2	2.0	2.0
EV/Net sales (x)	2.9	2.1	2.0	1.7	1.6
EV/Core EBITDA (x)	9.9	5.3	5.2	4.3	4.2

Tata Steel: Recommendation history

Date	Stock price (Rs)	Recommendation	Price target (Rs)	Report
15-Sep-05	405	BUY	495	Showing its mettle - Aggressive expansion, cost reduction to drive earnings growth
27-Oct-05	339	BUY	495	Q2FY06 result: Cost reductions=sustainable advantagesc
25-Nov-05	343	BUY	495	JV with Blue Scope to make value-added products
16-Dec-05	368	BUY	495	TATA to acquire Thai steel company - In line with strategy to acquire finishing facilities near target markets
23-Dec-05	381	BUY	495	Acquisition of Millennium Steel Co (MSC)
13-Jan-06	369	BUY	495	Asset rich - Value of investments adds up to Rs124/share
30-Mar-06	522	BUY	597	Showing its mettle
19-May-06	545	BUY	745	Q4FY06 result: Result disappoints - But the worst is over; expect earnings to improve as steel prices rise and costs decline
4-Jul-06	533	BUY	745	Strong growth in production and sales
24-Jul-06	484	BUY	698	Q1FY07 result: On track - Volume growth, cost reduction enables YoY growth in profit
21-Sep-06	**503**	**SELL**	**525**	**Losing sheen**

Steel Authority of India Ltd (SAIL)

Bloomberg: SAIL IN
Reuters: SAIL.NS
Mkt cap: Rs307.9bn/US$6.7bn

SELL
(Revised from Buy)

Current price: Rs75
Target price: Rs76
(Revised from Rs115)

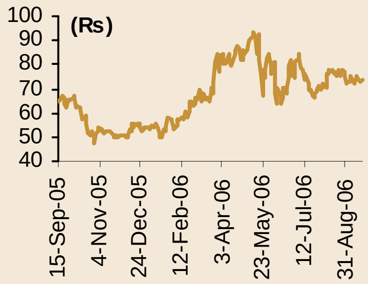
No more smooth sailing

Saddled with high costs, earnings will slide as steel prices fall

Key data

52-week range	96/42
Outstanding shares (m)	4,130.4
Avg. daily volume (6 m - Rs m)	1,327

Stock performance



(%)	Absolute	Relative
3 months	5.3	(13.9)
6 months	(11.7)	(20.3)
12 months	17.3	(21.4)

India's largest integrated steelmaker

SAIL, with its production capacity of 13mtpa, is India's largest steelmaker. Its captive mines supply 100% of its iron ore requirement, and for non-coking coal the company has linkages with Coal India. High level of integration reduces the company's vulnerability to input cost pressures. The company has approved a Rs300bn plan to raise capacity and improve process efficiencies.

SAIL has captive resources, but other inefficiencies result in high cost structure…

Despite its captive mines, SAIL's costs are higher than those of its peers. That's because of high proportion of semis in the product mix, lack of modernisation, huge work force and its heavy dependence on imported coal. The company has planned a modernisation project to address these inefficiencies, but benefits from these initiatives are some time away.

…which makes earnings most vulnerable to fall in steel prices

High costs and a high proportion of commodity-grade products in SAIL's volumes make SAIL's earnings particularly sensitive to steel prices. The company is planning to raise its production capacity by 9mtpa, but this expansion will be spread over the next six years, which means there's no step jump in capacity. Hence, SAIL's earnings have no support from volume growth, unlike those of its peers. We cut our earnings estimates for FY07 by 10% to Rs13/share, and for FY08 by 17% to Rs10.9/share, in line with our view on steel prices.

Valuation is not expensive, but risk is increasing – downgrade to Sell

At the current price, SAIL is selling at a P/E of 6.7 and an EV/EBITDA of 2.7 on FY08E. These valuations seem undemanding when compared to global peers. But the risk for SAIL has increased significantly, as its earnings are highly sensitive to steel prices, for which the outlook is weak. We downgrade SAIL from Buy to Sell, with a price target of Rs76 (7x FY08E EPS).

Key financials

Y/E 31 Mar	FY04	FY05	FY06E	FY07E	FY08E
Net sales (Rs m)	220,563	291,389	288,505	325,327	319,159
Net profit (Rs m)	25,144	68,789	40,236	53,706	45,226
Adj EPS (Rs)	6.2	16.7	9.7	13.0	10.9
PER (x)	**12.1**	**4.5**	**7.7**	**5.7**	**6.8**
PCE (x)	8.4	3.8	5.9	4.7	5.3
EV/Core EBITDA (x)	8.1	2.8	4.2	2.7	2.9
Price/Book (x)	6.6	3.1	2.5	1.9	1.5
ROE (%)	76.6	93.8	35.9	37.2	24.8
ROCE (%)	20.0	49.1	25.5	31.0	23.6
Consensus EPS (Rs) *(Bloomberg)*				13.2	14.6

Business outlook

SAIL is India's largest steel producer, with high levels of integration (100% of iron requirement met through captive mines). But despite this cost advantage from integration, it is not the most competitive steel producer. This is on account of outdated technology, huge work force, and high proportion of commodity-grade products. The company is planning to spend Rs300bn on increasing its production capacity to over 20mtpa and modernising plants. However, gains from these plans will come through only in the medium term. Over the next couple of years, earnings will depend primarily on steel prices, as volume growth, cost reduction and improvement in product mix will be small. SAIL's earnings are highly sensitive to steel prices, and will be hit hard as steel prices soften over the next 12 months.

India's largest integrated steel producer

SAIL, with a production capacity of 13mtpa, is India's largest steel producer. The company has a high level of vertical integration, with captive mines for iron ore, dolomite and limestone meeting 100% of its requirements. For non-coking coal, the company has linkages with Coal India Limited, which account for 30% of company's requirements (the rest is imported).

Merger of IISCO with SAIL has further augmented SAIL's raw material base. IISCO has lease on high-quality iron ore reserves, which are located near Durgapur and Bokaro steel plants. IISCO also has 70m-80m-tonne coal reserves. SAIL is planning to develop these mines, which are likely to supply 10-15% of the company's requirements in the next two years.

SAIL has captive resources, but it's not the lowest-cost steelmaker

SAIL has substantial captive resources, but it is not the lowest-cost producer. That's because of operational inefficiencies such as use of outdated technology in the production process. The company also has a huge workforce, and therefore a high employee cost. These legacy issues significantly negate the company's competitive advantage from its captive resource base.

Scope for significant improvement in product mix

SAIL's current product mix has significant scope for improvement. The company currently sells around 20% of its production in the form of semis, and has no presence in high-value-added segments such as auto-grade steel. SAIL's product mix is significantly inferior to TATA's, which sells barely 1% of its production in the form of semis.

Large capex planned to modernise and increase capacity

During the previous steel cycle downturn, SAIL's poor financial condition had constrained its ability to invest in expanding capacity and improving operational efficiencies. The company has now chalked out a plan to increase its steelmaking capacity from the current 13mtpa to 20mtpa, reduce its production cost, and improve product mix. In the medium term, the following steps will improve profitability:

- SAIL plans to shift its steelmaking process to continuous casting instead of using ingots. Continuous casting currently account for 65% of SAIL's production. Similarly, production through basic oxygen furnace will be increased to 100% from the current 75%. The plan also includes process automation and implementation of an ERP system. Besides this, the company is working on techno-economic parameters such as reducing coke rate and energy consumption to improve its cost structure.

- As for the product mix, the company aims to gradually reduce the proportion of semis in its product mix from the current 20% to 8-10%.

Figure 2.1: SAIL's plantwise production capacity

	Current (FY06)	Planned (FY12)	Change (mtpa)
Bhilai Steel Plant	4.9	7.0	2.1
Durgapur Steel Plant	2.0	3.2	1.2
Rourkela Steel Plant	1.7	3.0	1.3
Bokaro Steel Plant	4.1	6.0	1.9
IISCO Steel Plant	0.8	2.5	1.7
Total	13.5	21.7	8.2

Source: Company, Brics Research

Production growth in near term to remain slow

SAIL is planning to increase its capacity to over 20mtpa over next five years. The increase in capacity will come mainly from debottlenecking at existing plants. No major brownfield or greenfield expansion has been planned. Accordingly, production growth in the years ahead will be 7-8% per annum. That means SAIL's production capacity will not see any significant increases with expansion—unlike TATA, which is expanding capacity by 2mtpa in FY09, and JSW Steel, which is expanding to 7mtpa by FY10 from 2.5mtpa in FY06.

Earnings to depend primarily on steel prices

SAIL has a high cost base, but cost of production is unlikely to fall significantly in the years ahead. Cost of production is likely to remain more or less flat, except for the price of coking coal, which is negotiated annually. As for the product mix, proportion of semis in SAIL's production is unlikely to decline any time soon. Gains from the company's planned modernisation will come through only in the medium term. All taken, SAIL's earnings will depend primarily on steel prices in medium term.

SAIL's earnings have higher leverage to steel prices

SAIL's high fixed cost per tonne makes its earnings much more sensitive to steel prices than TATA's. SAIL's earnings were severely hit in FY06 as steel prices declined for nine months consecutively. SAIL's EBITDA declined by 30% QoQ in Q3FY06 as realisation dropped by 8.4% QoQ (see table below). The impact of declining realisations is not evident in other quarters, on account of substantial variance in quarterly sales volumes. Now with steel prices trending down, their impact on SAIL's earnings will be the highest.

Figure 2.2: SAIL's quarterly EBIDTA and realisation per tonne

	Q2FY06	Q3FY06	Q4FY06	Q1FY07
Volumes (m tonnes)	2.7	2.7	3.8	2.5
Revenues (Rs m)	70,178	63,345	92,190	65,583
Realisation (Rs/tonne)	25,612	23,461	23,945	27,993
% change QoQ	-15.6	-8.4	2.1	16.9
EBIDTA (Rs m)	19,627	13,725	15,159	17,803
% change QoQ	-1.4	-30.1	10.4	17.4

Source: Company, Brics Research

We downgrade our earnings estimates

We expect SAIL's volumes to grow by 8% in FY07 and a further 4% in FY08. Earnings growth in FY07 will be driven by higher steel prices, volume growth, and a reduction in coking coal prices. But steel prices are in for a decline in the quarters ahead, so we are cutting our earnings estimates for SAIL. We cut our EPS estimate for FY07 by 10.3% to Rs13, which would represent a growth of 33% over the previous fiscal.

For FY08, we are factoring in a decline of 5% in steel prices. Consequently, we expect SAIL's earnings to decline by 15.8% in FY08 to Rs10.9.

Figure 2.3: Earnings downgrade table

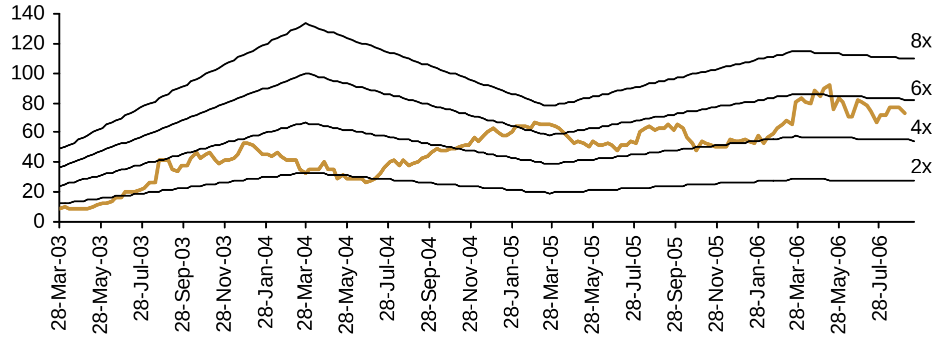
	FY07			FY08		
	Now	Earlier	Change	Now	Earlier	Change
Revenues (Rs m)	325,327	307,621	5.8	319,159	301,856	5.7
EBIDTA (Rs m)	90,441	99,847	-9.4	77,271	91,175	-15.3
PAT (Rs m)	53,706	59,981	-10.5	45,226	54,488	-17.0
EPS (Rs)	13.0	14.5	-10.3	10.9	13.2	-17.0

Source: Company, Brics Research

We downgrade the stock to SELL as risk to earnings increases

At current price of Rs74 SAIL is quoting at 5.7x & 6.8x on FY07E and FY08E earnings, respectively. On an EV/EBIDTA basis it is quoting at 2.5x on FY07 and 2.7x on FY08. The valuations seem undemanding in comparison to global peers. However, the risk for SAIL has increased significantly as its earnings highly sensitive to steel prices and price outlook has become negative. We downgrade the stock to SELL with target price of Rs76 (based on 7x its FY08E EPS).

Figure 2.4: One year forward PER graph



Source: Company, Brics Research

Income statement

Year ended 31 Mar	FY04	FY05	FY06E	FY07E	FY08E
					Rs m
Net sales	**220,563**	**291,389**	**288,505**	**325,327**	**319,159**
growth (%)	*26.0*	*32.1*	*(1.0)*	*12.8*	*(1.9)*
Operating expenses	(174,462)	(182,424)	(219,205)	(234,886)	(241,889)
Core EBITDA	**46,101**	**108,965**	**69,300**	**90,441**	**77,271**
Other income	748	2,628	4,615	5,500	6,000
EBITDA	**46,849**	**111,593**	**73,915**	**95,941**	**83,271**
Depreciation	(11,226)	(11,270)	(12,073)	(12,324)	(13,145)
EBIT	**35,623**	**100,323**	**61,842**	**83,617**	**70,126**
Interest paid	(8,994)	(6,051)	(4,678)	(2,734)	(2,014)
Non-recurring items (net of taxes)	(323)	0	0	0	0
Pre-tax profit	**26,305**	**94,273**	**57,164**	**80,883**	**68,112**
Tax (current + deferred)	(1,161)	(25,484)	(16,928)	(27,177)	(22,886)
Profit after tax	**25,144**	**68,789**	**40,236**	**53,706**	**45,226**
Net profit	**25,144**	**68,789**	**40,236**	**53,706**	**45,226**
Adjusted net profit	**25,467**	**68,789**	**40,236**	**53,706**	**45,226**
growth (%)	*n/a*	*170.1*	*(41.5)*	*33.5*	*(15.8)*

Balance sheet

Year ended 31 Mar	FY04	FY05	FY06E	FY07E	FY08E
					Rs m
Current assets	82,013	143,336	173,837	213,821	225,128
Investments	5,432	6,067	2,920	2,920	2,920
Fixed assets	135,361	128,516	129,201	127,524	139,570
Total assets	**222,806**	**277,919**	**305,958**	**344,265**	**367,618**
Current liabilities	44,629	47,789	51,917	58,909	57,775
Total Debt	86,888	57,698	42,976	32,976	22,976
Other liabilities	44,698	72,315	87,209	87,209	87,209
Total liabilities	**176,214**	**177,802**	**182,102**	**179,094**	**167,960**
Paid-up capital	41,304	41,304	41,304	41,304	41,304
Reserves & surplus	5,288	58,813	82,552	123,867	158,354
Shareholders' funds	**46,592**	**100,117**	**123,856**	**165,171**	**199,658**
Total equity & liabilities	**222,806**	**277,919**	**305,958**	**344,265**	**367,618**

Cash-flow

Year ended 31 Mar	FY04	FY05	FY06E	FY07E	FY08E
					Rs m
Pre-tax profit	26,305	94,273	57,164	80,883	68,112
Depreciation	11,226	11,270	12,073	12,324	13,145
Tax paid	(616)	(8,049)	(19,381)	(27,177)	(22,886)
Chg in working capital	**21,553**	**(7,270)**	**(7,475)**	**865**	**(1,893)**
Other operating activities	957	(2,467)	0	0	0
Cash flow from operations (a)	**59,425**	**87,756**	**42,381**	**66,895**	**56,478**
Capital expenditure	(1,991)	(3,150)	(17,084)	(10,647)	(25,191)
Chg in investments	0	(635)	3,147	0	0
CF from investing (b)	**(1,991)**	**(3,786)**	**(13,937)**	**(10,647)**	**(25,191)**
Free cash flow (a+b)	**57,435**	**83,970**	**28,444**	**56,248**	**31,287**
Debt raised/(repaid)	(42,392)	(29,190)	(14,722)	(10,000)	(10,000)
Dividend (incl. tax)	0	(13,630)	(8,261)	(12,391)	(10,739)
CF from financing (c)	**(42,392)**	**(42,820)**	**(22,983)**	**(22,391)**	**(20,739)**
Net chg in cash (a+b+c)	**15,043**	**41,150**	**5,461**	**33,857**	**10,548**

Key ratios

Year ended 31 Mar	FY04	FY05	FY06E	FY07E	FY08E
Adjusted EPS (Rs)	6.2	16.7	9.7	13.0	10.9
Adjusted EPS growth (%)	n/a	170.1	(41.5)	33.5	(15.8)
Core EBITDA growth (%)	120.6	136.4	(36.4)	30.5	(14.6)
Core EBITDA margin (%)	20.9	37.4	24.0	27.8	24.2
Pre-tax margin (%)	11.9	32.4	19.8	24.9	21.3
ROE (%)	76.6	93.8	35.9	37.2	24.8
ROCE (%)	20.0	49.1	25.5	31.0	23.6
Net debt/Equity (%)	143.2	(3.6)	(15.1)	(37.9)	(41.6)

Valuation parameters

Year ended 31 Mar	FY04	FY05	FY06E	FY07E	FY08E
PER (x)	12.1	4.5	7.7	5.7	6.8
PCE (x)	8.4	3.8	5.9	4.7	5.3
Price/Book (x)	6.6	3.1	2.5	1.9	1.5
Yield (%)	0.0	4.4	2.7	4.0	3.5
EV/Net sales (x)	1.7	1.0	1.0	0.8	0.7
EV/Core EBITDA (x)	8.1	2.8	4.2	2.7	2.9

SAIL: Recommendation history

Date	Stock price (Rs)	Recommendation	Price target (Rs)	Report
4-Nov-04	50	NEUTRAL	55	Not so cheap any more
10-Mar-05	65	SELL	63	Price and earnings outlook—Cutting FY06 EPS estimate, downgrading stock from Neutral to Sell
26-May-05	52	NEUTRAL	63	Q4FY05 result: Massive positive surprise…but outlook remains bleak
26-May-06	77	BUY	115	Q4FY06 result: One-time items hit earnings - Outlook remains strong; we maintain Buy
31-Jul-06	71	BUY	115	Q1FY07 result: Recurring earnings in line with estimates
21-Sep-06	**75**	**SELL**	**76**	**No more smooth sailing - Saddled with high costs, earnings will slide as steel prices fall**

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Bijal Shah, CFA	Telecom, Metals	bijal.shah@bricssecurities.com	(91-22) 66360 169
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