Initiation of Coverage

Indian Steel
Turning point approaching

Equities

India
Steel

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Favourable long-term market dynamics; no domestic overcapacity
Steel overcapacity driven by China is a global problem from which India is not exempt. Prices are under pressure and there are yet no signs of a material government response. Despite this, we expect the Indian market to remain more disciplined. The main players (c.60% market share) will not act on additional expansion in the absence of a demand recovery, while their current capacity is diverse and focused on attractive segments. The domestic "tail" and foreign players have no choice but to show capacity discipline due to debt constraints and the practical hurdles of investment in India, respectively.

Three areas of encouragement
While a demand recovery in the steel sector short term is muted, we believe the longer-term story is compelling. The upbeat India economic outlook and a strong government with aspirations to boost infrastructure, urbanisation and manufacturing bode well for steel consumption. Raw material availability issues in recent years have impacted costs and disrupted operations, but these are gradually being resolved and should help iron ore and coal supply. After years in negative territory, we expect free cash flow generation to improve from here and turn positive, as earnings improve and capex falls.

FY16E still challenging, but profitability to improve from here
Q1 and Q2 will be difficult, due to pricing and some specific issues that need to be resolved. Yet the profitability and FCF improvement we forecast represent a noteworthy turning point, which is not reflected in depressed share prices. Cyclicals such as steel can rerate six to nine months ahead of earnings. However, it is too early to be "all-in" positive given some of the short-term risks, but we do see selective opportunities.

We initiate coverage of the steel sector: valuations and stock views
JSW Steel (Buy) is our preferred India "pure-play". We believe it has modern capacity, good profitability and a better debt profile than closest equivalent SAIL (Neutral). We like the more diverse Tata Steel (Buy) as resolution of long-running issues in Europe will complement its mix/scale advantages. We prefer it to Jindal Steel and Power (Neutral), which has an interesting risk/reward skew, but higher external uncertainty and balance sheet risk. We base our price targets on normalised EV/EBITDA and EV/Sales multiples, except for JSPL where we use scenarios.

Recommendation and valuation summary

	Reuters code	Market cap (Rs m)	UBS Rating	Price target (Rs)	Share price (Rs)	PE (x) FY16E	PE (x) FY17E	EVEBITDA (x) FY16E	EVEBITDA (x) FY17E	Net debt (Rs m) FY16E
JSW Steel	JSTL.BO	211,868	Buy	1,200	877	10.4	8.0	5.7	5.0	349,900
Tata Steel	TISC.BO	288,886	Buy	420	297	8.3	7.2	7.5	7.0	715,793
SAIL	SAIL.BO	261,248	Neutral	67	63	13.5	11.2	12.1	9.6	303,100
JSPL	JNSP.BO	76,510	Neutral	95	82	14.3	7.4	8.9	7.8	445,032

Above data as at 7 July 2015.
Source: Reuters, UBS estimates

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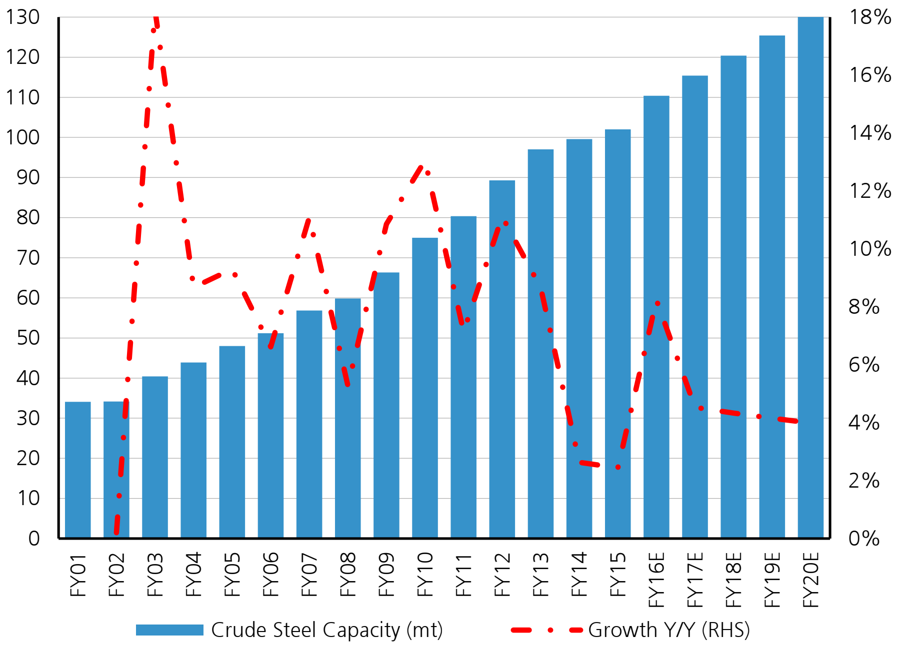
We would like to thank Prashanth Kota, an employee of Cognizant, for his assistance in preparing this research report. Cognizant staff provide research support services to UBS.

Our thesis in pictures

Figure 1: India crude steel capacity (mt) and growth

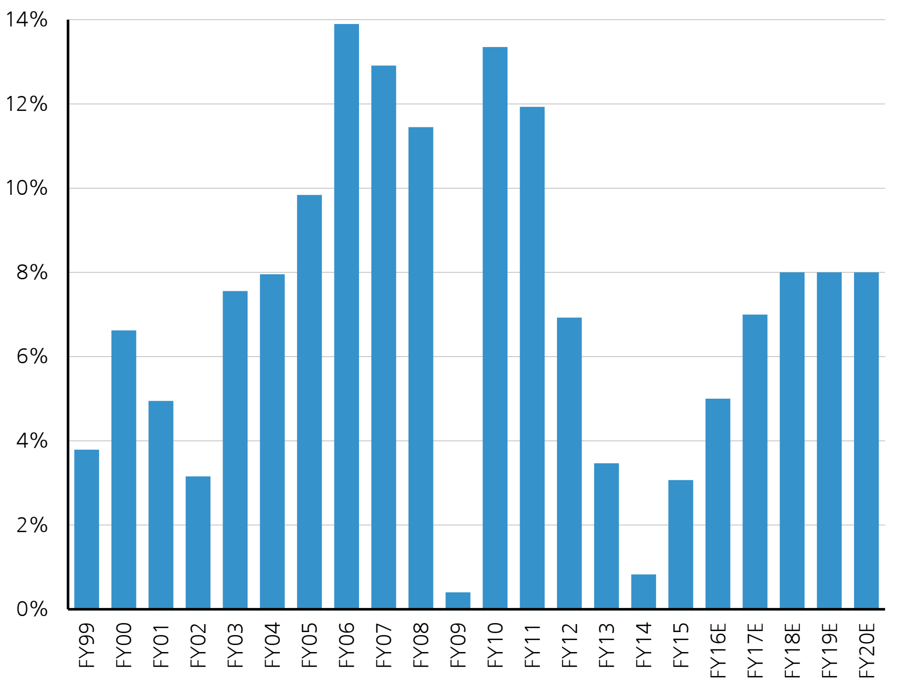


Source: JPC, OECD, SBB, UBS estimates

China-led overcapacity is a concern. But we believe Indian capacity addition will be modest and oversupply is unlikely.

India is feeling global/regional pressures via higher imports and pricing pressure. It is adding capacity itself (>10mt in FY16) as long-running projects are commissioned. We think material capacity expansion beyond this is unlikely due to discipline at the larger players and wider practical barriers in the market of debt and bureaucracy / regulatory clearances. This bodes well for market balance. Imports remain a threat in the short term, but there are early signs of government action in the form of higher duties.

Figure 2: India steel demand growth trends (YoY consumption)

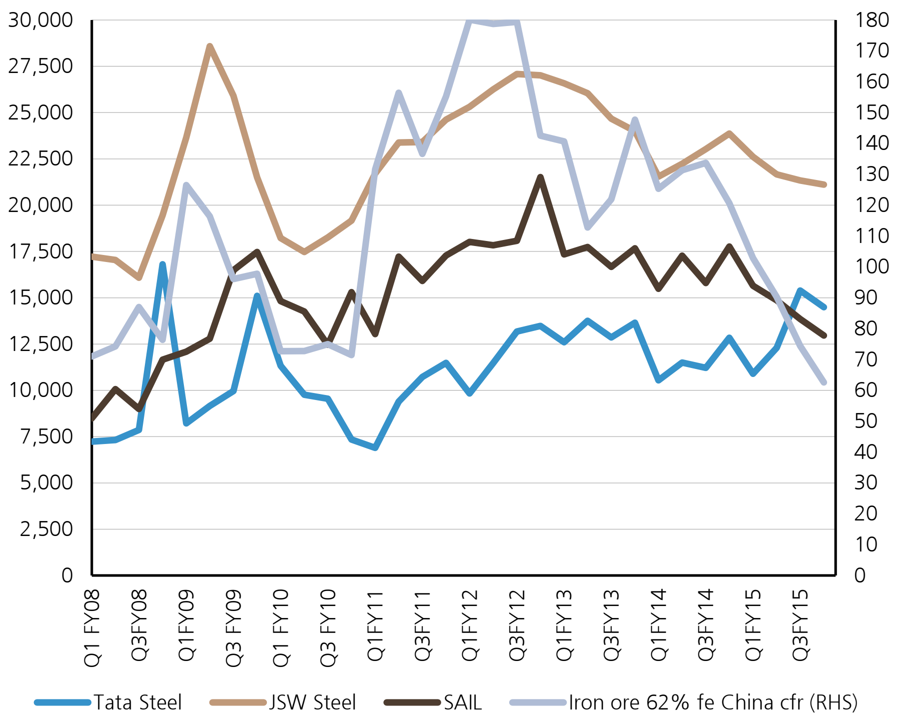


Source: JPC, Company data, UBS estimates

Steel demand recovery in India is tepid in the short term, but the long-term opportunity for steel is clear if the BJP government's plans are successful.

We do not expect a sharp turning point; market conditions in April/May were still muted. This is consistent with the UBS Strategy & Economics view on the wider situation in India. However the longer-term opportunity for steel demand growth is clear, in our view. General support from macro strength will be compounded by steel consumption / penetration growth from new government initiatives, such as infrastructure investment, the manufacturing push ("Make in India") and urbanisation. This will not happen overnight but we think the longer-term growth opportunity is compelling.

Figure 3: Quarterly raw material price trends (Rs/t) – India steel operations

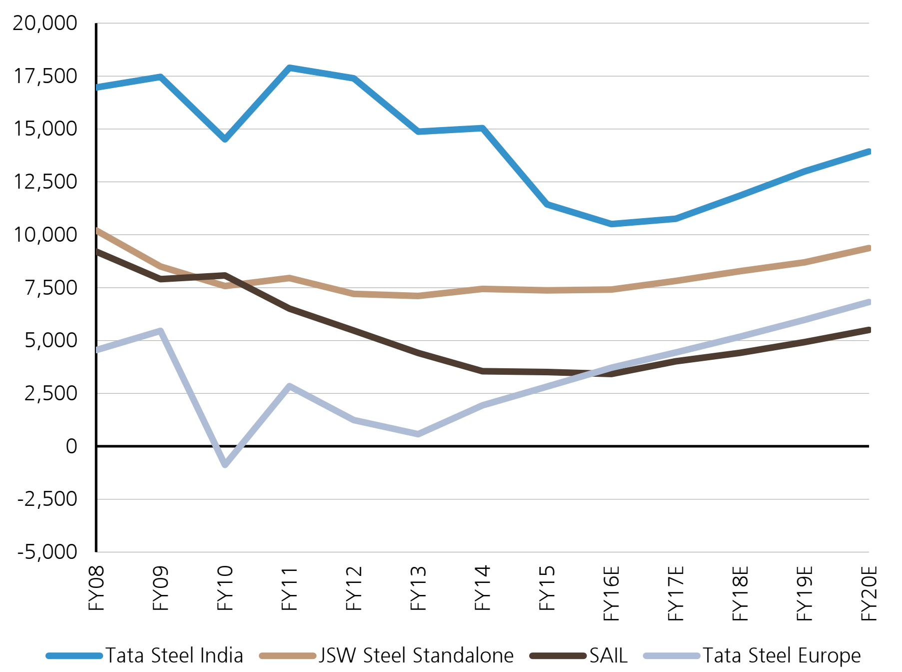


Source: Company data, UBS

Raw material supply issues are clearing after several years of disruption. The certainty is reassuring and it removes a source of margin pressure.

Reduced iron ore supply and the impact of mining bans have meant domestic prices have remained high and the captive model has lost some advantage. This has also reduced the benefit of lower global coal prices. New legislation means some further uncertainty, but much greater long-term visibility/security as well as some new supply coming into the market via upcoming auctions, which should benefit prices. For those with the greatest captive supply (Tata Steel and SAIL) it provides another source of operating leverage into a demand recovery.

Figure 4: EBITDA/t trends (Rs/t)

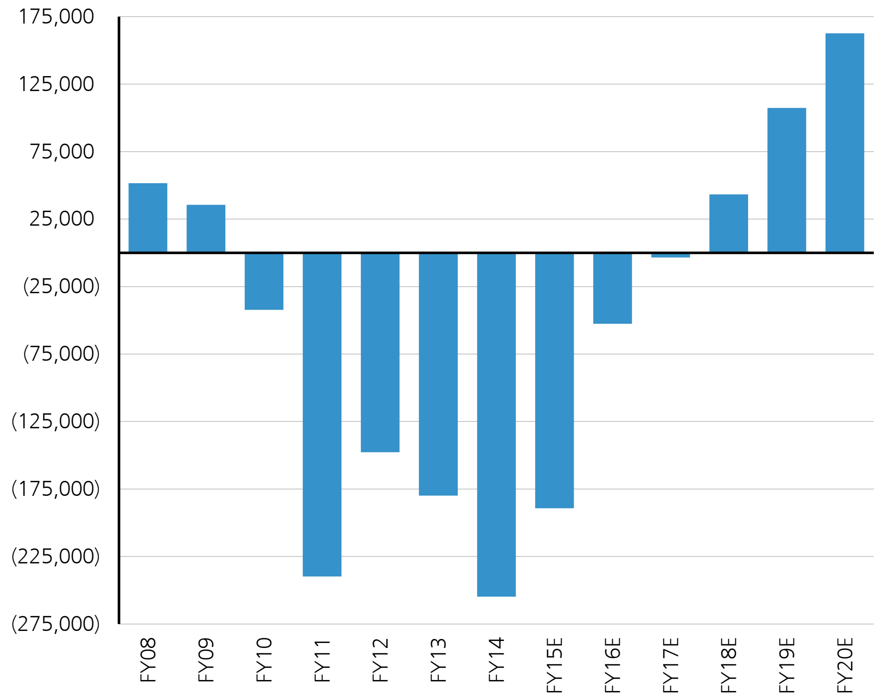


Source: Company data, UBS estimates

We forecast a bottoming in sector profitability from FY16, after several years of pressure.

The "post-Modi" optimism of mid-2014 has disappeared from steel share prices. Earnings have trended lower and could ease further (we are on average 8% below consensus at EBITDA for FY16E/FY17E) as we expect H1 FY16 to still be subdued. Yet the gradual improvement in profit/margins we forecast from this year is a meaningful turning point. Timing the investment decision is hard but cyclical shares rerate ahead of the earnings trough, by up to 6-9 months. Pricing is the key risk to this thesis; we forecast another hit to prices in FY16 across the group, but then a bottoming / recovery thereafter.

Figure 5: Aggregate consolidated free cash flow (Rs m)

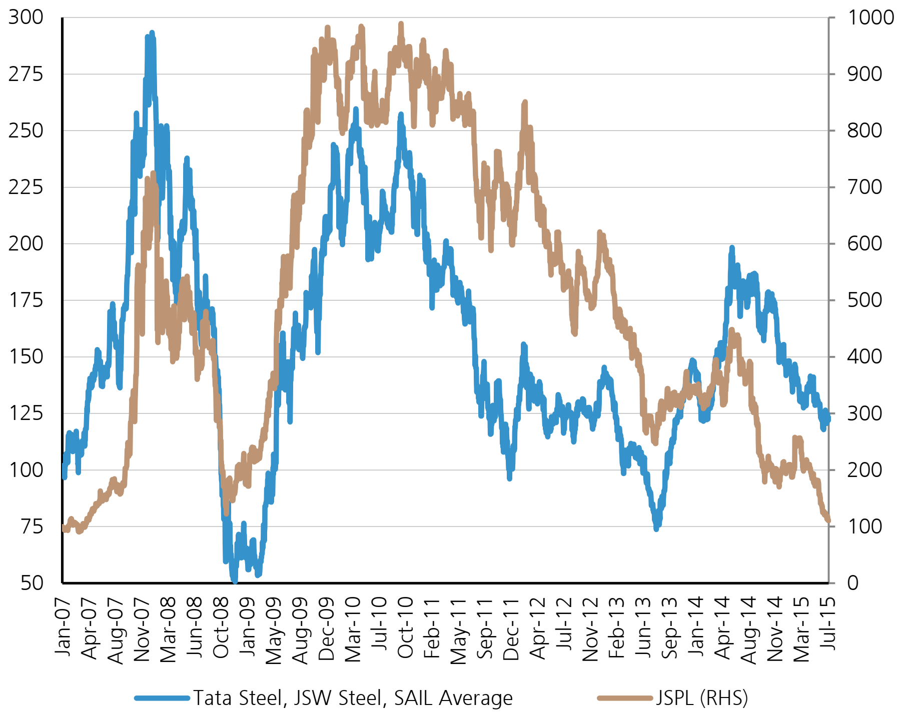


Source: Company data, UBS estimates March YE

FCF has been under pressure in the sector even longer than profitability. We see a turning point in FY16 led by capex reductions which benefits both debt and valuations.

Capacity expansion programmes over the last decade have meant consistently negative FCF and elevated levels of debt. Capex will reduce from here as projects are commissioned while the bottoming in earnings also bodes well for operating cash. We think this process is gradual but a notable change in direction. Falling debt levels will alleviate a key source of risk for equity investors. Tata Steel and JSW are the nearest-term beneficiaries of this; JSPL suffers from the highest current debt levels while capex at SAIL will persist for longer.

Figure 6: Sector indexed price performance



Source: Thomson Financial

Share prices have fallen driven by earnings and de-rating. We see attractive positioning and risk/reward for Tata Steel/JSW.

There is a case that if you are positive, you buy the sector or the most operationally/financially geared. But the risks we have highlighted and the risk/reward balance cause us to still be selective. JSW (Buy) is our preferred India "pure-play". It has well-invested capacity, good profitability and a better debt profile than closest equivalent SAIL (Neutral). We like Tata Steel (Buy) as upcoming resolution of issues in Europe compound the improving underlying picture. We prefer it to JSPL (Neutral), which has an interesting risk/reward skew, but high external uncertainty and balance sheet risk.

Key risks

Sector risks

Macro-economic risks

Steel is highly correlated to trends in GDP, especially infrastructure and construction components. Disappointment against economic growth expectations in India/Europe could adversely impact share prices/performance. It is also directly linked to trends in key raw material prices, especially iron ore and metallurgical coal. Related to both of the above, China production of and demand for steel remains a key driver of trade flows, utilisation and pricing in the global steel market.

Industry risks

The steel sector in India is highly leveraged and needs a demand recovery to reduce leverage and support earnings growth. Success is closely tied to government decisions around import/export duties and mining taxes/royalties as well as environmental and land regulations. India steel is influenced by global/regional import/export trends, such as those recently seen from China, and associated price support/pressure.

End-market risks

Investment in roads, rail and infrastructure is key to supporting improvement in long products in India. In flat products, imports are a key risk, but so is the need to differentiate in terms of quality or value-add. Automotive is a key sector for Tata Steel and JSW. Finally for all companies the low-volume retail route is a critical, but competitive, route to market.

Company specific risks

Please refer to the separate company notes for company specific risks. However we briefly highlight the key risk for each company below:

Tata Steel - is exposed to a variety of residual risks relating to its acquisition of Corus in 2007. These include weak performance in long products and the ongoing sales process of this unit, a pension deficit in the UK and associated industrial relations, patchy economic recovery across the Eurozone, and currency.

JSW Steel - has almost no captive raw material supply, which limits its control over its operations and reduces operational gearing into any recovery in global raw material / steel prices.

JSPL - continues to work through a number of residual regulatory issues. These mainly relate to raw material supply in both steel and power, and include Indian CBI charges against its Chairman, Mr Naveen Jindal and de-allocation of coal blocks won in the recent coal auction process.

SAIL - is still majority-owned by the government. While the implicit state support is positive there is a risk of direct intervention in operations or financial policy which could be detrimental to minority shareholders.

Forecast and scenario summary

For more details of the underlying assumptions behind these forecasts, please refer to the detailed company notes at the back of this report.

Figure 7: Forecast and scenario summary (consolidated figures)

Rs.m	FY12	FY13	FY14	FY15	FY16E	FY17E	FY18E	FY19E	FY20E
Tata Steel									
EBITDA	124,168	123,212	164,110	125,358	138,780	149,908	176,458	204,056	231,435
Growth	n/a	-0.8%	33.2%	-23.6%	10.7%	8.0%	17.7%	15.6%	13.4%
Margin	9.3%	9.1%	11.0%	9.0%	10.2%	11.0%	12.0%	13.1%	14.0%
Upside EBITDA	124,168	123,212	164,110	125,358	158,751	206,567	261,534	319,709	382,749
Upgrade	0.0%	0.0%	0.0%	0.0%	14.4%	37.8%	48.2%	56.7%	65.4%
Downside EBITDA	124,168	123,212	164,110	125,358	102,273	104,021	112,755	121,174	126,945
Downgrade	0.0%	0.0%	0.0%	0.0%	-26.3%	-30.6%	-36.1%	-40.6%	-45.1%
FCF	-35,976	-40,294	-63,040	-75,682	-22,213	11,354	26,412	48,627	66,435
Leverage ratio (x)	3.2	3.7	3.6	5.6	5.2	4.8	4.1	3.4	2.8
Upside FCF	-35,976	-40,294	-63,040	-75,682	-19,092	12,464	41,626	98,137	156,444
Downside FCF	-35,976	-40,294	-63,040	-75,682	-21,571	-19,142	-17,836	2,347	17,148
JSW Steel									
EBITDA	61,019	65,039	91,655	94,023	98,318	108,564	121,373	134,774	152,040
Growth	n/a	6.6%	40.9%	2.6%	4.6%	10.4%	11.8%	11.0%	12.8%
Margin	17.8%	17.0%	17.9%	17.7%	18.9%	19.6%	19.8%	20.0%	20.6%
Upside EBITDA	61,019	65,039	91,655	94,023	110,271	123,921	155,764	195,164	249,950
Upgrade	0.0%	0.0%	0.0%	0.0%	12.2%	14.1%	28.3%	44.8%	64.4%
Downside EBITDA	61,019	65,039	91,655	94,023	71,772	74,285	81,119	87,502	89,034
Downgrade	0.0%	0.0%	0.0%	0.0%	-27.0%	-31.6%	-33.2%	-35.1%	-41.4%
FCF	-16,227	-12,333	-55,076	-7,001	11,588	24,265	27,982	33,629	36,944
Leverage ratio (x)	2.8	3.0	3.8	3.8	3.6	3.0	2.5	2.1	1.7
Upside FCF	-16,227	-12,333	-55,076	-7,001	14,100	28,988	46,545	69,540	99,695
Downside FCF	-16,227	-12,333	-55,076	-7,001	99	9,954	12,787	15,571	12,659
SAIL									
EBITDA	63,152	49,703	43,487	41,110	45,979	60,850	71,968	84,137	98,703
Growth	n/a	-21.3%	-12.5%	-5.5%	11.8%	32.3%	18.3%	16.9%	17.3%
Margin	13.6%	11.1%	9.2%	9.1%	9.8%	11.5%	12.1%	12.8%	13.6%
Upside EBITDA	63,152	49,703	43,487	41,110	62,043	86,060	109,109	137,016	170,159
Upgrade	0%	0%	0%	0%	35%	41%	52%	63%	72%
Downside EBITDA	63,152	49,703	43,487	41,110	31,588	38,829	33,443	45,075	55,643
Downgrade	0%	0%	0%	0%	-31%	-36%	-54%	-46%	-44%
FCF	-67,070	-63,433	-30,676	-60,189	-17,690	-17,379	-8,905	11,881	29,987
Leverage ratio (x)	1.7	3.7	5.4	6.7	6.6	5.4	4.8	4.1	3.3
Upside FCF	-67,070	-63,433	-30,676	-60,189	-14,378	-16,400	1,943	24,575	43,761
Downside FCF	-67,070	-63,433	-30,676	-60,189	-27,568	-40,234	-22,447	-17,224	-5,962
JSPL									
EBITDA	70,405	65,685	54,568	54,835	58,635	68,626	72,717	82,020	89,818
Growth	n/a	-6.7%	-16.9%	0.5%	6.9%	17.0%	6.0%	12.8%	9.5%
Margin	39%	33%	27%	27%	30%	30%	30%	31%	31%
Upside EBITDA	70,405	65,685	54,568	54,835	68,832	90,562	105,287	131,560	151,568
Upgrade	0%	0%	0%	0%	17%	32%	45%	60%	69%
Downside EBITDA	70,405	65,685	54,568	54,835	53,081	55,100	54,594	54,533	53,294
Downgrade	0%	0%	0%	0%	-9%	-20%	-25%	-34%	-41%
FCF	-28,518	-65,407	-107,408	-46,462	-15,742	-11,343	-1,896	8,557	15,006
Leverage ratio (x)	2.4	3.7	6.5	7.8	7.6	6.7	6.3	5.5	4.8
Upside FCF	-28,518	-63,838	-105,920	-46,462	13,873	38,793	24,991	47,259	66,270
Downside FCF	-28,518	-63,838	-105,920	-46,462	45,347	25,028	16,361	18,452	20,579

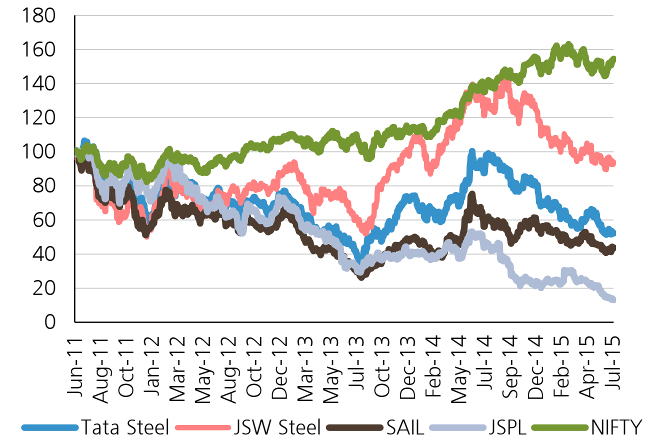
Source: Company data; UBS estimates

Valuation commentary

Weak earnings momentum and share price performance

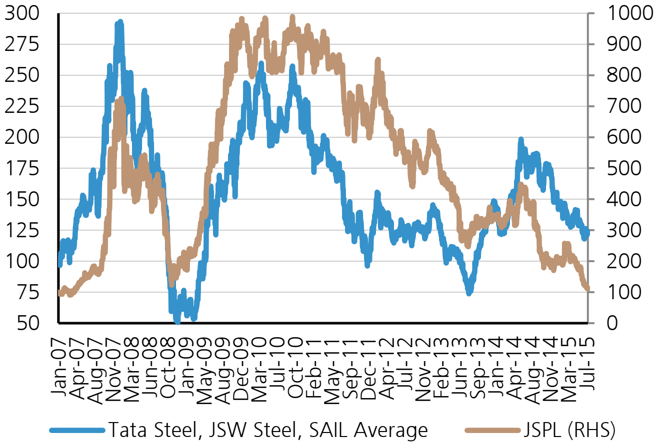
Indian steel names have been amongst the biggest underperformers vs the market in the last 12m, on average underperforming by some 38% (JSW) to 83% (JSPL). Underperformance is even more striking against previous cyclical peaks.

Figure 8: Share price performance vs NIFTY



Source: Thomson Financial

Figure 9: Sector price performance indexed



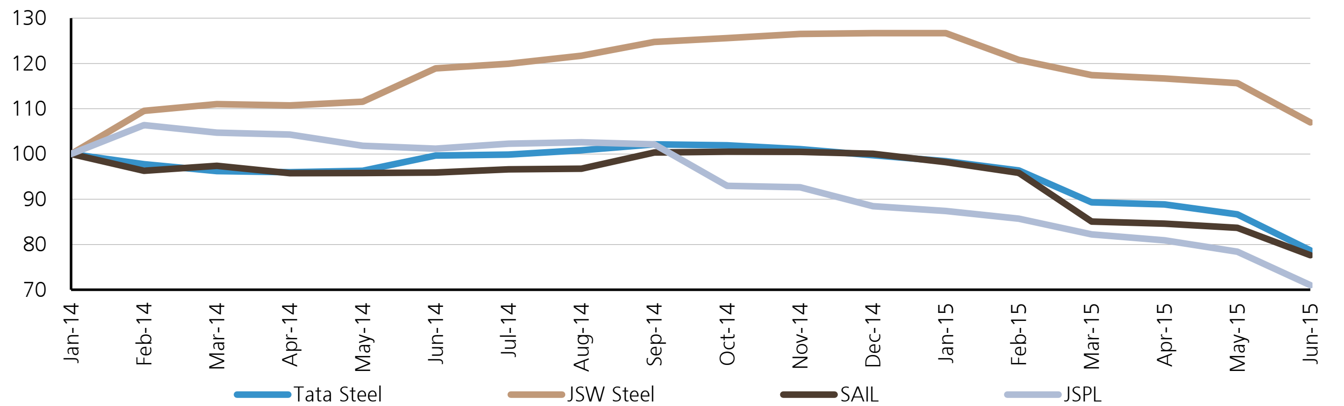
Source: Thomson Financial

Cyclical share price performance compounds wider market trends

A number of factors drive this in our view. The underperformance of the last 12m is partly due to a high base in the middle of last year. Post the election of Modi and his BJP party into government there was a strong market rally within which Tata Steel and SAIL outperformed while JSW and JSPL were broadly in line. The last 12m likely reflect some fading of the initial post-election euphoria (for steel and the market), to some extent mirrored in the wider market, as realism about near term earnings and the pace of delivery of many of the new government reforms set in.

This trend was reflected in consensus earnings for the companies, which after broad stability and even upgrades in the first part of 2014, started to weaken from Q3. This is also reflective of the pace of growth, but also included some impact of raw materials disruption and the tough pricing environment.

Figure 10: Earnings momentum (Reuters consensus EBITDA)



Source: Bloomberg, UBS; The chart represents indexed movement for FY6E EBITDA since Jan 2014.

We do not believe a rapid turnaround is likely and flag throughout this note that conditions in the short-term, especially around pricing in India, are difficult. Indeed our estimates on a 1-2 year view are generally below consensus, implying the downgrade cycle can continue.

Figure 11: UBS vs consensus

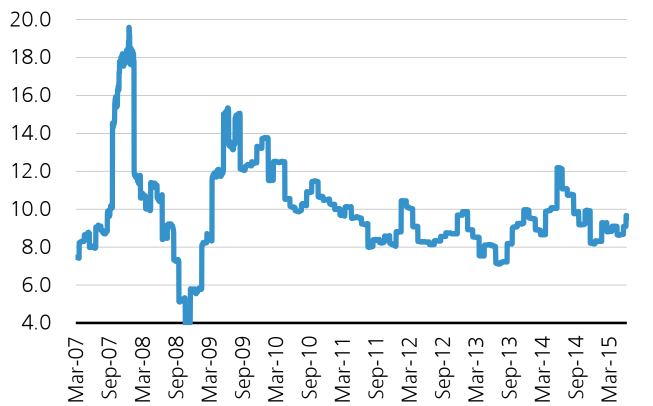
	Consensus		UBS		UBS vs Consensus	
Tata Steel	**FY16E**	**FY17E**	**FY16E**	**FY17E**	**FY16E**	**FY17E**
Net Sales	1,426,093	1,511,579	1,357,357	1,359,725	-5%	-10%
EBITDA	151,114	173,122	138,780	149,908	-8%	-13%
PAT	24,441	36,496	34,197	40,442	40%	11%
JSW Steel	**FY16E**	**FY17E**	**FY16E**	**FY17E**	**FY16E**	**FY17E**
Net Sales	535,422	591,721	520,058	555,263	-3%	-6%
EBITDA	96,939	111,334	98,318	108,564	1%	-2%
PAT	18,491	26,253	20,699	26,907	12%	2%
SAIL	**FY16E**	**FY17E**	**FY16E**	**FY17E**	**FY16E**	**FY17E**
Net Sales	515,338	585,808	469,276	527,935	-9%	-10%
EBITDA	56,516	74,535	45,979	60,850	-19%	-18%
PAT	21,395	28,444	19,346	23,239	-10%	-18%
JSPL	**FY16E**	**FY17E**	**FY16E**	**FY17E**	**FY16E**	**FY17E**
Net Sales	249,622	280,264	217,197	245,850	-13%	-12%
EBITDA	61,067	70,746	58,635	68,626	-4%	-3%
PAT	6,565	11,488	6,001	11,387	-9%	-1%

Source: Thomson Financial; Note the wide range in consensus – for example FY16 Tata Steel Consensus PAT range is Rs10-60bn

Not expensive

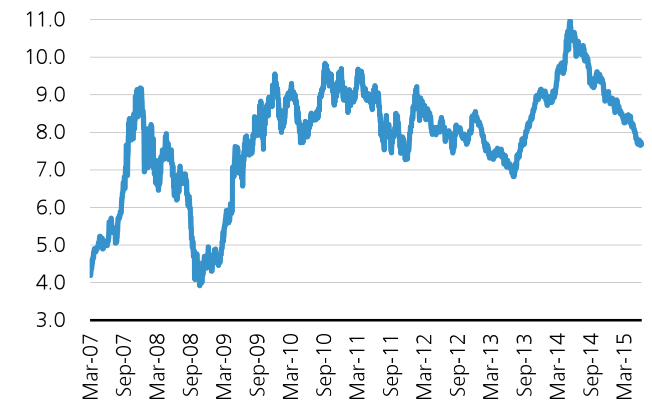
Yet our stance on the sector is positive from a valuation perspective for a number of reasons. Firstly, the companies are not expensive compared to historical averages (c.10% below on both EV/EBITDA multiples and on PER). The share price fall over the last 12m has been driven by both earnings downgrades and rerating.

Figure 12: India steel consensus PE*



Source: Thomson Financial; * Market cap weighted average of Tata, JSW, JSPL and SAIL 12mth fwd consensus based PEs

Figure 13: India steel EV/EBITDA*

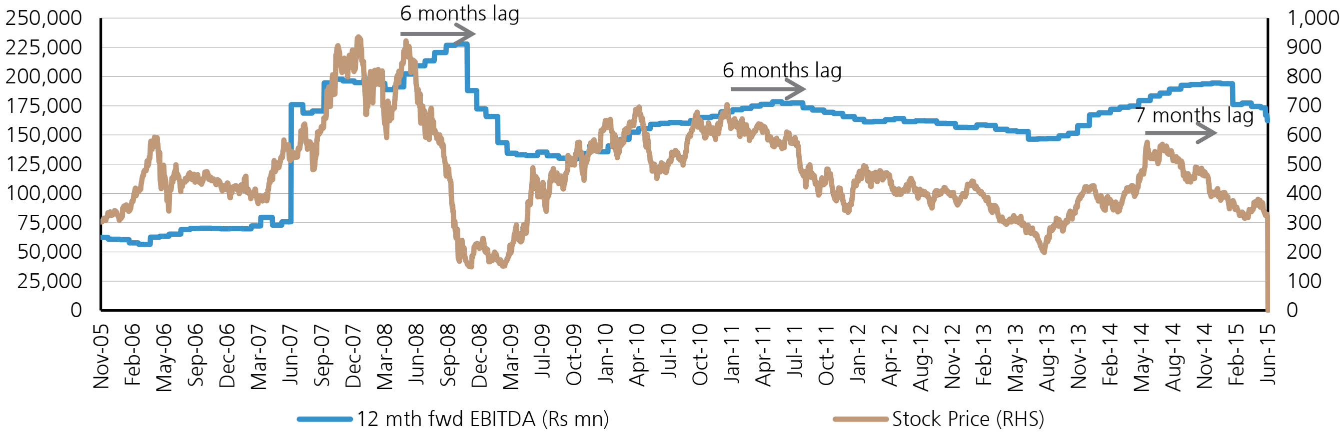


Source: Thomson Financial; * Based on actual 1yr fwd rolling EBITDA

Buy ahead of the earnings trough

Secondly, there is a timing consideration. Our forecasts across the group imply a subdued earnings environment in FY16 with recovery generally only taking hold in FY17. While we are cognisant of the fact that we might be too early, we are also aware that cyclical stocks generally move ahead of the earnings cycle. The example that we show below indicate that share prices can move 6m+ ahead of the improvement in earnings. On this basis, if one is positive on 2017, then the time to consider the sector is in the second half of 2016. As we have flagged above, while we expect the move to be gradual, we forecast a swing in free cash flow generation over the next 12m. After more than 5 years of negative FCF for the companies we believe this turning point could be a catalyst for rerating even ahead of a pick-up in earnings/growth.

Figure 14: Tata Steel example – share price cycle vs earnings cycle



Source: Bloomberg, DataStream, UBS

We set our PTs (which are 1 year forward) using normalised multiples on FY17 earnings. We use EV/EBITDA and EV/Sales to remove some of the volatility that is incorporate in PER at turning points in the cycle. Free cash flow based methodologies, like DCF, are not appropriate in our view given the lack of FCF generation historically. The only exception is JSPL where high leverage and potential non-operational means to repair the balance sheet (including in our view asset sales and/or an equity raising) make scenario analysis a more appropriate PT basis in our view.

Figure 15: Valuation summary

Tata Steel	FY15	FY16E	FY17E	FY18E	FY19E	FY20E
Current price (Rs/sh)			297			
EV/EBITDA multiple	9.0	7.5	7.0	6.0	5.1	4.4
PT (Rs/sh)			420			
EV/EBITDA multiple	9.0	8.4	7.8	6.6	5.7	4.9
JSW Steel						
Current price (Rs/sh)			877			
EV/EBITDA multiple	6.7	5.7	5.0	4.3	3.7	3.1
PT (Rs/sh)			1200			
EV/EBITDA multiple	6.7	6.5	5.7	4.9	4.2	3.6
SAIL						
Current price (Rs/sh)			63			
EV/EBITDA multiple	14.6	12.1	9.6	8.3	7.1	5.9
PT (Rs/sh)			67			
EV/EBITDA multiple	14.6	12.4	9.8	8.6	7.3	6.1
JSPL						
Current price (Rs/sh)			82			
EV/EBITDA multiple	11.1	8.9	7.8	7.4	6.6	5.9
PT (Rs/sh)			95			
EV/EBITDA multiple	11.1	9.1	8.0	7.6	6.7	6.0

Note: For detailed PT derivation, please refer to the individual company pages. Source: Company data; UBS estimates

What is priced in?

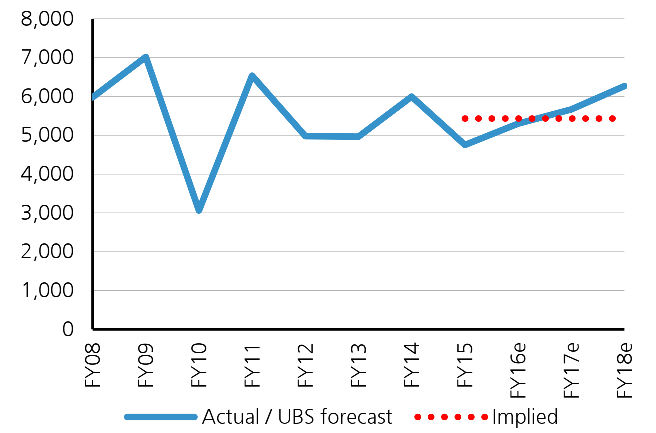
We calculate implied EBITDA/t based on current share price and multiples

Given the range of factors impacting valuation and the diversity within some of the businesses, it is hard to find the ideal methodology to capture what is included in the current share price. In the charts below, we show implied average EBITDA/t for FY16-18 vs history and UBS forecasts. This is calculated by.

- The current share price and consensus EV/EBITDA multiple. This allows us to calculate an implied absolute EBITDA going forward;
- We use our own volume forecasts which we assume are in the range of consensus, to derive an implied EBITDA/t on average for FY16-18.
- Note we do not use the same analysis for JSPL as lack of disclosure and the power business do not allow it. For JSPL we show the risk reward spread from our scenario analysis (detailed in the separate company note). While it looks cosmetically appears skewed to the upside, we would attach a much higher likelihood to our base and downside scenarios in the short-term.

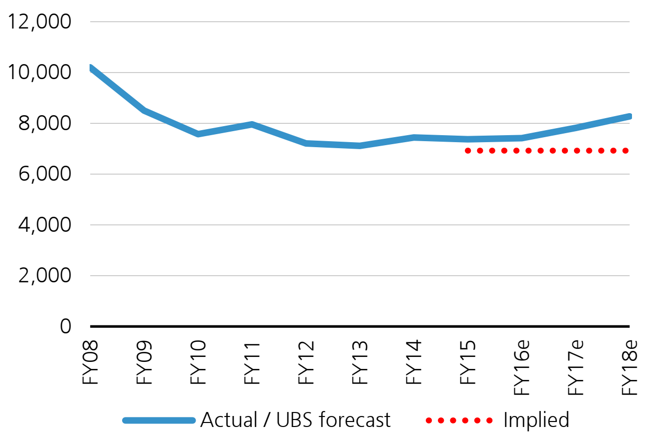
The outputs are consistent with our views. Current share prices for Tata Steel and JSW do not capture the gradual improvement in profitability in our forecasts, whereas for SAIL it appears largely priced in.

Figure 16: EBITDA/t (Rs) – Tata Steel



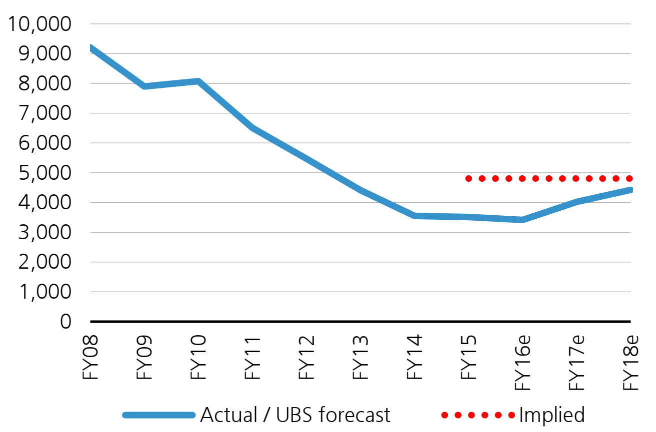
Source: Co data; UBS-e. Tata Steel at 7x EV/EBITDA today, long term median is 6x

Figure 17: EBITDA/t (Rs) – JSW Steel



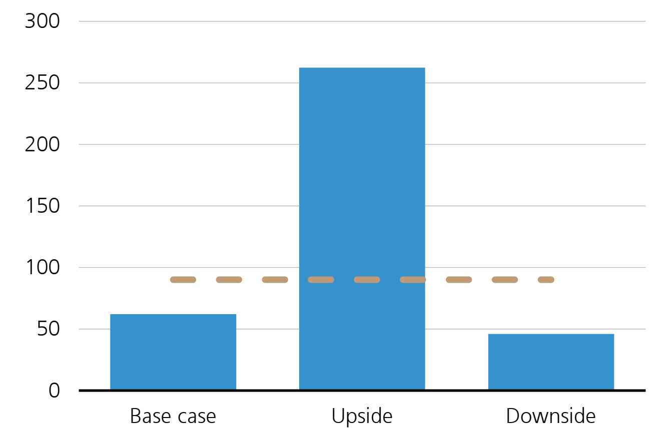
Source: Co data; UBS-e. JSW at 6x EV/EBITDA today, long term median is 7x

Figure 18: EBITDA/t (Rs) - SAIL



Source: Co data; UBS-e. SAIL at 10x EV/EBITDA today, long term median is 7x

Figure 19: JSPL upside and downside summary (Rs)



Source: Company data; UBS-e

Valuation comparatives

Figure 20: Global Steel valuations comps

Company Name	Rating	Price target (LC)	Share price (LC)	Upside	M cap US$ m	PE (x)		EV/EBITDA(x)		EBITDA Margin		RoIC		P/B (x)		Net Debt to EBITDA	
						2015	2016	2015	2016	2015	2016	2015	2016	2015	2016	2015	2016
India																	
Tata Steel	Buy	420	297	40.6%	4,549	11.1	7.4	7.6	7.1	9.9%	10.8%	6.5%	8.9%	0.8	0.8	5.3	4.9
JSW Steel	Buy	1200	877	36.9%	3,337	10.7	8.5	5.8	5.2	18.6%	19.4%	10.5%	10.5%	0.9	0.8	3.6	3.2
Steel Authority of India	Neutral	67	63	5.9%	4,114	13.2	11.7	12.3	10.1	9.6%	11.1%	3.5%	3.7%	0.6	0.6	6.6	5.7
Jindal Steel & Power	Neutral	95	82	15.6%	1,205	13.6	8.4	8.9	8.0	27.0%	27.7%	4.5%	4.8%	0.4	0.3	7.7	6.9
Japan																	
Nippon Steel&Sumitomo Metal	Buy	420	303	38.5%	23,492	10.3	8.2	4.8	4.0	12.8%	15.1%	10.3%	10.6%	0.9	0.8	2.6	2.1
JFE Holdings	Neutral	3,070	2,565	19.7%	12,849	10.7	8.2	5.7	4.6	11.1%	13.2%	8.3%	8.0%	0.8	0.7	3.3	2.6
Kobe Steel	Neutral	240	201	19.4%	5,971	11.2	10.7	4.9	4.4	12.0%	12.9%	10.3%	11.0%	0.9	0.9	2.4	2.1
Korea																	
POSCO	Buy	320,000	219,000	46.1%	15,430	10.1	7.4	3.8	3.4	10.6%	11.8%	5.6%	7.0%	0.4	0.4	3.2	2.6
China Steel	Neutral	25	24	3.1%	11,732	22.9	19.4	10.9	10.1	16.9%	18.1%	4.3%	5.2%	1.2	1.2	4.0	3.6
Hyundai Steel	Buy	80,500	65,300	23.3%	6,668	8.1	6.9	3.8	3.5	17.9%	18.5%	6.8%	7.6%	0.5	0.5	3.8	3.2
Europe																	
ArcelorMittal	Buy	12	8	52.1%	15,504	-148.4	85.9	5.9	6.0	8.4%	8.4%	3.7%	3.9%	0.4	0.4	2.5	2.6
ThyssenKrupp	Sell	16	22	-26.7%	13,530	18.3	14.4	8.4	7.7	6.8%	7.2%	10.2%	11.1%	3.9	3.1	1.8	1.6
Voestalpine AG	Sell	35	35	0.2%	6,595	9.9	10.0	6.4	6.3	14.1%	13.8%	9.2%	10.7%	1.2	1.1	2.4	2.3
Swedish Steel AB	Sell	35	41	-13.9%	2,460	26.4	13.4	7.4	6.2	9.5%	10.6%	2.9%	4.4%	0.5	0.5	4.1	3.3
Salzgitter AG	Buy	38	30	27.1%	1,775	12.1	10.4	5.7	5.2	6.2%	6.5%	4.6%	5.8%	0.5	0.5	-0.3	-0.3
Klöckner	Neutral	9	8	5.2%	885	591.3	12.9	11.0	6.7	2.3%	3.7%	2.6%	6.7%	0.6	0.6	3.1	1.6
Russia																	
Magnitogorsk Iron and Steel	Buy	5	4	37.2%	3,133	5.2	6.3	3.3	3.5	23.1%	21.2%	15.6%	13.5%	0.8	0.8	1.4	1.3
Novolipetsk Steel	Buy	16	13	26.8%	7,701	7.6	7.6	4.2	4.0	25.2%	24.7%	18.1%	18.3%	1.1	1.1	0.8	0.5
Evraz plc	Sell	100	113	-11.8%	2,639	5.9	6.1	4.8	4.7	20.1%	19.8%	13.9%	13.6%	1.4	1.1	3.0	2.7
USA																	
Nucor Corp.	Buy	54	44	22.4%	14,129	27.8	16.2	9.8	7.1	9.9%	12.7%	15.0%	25.4%	1.8	1.7	1.1	0.6
Steel Dynamics Inc.	Buy	24	20	18.9%	4,874	19.2	13.0	8.2	6.2	10.7%	12.6%	10.4%	14.7%	1.6	1.5	2.4	1.7
Reliance Steel & Aluminum	Neutral	64	61	5.6%	4,715	13.7	11.7	8.9	8.0	8.0%	9.1%	9.2%	10.7%	1.2	1.1	2.7	2.2
United States Steel Corp	Neutral	24	20	20.1%	2,913	-36.2	18.1	8.4	5.0	4.7%	7.6%	0.5%	7.9%	0.8	0.8	3.4	2.3
AK Steel Holding Corp	Neutral (CBE)	5	3	49.3%	593	-4.4	7.3	8.6	4.9	5.8%	9.7%	7.7%	24.8%	-0.7	-0.7	5.4	3.2
Others																	
Gerdau	Buy	13	7	85.2%	3,560	13.1	9.7	5.5	4.8	11.7%	12.3%	4.9%	5.7%	0.3	0.3	3.4	2.9
BlueScope Steel	Buy	5	3	39.8%	1,370	39.1	-60.9	6.6	8.4	5.8%	4.8%	5.7%	1.5%	0.4	0.4	1.1	1.3
ArcelorMittal South Africa Ltd	Neutral	2,300	1,218	88.8%	392	6.4	5.5	0.3	0.0	6.3%	6.2%	5.2%	6.2%	0.2	0.2	0.0	-0.3
Mean ex-India						**29.6**	**10.8**	**6.4**	**5.4**	**11.3%**	**12.2%**	**8.0%**	**10.2%**	**0.9**	**0.8**	**2.5**	**2.0**
Median ex-India						**10.7**	**10.0**	**5.9**	**5.0**	**10.6%**	**12.3%**	**7.7%**	**8.0%**	**0.8**	**0.8**	**2.6**	**2.2**

Note: Above data as at 7 July 2015. Source: Company data, Bloomberg, UBS estimates

Q: Is India an oversupplied market?

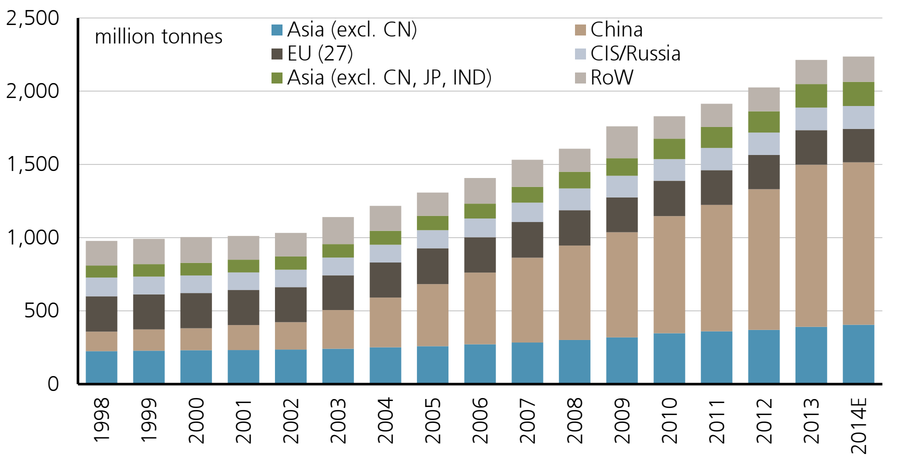
Over-capacity driven by China is an issue for global steel. We expect the Indian market to remain well balanced both through choice and necessity. While prices remain under pressure in the short-term, further out we see price support from this market balance, a consolidated market structure and potential government support against imports.

Global capacity and India impact

Cautious UBS outlook on steel prices for rest of this calendar year

Overcapacity is the main issue for the global steel industry today. The most recent UBS Global I/O (*Chinese steel production to shrink*, 9 March 2015) highlights the view of our Global Steel team that Asian (and especially Chinese) oversupply will continue to be the primary driver of weak steel prices in 2015. In the last 10 years China has added some 770mt of capacity (almost 80% of global growth in this period) and now accounts for 50% of global capacity.

Figure 21: Global crude steel production capacity



Source: CRU, WSA, UBS estimates

Weak domestic Chinese demand is set to continue. Capacity is peaking, but not falling

UBS sees the China steel market at a structural tipping point driven by a slowdown in construction activity which will drive broadly flat steel consumption and production for up to five years. In an environment of elevated capacity, many Chinese mills are loss-making and while there are signs of peaking capacity and some temporary shutdowns Chinese steel capex still remains high in absolute terms and some new capacity is still coming on stream given the long-lead times for new plant additions. There are other global supply pressures such as potential oversupply from Russia and Ukraine due to recent currency devaluations. The main glimmers of hope for global steel are prospects in the European and US markets, in both cases due to a favourable demand outlook as European growth recovers and US momentum continues, and falling capacity.

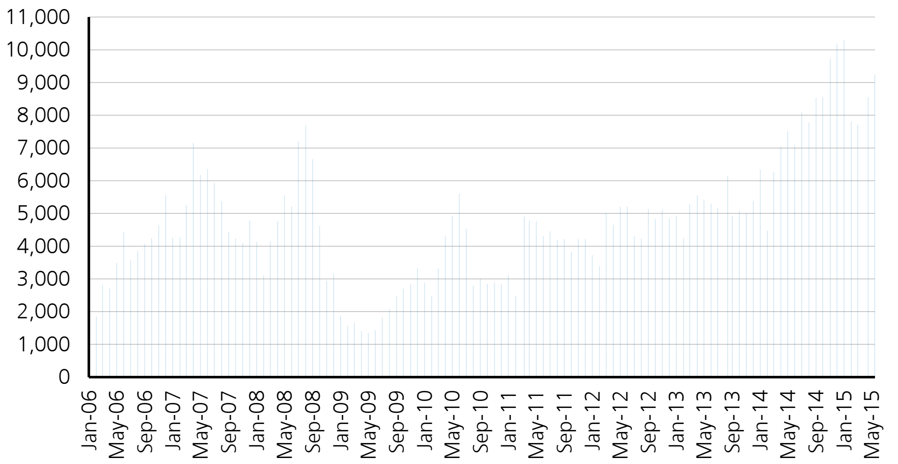
But more than 120mt of excess capacity still in the global market

While the UBS Steel team sees Chinese capacity peaking, it does not see absolute reductions for some time. Indeed it estimates that Global capacity will have to shrink by around 124mt over the next 2 years in order to restore global capacity utilisation to c.80% level which would give steelmakers some measure of pricing control. To put this in context this is over 20% more than the entire crude steel making capacity of India in FY15 (which stood at c.100mt).

Chinese export growth is hurting

Excess Chinese supply has found its way into Global markets via higher exports and lower prices. Chinese exports continue to rise YTD in 2015 (up 38% YTD in May; after being up c.47% in 2014) although we do expect this to moderate due to the impact of the export tax rebate being removed and the likelihood that many exports were front-loaded ahead of this step. Many countries have already taken protectionist measures against lower priced Chinese imports and a significant number of anti-dumping cases have been filed (we note in particular that the EU announced in mid-May that it was launching an anti-dumping into cold rolled material from China and Russia, a significant steel product category).

Figure 22: Monthly China steel exports (kt)



Source: Chinese Custom Statistics

India hurting too…

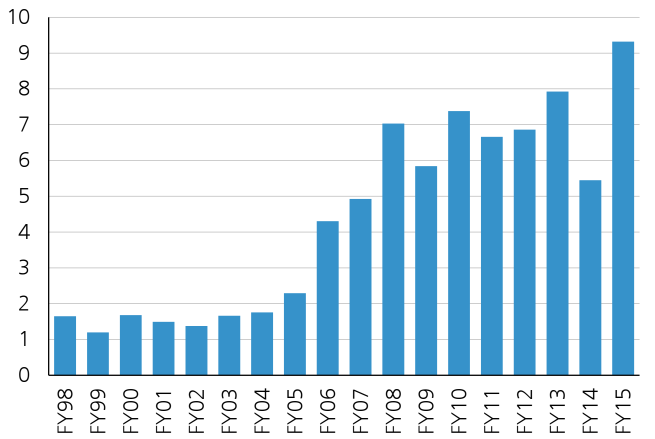
Indian market seeing pressure from China; early signs of government action…

Rising imports, from China especially, are a concern for Indian market participants and has been a consistent theme of company commentary in 2015 so far. The industry and its associated bodies (including the banks that are exposed to the steel industry) are lobbying the government for deeper protection in the way of higher duties. The FY16 budget announced in February 2015 contained the possibility (via an enabling provision) of raising import duties for finished steel from 10-15. There have been some smaller measures: in late May the government announced an anti-dumping duty on some grades of flat stainless products. The duty ranges from \$180-\$316/t on products from China, South Korea, and Malaysia. In mid-June, the government announced a hike in the import duty on flat and long steel from 7.5% to 10% and from 5% to 7.5% respectively.

…India has been a consistent importer for many years

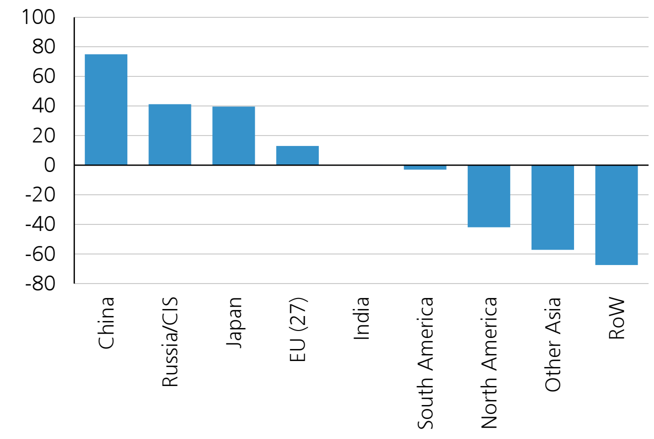
There was a strong pick-up in imports in FY15, albeit following a year of net exports in FY14 (largely as a result of weak domestic demand and depreciation in the rupee). However India has been a net importer of steel for 7 of the last 8 years so it would require a very substantial boost in Chinese imports to mean a change to this status quo. Note also India is not only impacted by cheap Chinese imports of lower grade steels: Tata Steel in Q415 flagged the impact of higher imports from FTA (free trade agreement) countries like Japan and Korea. Finally it is worth noting that India is by no means the worst affected country in terms of the current high level of Chinese exports – the majority of these are currently going to North American and other Asian countries – although we accept this could change if the Indian demand environment materially picks up.

Figure 23: Finished steel imports into India (gross)



Source: JPC, UBS

Figure 24: Net exports by region (2014E)



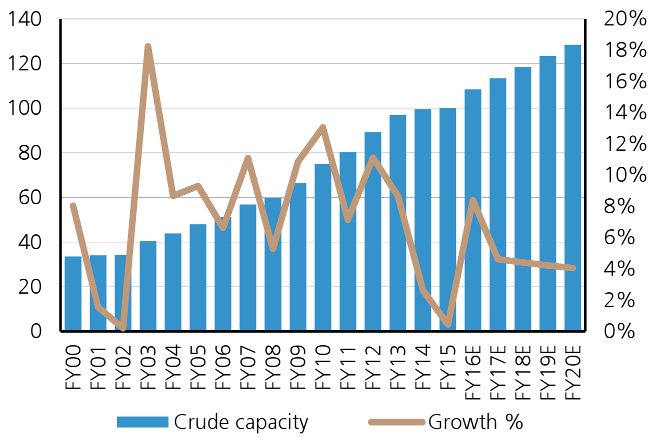
Source: UBS estimates

India will be more disciplined on capacity

Steady historic capacity addition in India

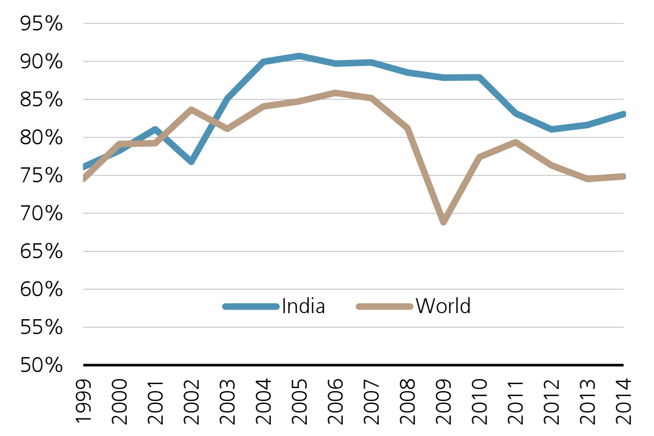
Capacity addition remains high on the agenda in India. The Indian steel industry has added capacity over the last decade, but in a relatively steady way and incomparable to the growth in China. Capacity additions for the industry have added around 4mt pa, compared to China in the equivalent period at c.60mt pa. The growth has been relatively lumpy (as specific projects come on-stream) and has moderated somewhat in recent periods.

Figure 25: India capacity growth



Source: JPC; * - crude steel; fiscal years

Figure 26: India crude steel capacity utilisation rates



Source: World is CRU, WSA, India is JPC (calendarised)

Capacity utilisation rates appear better than global averages

Capacity utilisation trends have been robust and solidly at or above the 80% level. Both public (state owned enterprises, mainly SAIL and Vizag) and private sector parts of the industry have performed well, although we believe data classification overstates capacity utilisation in the public sector somewhat. Compared to global averages, utilisation rates have been some 5% ahead in India, and still 4% ahead if you adjust for 2009 and 2010 when global utilisation rates plummeted compared to India in the aftermath of the global financial crisis.

There is a high-profile government target of 300mt of steel capacity in India 2025, although this has not been formally presented yet, despite having been initially laid out by the previous Congress-Singh government in 2013. This follows on from previous steel plans: the National Steel Policy 2005 aimed for 110mt of production by FY10-20; more ambitiously the Twelfth Five Year Plan (2012-17) targets 142mt of capacity by the end of the plan period. India appears committed to significant capacity additions at a time when the Global steel industry is suffering from an over-capacity problem. Yet we do not view these aspirations with much concern.

Leverage and bureaucracy suggest domestic India capacity expansion will continue to be slow, which bodes well for the incumbents

We regard government plans as aspirational and top down, driven by a culture of planning/targets that has prevailed in India for many years. This can be seen in other parts of the resources industry such as coal. At a company level, "phase I" expansion programmes over the last few years are largely complete and most capacity will come on-stream in FY16/FY17. "Phase II" capacity has a degree of optionality (eg phase II at Kalinganagar for Tata Steel; further expansion at Vijayanagar for JSW) and is unlikely without suitable conditions. Steel SOE SAIL has taken almost a decade to grow its capacity by around 7mt. The long tail of smaller competitors in the industry has no choice than to be disciplined, given the pressures of high leverage in the sector. Large foreign players like POSCO have seen their growth aspirations snared in bureaucracy. Of the identified opportunities below, we think less than 20% (or 12mt) are feasible on a 5 year view. Regardless of the targets, rapid capacity expansion is unlikely in our view.

Figure 27: Indian steel industry crude steel capacity additional schedule (mt) – main players

Company	Capacity today*	Capacity 2010	Target Capacity	Aspirational Capacity	Targets	Aspirations
Tata Steel	9.7	6.8	12.7	32.7	Kalinganagar	Manoharpur, Bastar
JSW Steel	14.4	7.8	18.2	56.2	Dolvi, Vijayanagar	Brownfield, Salboni
SAIL	13.5	12.5	21.4	50.0	Mega brownfield	Brownfield, Sindri
JSPL	5.8	3.0	13.3	34.5	Raigarh, Angul	Brownfield, Asanboni
Others	58.7	44.9	N/A	126.6	N/A	N/A
INDIA	**102**	**75**	**N/A**	**300**	**N/A**	**N/A**

Source: Company data; press; UBS estimates; * - last reported or more recent comment (eg co website). Target represents specifically identified, "Aspirational" represents longer-term potential projects discussed by companies or by the press; Details are in individual company notes

Figure 28: India steel industry, second tier* producers, crude steel capacity status (mt)

Company	Public or Private	Capacity today*	Capacity 2010	Target Capacity	Major Product
Essar	Private	10.0	4.6	10.0	Flat
Bhushan Steel	Private	1.9	0.0	4.5	Flat
BMM Ispat	Private	0.0	0.0	1.3	N/A
Monnet Ispat	Private	1.5	0.0	1.5	Both
Electrosteel	Private	1.3	0.0	3.5	Long
Kalyani - Gerdau	Private	0.3	0.3	0.3	Long
Kalyani - Carpenter	Private	0.2	0.2	0.2	Long
Visa Steel	Private	0.5	0.0	5.0	Long
Posco	Private	0.0	0.0	12.0	N/A
Arcelor Mittal	Private	0.0	0.0	12.0	N/A
Mesco	Private	1.2	1.2	3.5	Long
RINL (Vizag)	Public	6.3	3.0	7.3	Long
NMDC	Public	0.0	0.0	3.0	N/A
Total		**23.2**	**9.3**	**64.1**	

Source: Company data; press (inc Livemint, ET, India Telegraph, DNA); UBS estimates; * - last reported or more recent comment (eg co website). Target represents specifically identified.

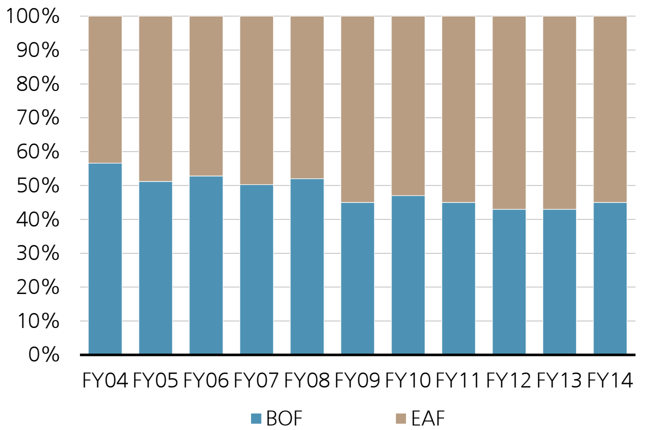
Capacity currently well-balanced

Alongside the likely discipline in terms of capacity addition we believe the industry today looks well-balanced in terms of capacity and technology.

Spread of technology and end markets for the Indian steel industry

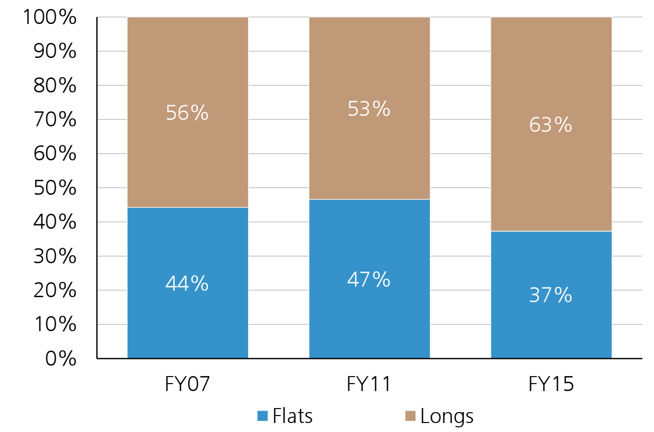
- The market is **reasonably well consolidated** with the top 6 having some 60% market share of capacity as at FY15. A 40% tail can still be disruptive of course, but it is in the minority and probably does not have the large client relationships or national reach of most of the larger players.
- **Even split of technology** between the Basic Oxygen (BOF) and Electric Arc (EAF) / Induction (IF) Furnace methods. As we show in the company sections of this note, main players in the industry have invested in technology and efficiency as well as just capacity expansion.
- **Industry product mix** is again reasonably well split between flat and long. Interestingly the industry data suggests a recent skew towards capacity addition in long products. This would be consistent with an anticipation of an infrastructure boom in the country. Nonetheless, more of the domestic capacity at the main listed companies is in flat products. By end use, construction continues dominate the consumption of steel, followed by Engineering and Autos.

Figure 29: India crude steel capacity by technology



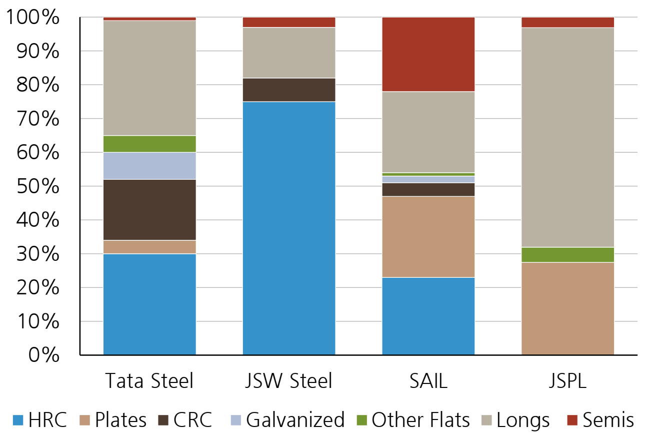
Source: JPC, UBS

Figure 30: India finished steel production mix



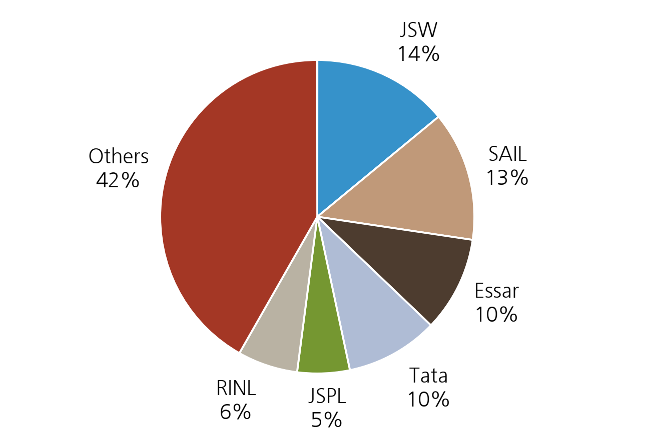
Source: JPC, UBS; Note: Flats proportion excludes double counting component

Figure 31: Product by company by volume (FY14)



Source: Company data, UBS estimates

Figure 32: Market share by capacity, FY15



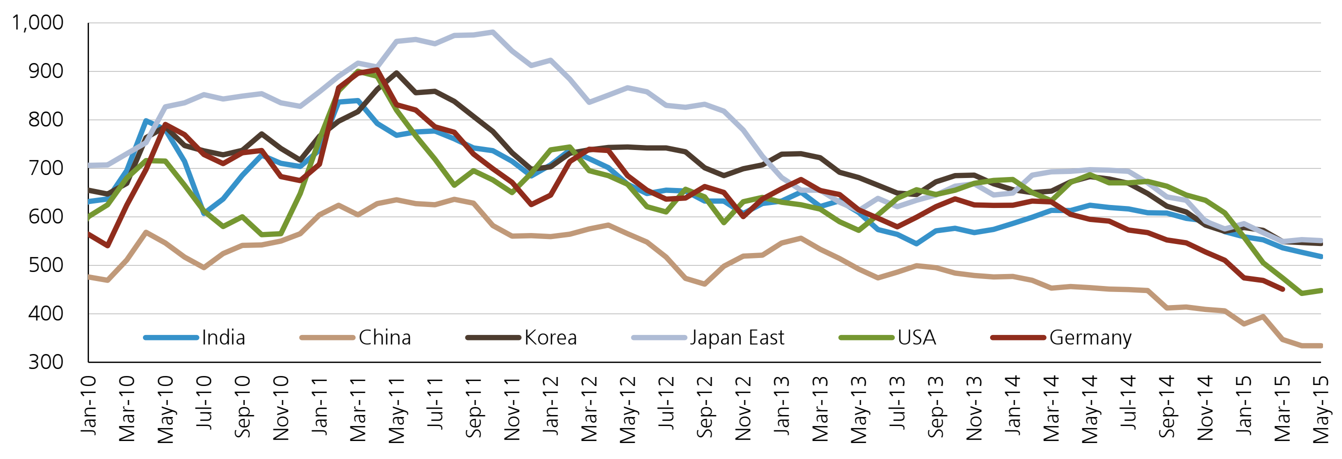
Source: Company data, UBS

Near-term pricing pressures persist

Price pressure in most steel markets

The current situation is still challenging: India steel prices have been under pressure in the last 12-18 months for many of the reasons discussed above.

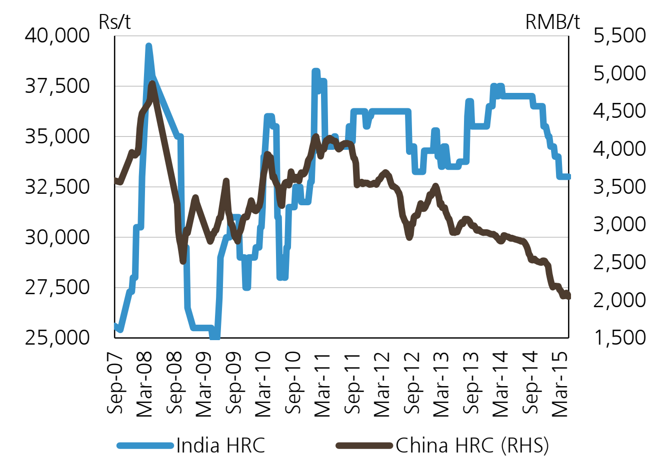
Figure 33: Recent price trend: domestic HRC prices by country (USD/t)



Source: Metal Bulletin, WSD, CRU, Steel Daily, UBS

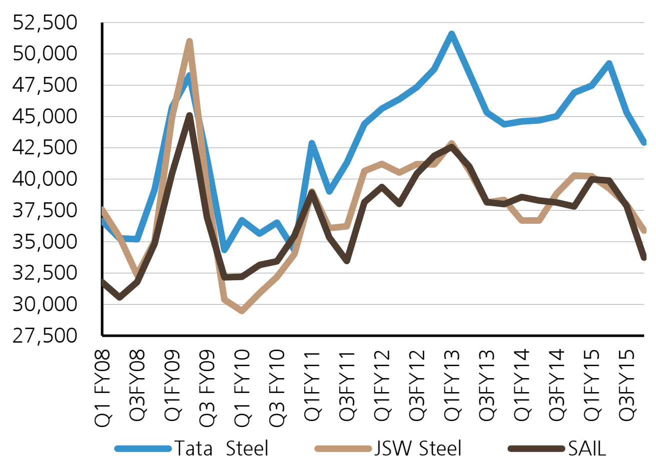
Tata Steel on its Q415 call referenced average Indian market HRC realisations falling from c.Rs40,000 to Rs33,200 YoY; and a Rs3,100 sequential drop in Indian HRC in Q415, although only a Rs2,100 drop for its Indian business. It anticipates a further Rs1,500 drop in its Q116 realisations. **JSPL** on its Q415 call referenced a 15% drop in realisations in steel in the quarter and 7% YoY. The company also stated that it does not anticipate any improvement until Q215 (ending September). **JSW** on its Q415 call flagged material pressures on realisations in the quarter. Yet looking forward management was more optimistic than peers, indicating blended realisations are heading towards stability (ie only slightly down) in Q1. **SAIL** at its Q415 results, stated they see falling realisations over levels seen in March (their worst month in Q4 FY15). They expect the Q116 realisations to be lower by ~Rs1,500/t (over Q4 FY15 levels) and the next move to be dependent on Indian demand recovery and global steel market conditions.

Figure 34: India vs China HRC



Source: Metal Bulletin, UBS

Figure 35: Quarterly trends in India realisations (Rs/t)



Source: Company data, UBS

Constructive on longer-term market balance

India supply demand model

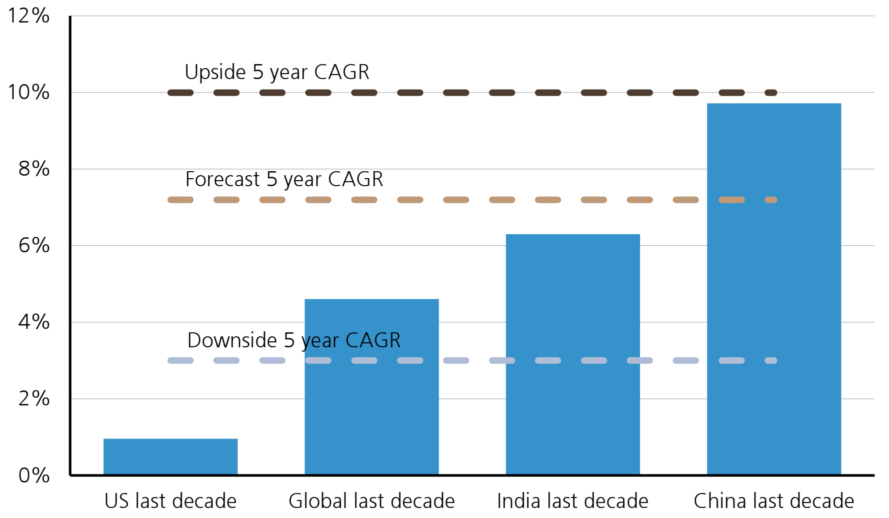
Only gradual improvement in capacity is realistic

On capacity we see a steady growth in the next 5 years. We have a good degree of visibility in the short-term from the known additions of the 4 main players. We do not incorporate any of the potential phase 2 expansion plans that the companies have identified. While other steel companies have stated capacity addition targets of >40mt, we think only c.10mt of this is conceivable on a 5 year view (if you exclude long-stalled projects like those of Arcelor Mittal and POSCO). We see little flexibility on a 3 year view given committed projects, but flex our assumptions in the outer years for upside and downside scenarios.

Positive on longer-term demand growth

We see gradual improvement in demand growth, consistent with our company forecasts and the UBS constructive view on the longer-term Indian outlook. We note a moderate pick-up in apparent finished steel consumption in FY15. April FY16 was 7%, but has been impacted by restatements and it is too early to extrapolate a trend. Below we show our consumption CAGRs for the next 5 years in our three scenarios. For context we compare them against some historic examples, specifically the consumption CAGRs of US, Global average, India and China in the last decade.

Figure 36: Demand growth scenario CAGR vs historical examples



Source: UBS estimates

Imports the main risk to supply demand balance

The main risk to market balance is imports. In our base case we assume steady net imports of 2-3mt, which implies some alleviation of current pressures, and is in line with long-running averages. In a healthy market in India which is our base case, there is enough demand to absorb these imports and on average maintain capacity utilisation in the mid-80s. In our upside scenario, imports dip in the short term (as a result of anti-dumping) and then rise as a result of strong demand. Even so demand is such that capacity utilisation grows back above 90% (the range since 2007 in India has been 83% to 94% according to the official JPC data). In our downside scenario imports remain broadly at FY15 levels and with a weak domestic demand backdrop, this pushes capacity utilisation below 80%.

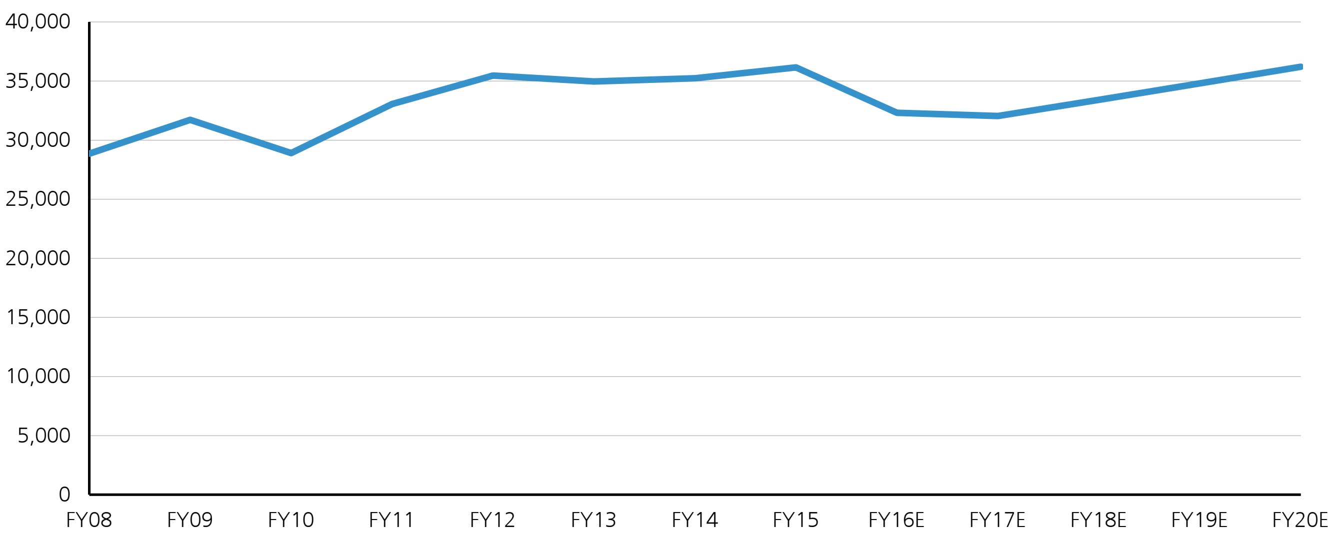
Figure 37: Supply demand model and scenarios

SUMMARY TABLE FOR NOTE										
BASE CASE	**FY11**	**FY12**	**FY13**	**FY14**	**FY15**	**FY16E**	**FY17E**	**FY18E**	**FY19E**	**FY20E**
Crude Steel Capacity (mt)	80.4	89.3	97.0	99.6	102.0	110.4	115.4	120.4	125.4	130.4
Growth (%)	**7.1%**	**11.1%**	**8.7%**	**2.6%**	**2.4%**	**8.2%**	**4.5%**	**4.3%**	**4.2%**	**4.0%**
Capacity Utlization %	**91%**	**88%**	**84%**	**83%**	**88%**	**84%**	**82%**	**84%**	**86%**	**88%**
Crude Steel Production (mt)	70.7	74.3	78.4	81.7	88.3	89.2	92.6	99.0	105.7	112.6
Finished Steel Real Consumption (mt)	66.4	71.0	73.5	74.1	76.4	80.2	85.8	92.7	100.1	108.1
Growth (%)	**11.9%**	**6.9%**	**3.5%**	**0.8%**	**3.1%**	**5.0%**	**7.0%**	**8.0%**	**8.0%**	**8.0%**
Net Imports / (exports) (mt)	3.0	2.3	2.6	-0.5	3.8	2.0	3.0	3.0	3.0	3.0
UPSIDE CASE	**FY11**	**FY12**	**FY13**	**FY14**	**FY15**	**FY16E**	**FY17E**	**FY18E**	**FY19E**	**FY20E**
Crude Steel Capacity (mt)	80.4	89.3	97.0	99.6	102.0	110.4	115.4	120.4	130.9	141.4
Growth (%)	**7.1%**	**11.1%**	**8.7%**	**2.6%**	**2.4%**	**8.2%**	**4.5%**	**4.3%**	**8.7%**	**8.0%**
Capacity Utlization %	**91%**	**88%**	**84%**	**83%**	**88%**	**84%**	**86%**	**89%**	**92%**	**95%**
Crude Steel Production (mt)	70.7	74.3	78.4	81.7	88.3	89.5	96.6	105.4	116.2	129.6
Finished Steel Real Consumption (mt)	66.4	71.0	73.5	74.1	76.4	82.5	89.9	98.9	109.8	122.9
Growth (%)	**11.9%**	**6.9%**	**3.5%**	**0.8%**	**3.1%**	**8.0%**	**9.0%**	**10.0%**	**11.0%**	**12.0%**
Net Imports / (exports) (mt)	3.0	2.3	2.6	-0.5	3.8	1.0	2.0	3.0	4.0	5.0
DOWNSIDE CASE	**FY11**	**FY12**	**FY13**	**FY14**	**FY15**	**FY16E**	**FY17E**	**FY18E**	**FY19E**	**FY20E**
Crude Steel Capacity (mt)	80.4	89.3	97.0	99.6	102.0	110.4	115.4	120.4	123.4	126.4
Growth (%)	**7.1%**	**11.1%**	**8.7%**	**2.6%**	**2.4%**	**8%**	**5%**	**4%**	**2%**	**2%**
Capacity Utlization %	**91%**	**88%**	**84%**	**83%**	**88%**	**77%**	**75%**	**74%**	**74%**	**74%**
Crude Steel Production (mt)	70.7	74.3	78.4	81.7	88.3	82.0	84.6	87.3	90.1	92.9
Finished Steel Real Consumption (mt)	66.4	71.0	73.5	74.1	76.4	78.7	81.0	83.4	85.9	88.5
Growth (%)	**11.9%**	**6.9%**	**3.5%**	**0.8%**	**3.1%**	**3%**	**3%**	**3%**	**3%**	**3%**
Net Imports / (exports) (mt)	3.0	2.3	2.6	-0.5	3.8	4.0	4.0	4.0	4.0	4.0

Source: JPC, UBS estimates

We do not have a formal India market price forecast. In the table below, we back calculate an implied domestic HRC price. This is based using the observed historical spread (between average domestic company realisations and the domestic HRC price) over the last 5 years. We assume a linear improvement back to the average spread level over our forecast period.

Figure 38: Implied India HRC price under UBS forecasts* (Rs/t)



Source: Company data, UBS estimates; % - blended average forecasts assuming gradual improvement in spread to average levels (conservative given ongoing investment in mix improvement in our view)

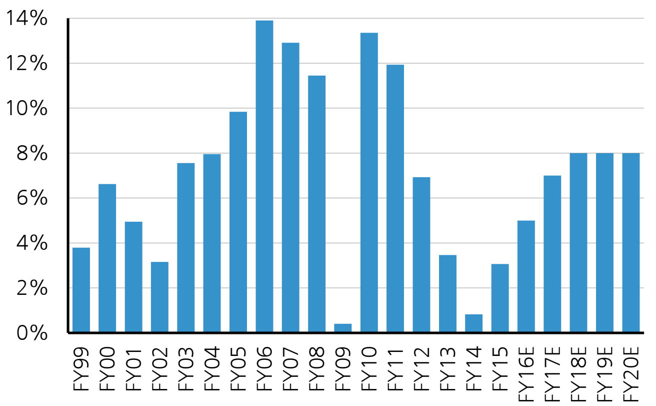
Q: When is the turning point?

Growth, profitability and cash in the steel sector have been depressed in recent years. We see an improvement in each of the main headwinds in the next 12m, albeit at different speeds. Raw materials issues are coming to an end, India is well set for a structural demand recovery driven by macro/infrastructure and peaking capex means a swing to positive FCF in the medium-term.

Demand recovery tepid in the near term

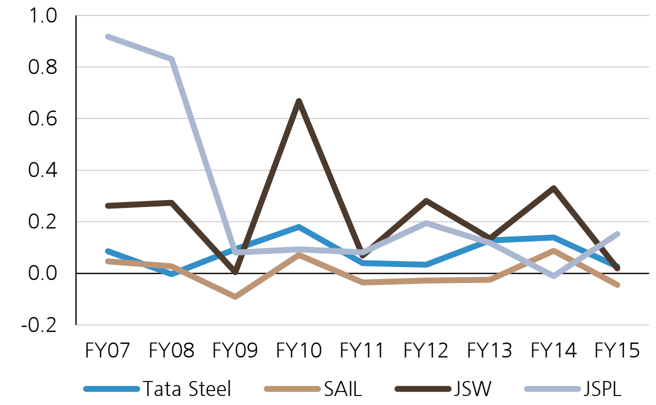
After a strong bounce-back in demand post the Global Financial Crisis, the India steel demand trend for the last 5 years has been softening.

Figure 39: India finished steel consumption growth YoY



Source: JPC, UBS estimates

Figure 40: Steel corporate volume trends

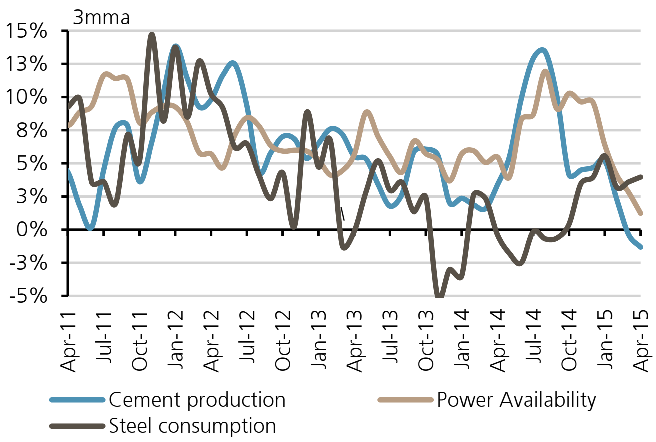


Note: Includes acquisition/capacity addition. Source: Company data, UBS

India still waiting for clear signs of an on-the-ground macro improvement

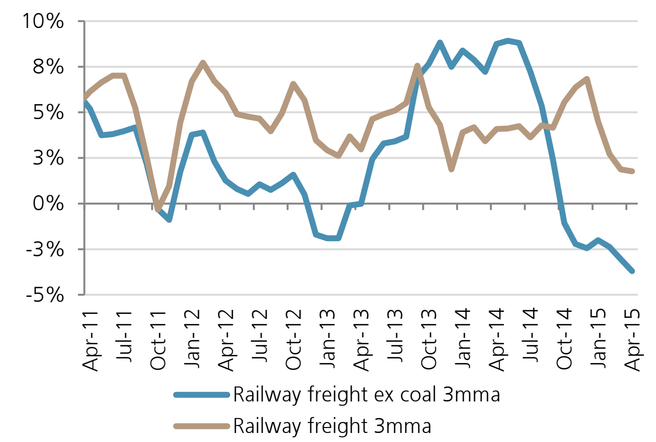
Our strategy and economics team have for some time been flagging some of the likely short-term hurdles in terms of growth, markets and corporate earnings in India. After 12 months of optimism following the May 2014 election, sentiment has suffered somewhat and concerns around key legislation (like the Land Bill) and FDI policy (especially relating to retrospective taxation steps) have increased. As we show below, it is fair to say that the recovery remains tepid. This is reflected in steel industry data and company commentary through the Q415 reporting season:

Figure 41: Consumption, cement prod, power availability



Source: Company data, UBS

Figure 42: Railway freight traffic tonnage growth



Source: CEIC, UBS

Longer-term prospects are favourable

Steel should be a major beneficiary of structural changes Modi is pushing for the Indian economy

The Modi-BJP government has made an aggressive agenda of reform its key focus. Within this it has prioritised infrastructure, especially the acceleration of major rail and industrial corridor projects, as well as seeking to clear some of the legislative hurdles/blockages that have hindered growth historically. Modi's 100 "Smart Cities" initiative has also garnered a lot of attention, and the Make in India initiative, seeking to increase manufacturing from c.15% to c.25% of GDP has been similarly high profile.

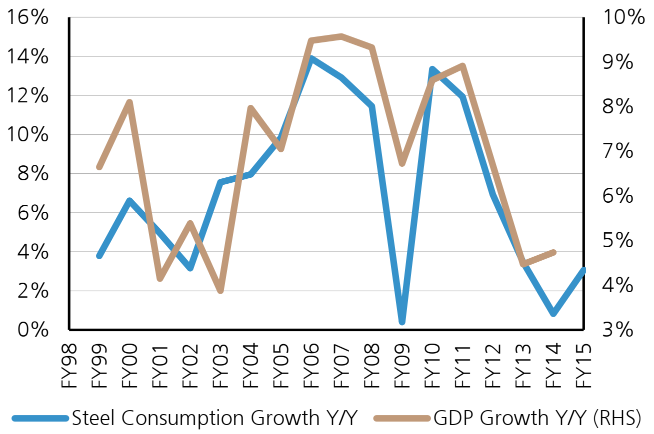
All of this should be good for steel and it is hard not to be positive about the industry if such an ambitious agenda is even partially successful. Comparisons are often made with the situation in China 15 years ago and the fact that India is set to grow its GDP faster than China in the coming years is a source of some pride amongst its politicians and media. We note the following:

- Steel is an obviously cyclical sector so the expected improvement in GDP growth in India ultimately bodes well. What is less clear is the extent to which consumption will be satisfied by domestic supply or imports, as we have discussed above.
- The structural gap between India's economy and the rest of the world is also supportive for the long-term prospects of the industry. India's steel consumption per capita is <25% of the global average (and~12% of China). This is undoubtedly a function of its predominantly rural economy (around 70% of the population still live in rural areas). This will be slow to change, but urbanisation is high on the agenda. The Smart Cities project was recently approved with funding of c.$16b over the next 5 years. Other infrastructure projects will add to this; for example the February 2015 railway budget earmarked some $140b of investment over 5 years. All of this supports a deeper penetration of steel use in India over the coming years.
- Sector-wise the ambitions of the government are also very broad, but steel-intensive parts of the economy are well-placed. The Make in India programme covers 17 sectors as diverse as "Wellness" and Mining. But sectors like Construction ($650b investments in urban infrastructure estimated over next 20 years) and Automotive (government sees itself as the 3rd largest producer of automobiles by the end of 2016; up from 7th currently) show some of the potential benefits for the steel industry.

Long-term prospects are very strong; although timing/quantification is difficult

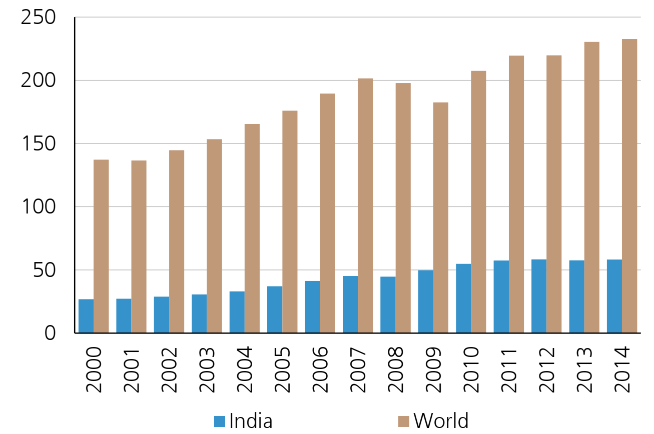
All of these arguments are convincing reasons to support long-term growth in steel consumption in India. But it is difficult to quantify on any sort of reasonable investment timeframe. China's expansion was extremely rapid, but the most significant part still took place over a 15 year period post the Asian Financial Crisis in 1998, with really rapid expansion only from 2003. At the very least India's status as a democracy must imply a slower growth profile. Furthermore, the bureaucracy that the Modi-BJP government is trying to change is another potential hurdle. Even only a year after the election, there are signs that the government is not having things all its own way (for example the Land Bill; some decline in Modi's popularity). Market data suggests FIIs (foreign institutional investors) remain overweight in India, but at UBS we believe that signs of delivery (earnings and macro data especially) will be needed to drive further improvement.

Figure 43: India steel consumption closely correlates to GDP



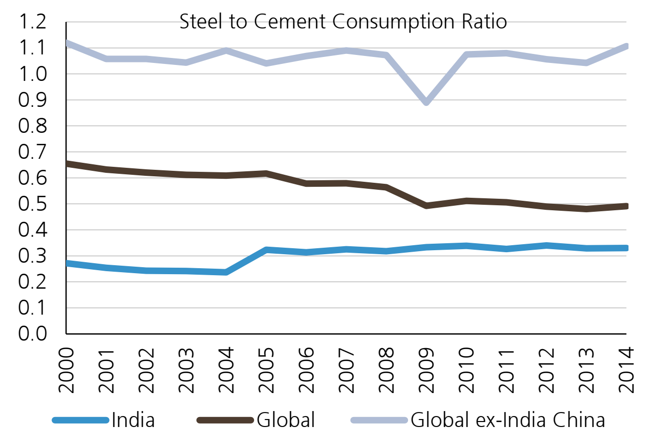
Source: JPC, CEIC, UBS

Figure 44: Penetration growth opportunity: India steel consumption* much lower than global averages



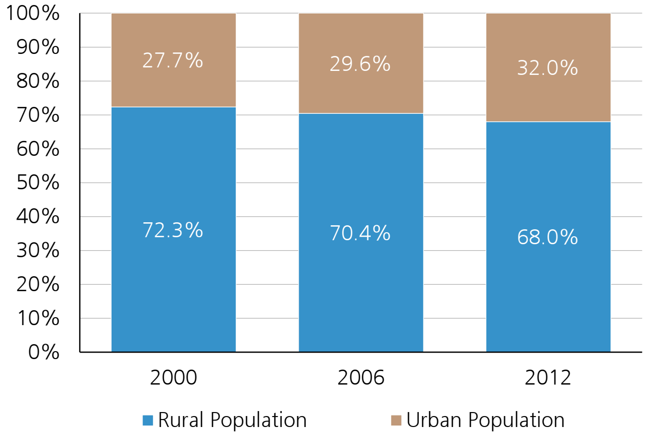
Source: JPC, World Steel, India Census, World Bank, UBS; * - kg/per annum

Figure 45: Penetration growth opportunity: India steel intensity of use is low



Source: JPC, CMA, UBS

Figure 46: Urbanisation programme of government could be significant for steel from current low base (India)

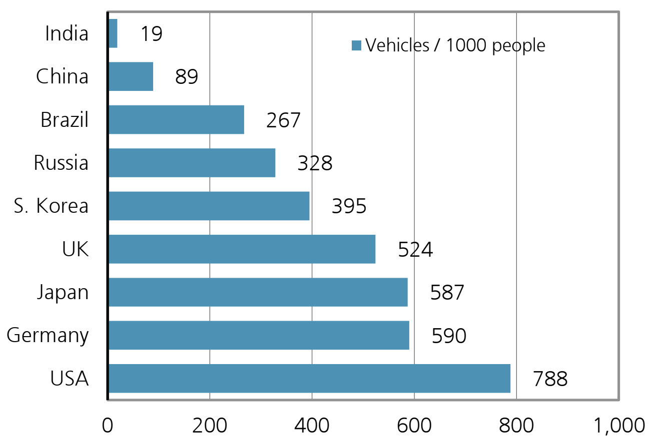


Source: World Bank, UBS

Figure 47: Manufacturing has never been significant in India; "Make in India" should drive greater steel use

Source: CEIC, UBS

Figure 48: Automotive is a key end-market; another penetration growth opportunity



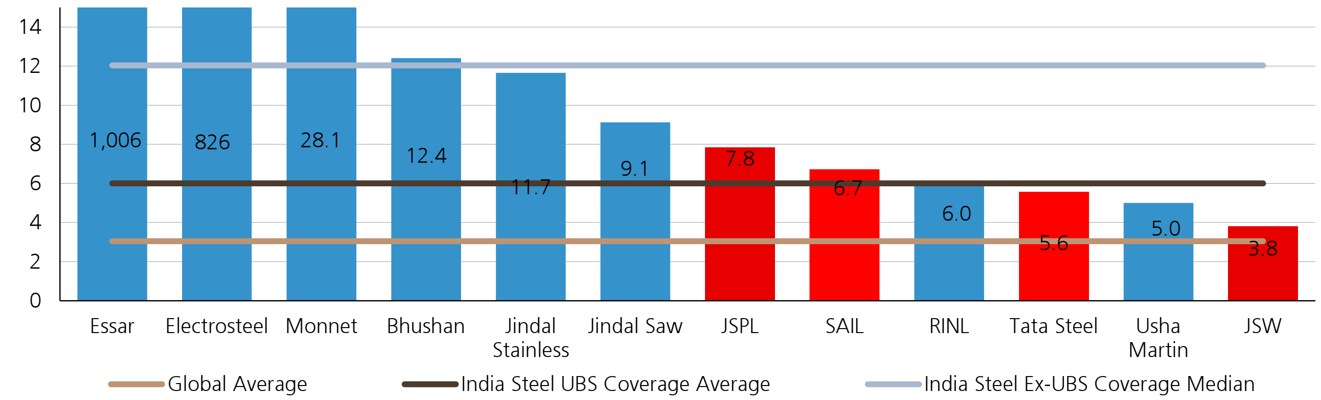
Source: Delphi

Debt peaking; free cash flow turning

The capacity expansion we discuss in this note and a period of weaker demand in both domestic and global steel markets has driven an increase in debt and pressure on key ratios (net debt vs EBITDA; debt to equity). The issue is steel sector-wide rather than company-specific. Leverage is common in the global steel industry, but the 4 main listed players in India are still on average levered at twice the global average. They have also made positive free cash flow (combined for the sector) in only 2 out of the last 8 years.

Financial pressure in the Indian steel sector has been rising and is a concern for investors in our view.

Figure 49: Net debt to EBITDA (x) by company latest (FY14/15) vs global peers

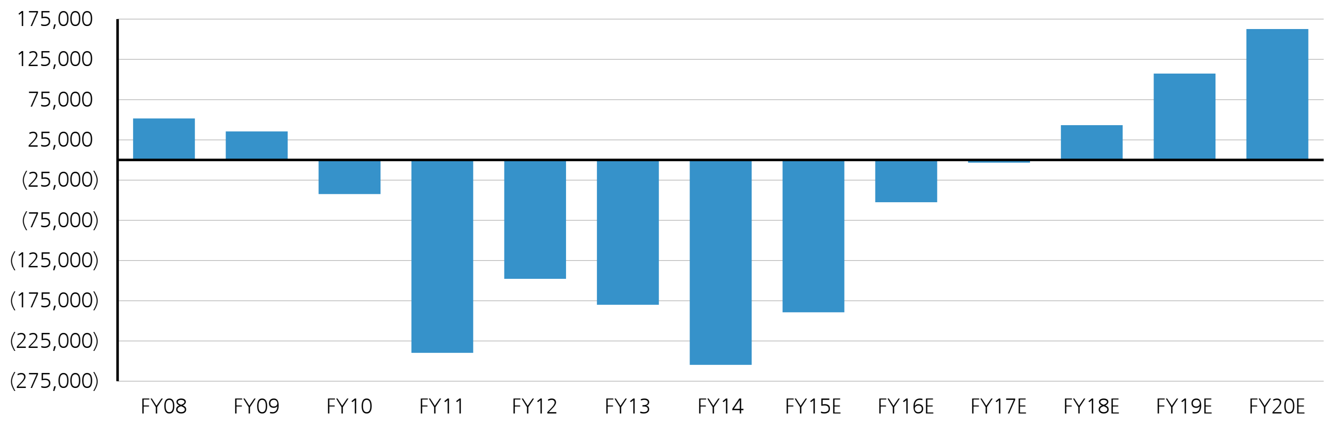


Note: We have computed global average, based on 2014 calendarised data, for the top 20 global steel companies by Market Cap. In the case of Global coverage and India coverage, we have mean for the global average, while we use median for India ex-coverage due to significant outliers. Source: Company data, UBS

JSPL is the only company where we believe there is a potential short/mid-term requirement to secure its financing position via asset disposals or refinancing. But we think the relatively high levels of leverage matter for each of the companies in terms of investor sentiment (debt adds an additional layer of risk to an operationally geared sector), equity valuation (on average net debt represents c.65% of the EV for the 4 companies under our coverage) and flexibility (the companies' ability to react to new opportunities, such as acquisitions or acquiring raw material assets). Yet the gradually improving demand picture that we anticipate should drive a turning point in free cash flow generation for the sector. The benefit this will have on net debt will be compounded in our view, by reduction in capex, and reducing cost of mainly floating rate debt.

Debt an urgent issue only for JSPL, but weighs on sentiment and valuation in general

Figure 50: Free cash flow trend (Rs m)



Source: Company data, UBS estimates

Capex reductions

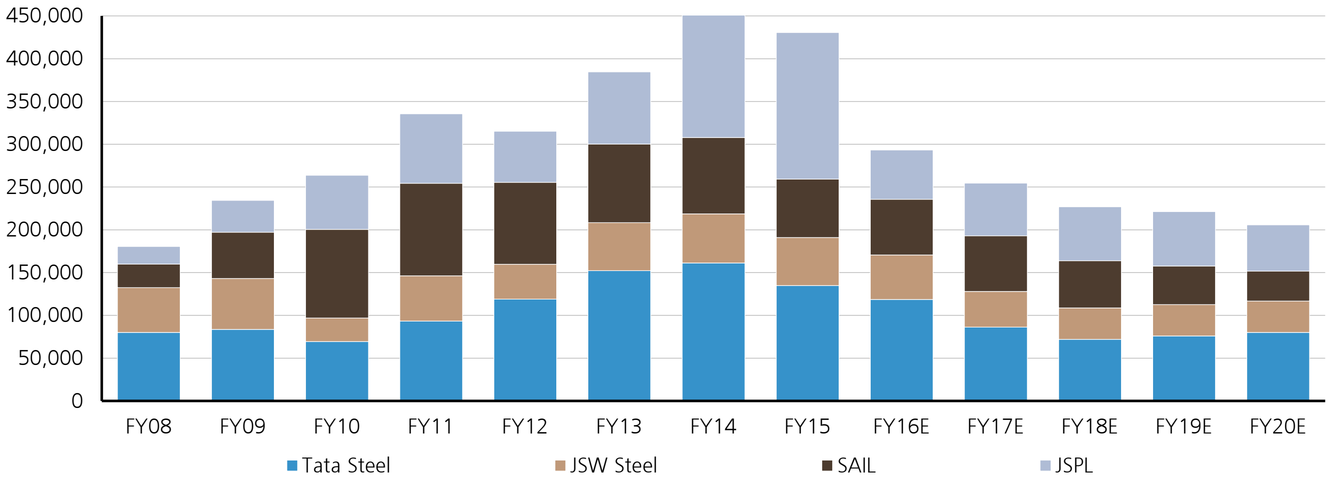
The capacity expansion plans of each of the four main companies are finally approaching commissioning. The associated capex has been the main driver of increasing net debt in the sector and this material headwind will ease from here in our view, starting in FY16. All of the companies made specific comments to this effect when giving guidance at the May 2015 Q4 results.

Capex peaking; significant potential benefit on FCF

- **Tata Steel** – spoke of a 20% reduction in group capex from the Rs135bn spent in FY15.
- **JSW Steel** – after Rs56bn in FY15, the company guided to around Rs52bn in FY16 so around a 7% reduction only as it completes certain projects.
- **JSPL** – announced plans to spend around Rs50bn in FY16, down from around Rs56bn in FY15, a reduction of around 9%.
- **SAIL** – saw capex in FY15 of Rs68bn, already down from the Rs99bn seen in FY14. In FY16 it guides for Rs75bn as final projects are completed.

Our forecasts show a steady reduction from this point, especially at JSW and Tata Steel.

Figure 51: Consolidated capex by company (Rs m)



Source: Company data, UBS estimates

Reducing finance costs; little immediate pressure

In the short-term, we are generally relaxed about the financing and covenant position of the sector. As we show below, the majority are comfortable in terms of financing covenants and have also recently refinanced. JSPL has the most pressurised balance sheet, but the company states it is not generally seeing pressure on covenants. More generally, debt service costs are high but are another drag on cash-flow which should reduce over time. The majority of debt in the sector is via term loans with floating rates. This makes the sector a direct beneficiary of any reduction in interest rates in India. This is a high conviction view of the UBS India Economics & Strategy team (see *Monsoon jitters? Reiterate lower interest rates*, 9 June 2015).

Generally no rush to refinance; falling interest rates another benefit

Figure 52: Indian steel sector financing summary

	Financing comment	Covenant comment
Tata Steel	H214 refinancing. c.$7b comprised of $1.5b of 5-7 year bonds ($500m at 4.85% coupon and $1000m at 5.95% coupon) as well a multi-currency (mainly Euro and GBP) loan facility across group entities, also with 5-7 year maturities.	Standalone: 3x debt:equity (under most recent INR loan); UK: no maintenance covenants but a cap on capex; Group: wants investment grade credit rating in 3-4 years, which implies 2-2.5x net debt EBITDA.
JSW Steel	Q315 JSW refinanced part of its rupee debt with $500m bonds at a 4.75% coupon rate, which will benefit the blended cost of debt going forward. No further immediate refinancing requirements other than the general debt servicing.	Covenants at 3.75x net debt:EBITDA and 1.75x debt: equity at standalone. No consolidated covenants. Aims to maintain minimum liquidity (cash, short-term investments, facilities) of 20b INR (c.$320m).
JSPL	In August 2014 the company stated it wanted to refinance its high cost debt into dollar-denominated loans, although there has been no apparent further progress on this.	Vary by instrument. Current leverage levels of c.7x net debt:EBITDA and no breach imply generous terms, although there was a "small breach" in FY14 according to the company.
SAIL	Domestic debt is mainly privately placed debentures and we expect this to have increased during FY15 (as per the strategy laid out in the FY14 Annual Report).	Not disclosed. Last ratings agency report indicated "significant headroom" to covenants. Government majority stake.

Source: Company data; UBS estimates; press

Other options to improve cash-flow

Finally, asset sales have been a feature of the group historically and are likely to continue (although we do not include them in our forecasts) as all companies seek to reduce leverage. Tata Steel has been the most active, having realised some Rs17bn (>US$2.5bn) over the last 5 years from various asset sales. Equity raisings have been limited. JSW notably took a 15% equity infusion from Japanese company JFE in FY11. Tata Steel raised equity to fund the acquisition of Corus in FY08, in the form of a rights issue and issuance of compulsory convertible preference shares. It issued equity again in FY11 in order to support the capacity expansion at Jamshedpur. JSPL somewhat incongruously given current high leverage did a share buyback in FY14, with the company CFO at the time stating "we wanted to show investors that the management has belief in the company's strong fundamentals," (Economic Times 30 August 2013).

Figure 53: Recent fund-raising measures in India steel sector*

	Tata Steel	JSW	JSPL
FY09	N/M	Reduction in associates yielded 200cr. Due to merger of JSW Energy (Vijayanagar) Ltdwith JSW Energy Ltd.	N/M
FY10	SSB (Malaysia) stake sale ($72m). Teeside cast products sale ($700m).	N/M	N/M
FY11	N/M	Allotment of 15% stake to JFE Steel Corporation. Total inflow of 6000cr.	N/M
FY12	Tata Refractories stake sale ($129m). Riversdale sale to Rio Tinto ($1100m).	N/M	N/M
FY13	Titan stake sale.	Minor stake sales.	Minor stake sale (Rocklands).
FY14	N/M	N/M	N/M
FY15	Dhamra Port stake sale (to Adanai; implied valuation of 2,750cr).	N/M	N/M

Note: *Does not include SAIL which has not seen any material disposals or equity financing. Source: Company data; UBS estimates

Raw materials prospects improving

Long-running iron ore availability issues are almost at an end

The ready domestic supply of iron ore in India should be a competitive advantage for its steel industry, both in terms of costs and raw material security. Historically it has meant the India steel industry is largely decoupled from international price movements. However regulatory issues stretching back over 5 years have dented iron ore availability for those with captive supply while domestic prices have fallen much more slowly than international equivalents. The main issue was a desire to stamp out illegal mining, led by the state of Karnataka. Although there are still hurdles to be cleared, the worst of this long-running headwind to the steel industry seems to be over and the supply situation should gradually improve from here. We include a detailed summary in Figure 60 below. In terms of coking coal, India is reliant on the seaborne market, given it produces very little domestically.

Figure 54: Normalised steel raw material sourcing* (India steel operations only)

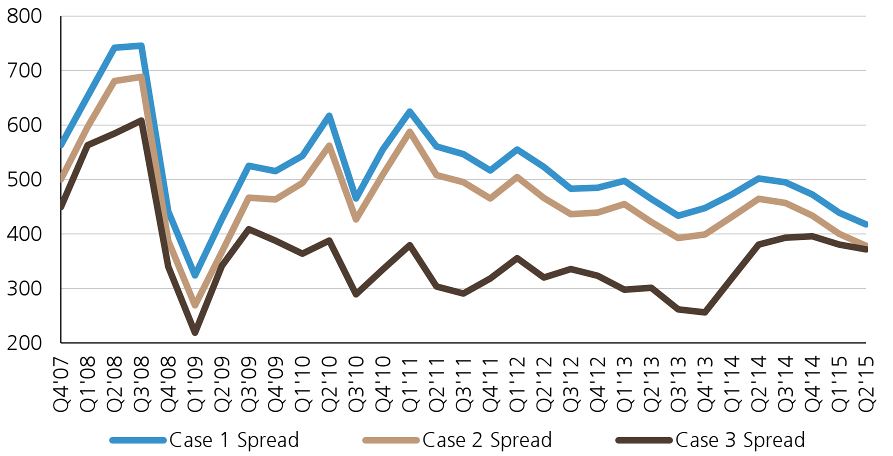
Iron Ore	% Cost**	Captive	Domestic	Import	Comment
Tata Steel	8%	100%	0%	0%	100% captive supply.
JSW Steel	25%	0%	70%	30%	Source is largely Karnataka (80% of Vijaynagar supply is Karnataka).
SAIL	7%	100%	0%	0%	100% captive supply
JSPL	14%	18%	77%	5%	Captive is Tensa. Domestic is mainly feed to Barbil pellet plant.
Coal	**% Cost****	**Captive**	**Domestic**	**Import**	**Comment**
Tata Steel	24%	45%	6%	50%	Majority non-captive is imported, in line with Indian market.
JSW Steel	31%	0%	5%	95%	We assume nearly 100% of met coal is imported.
SAIL	34%	3%	27%	70%	Fraction of captive met coal, with balance of domestic from Coal India.
JSPL	10%	43%	14%	43%	Note coal includes both coking and thermal coal.

Note: ** - % Cost = % total operating cost (excluding depreciation and amortisation); * - excludes power for JSPL, it is Indian operations only for Tata Steel (we estimate % cost is 30-40% and 20-30% for iron ore and coal respectively at Tata Steel Europe. Source: Company data; UBS estimates

Captive supply a source of operating leverage

For a long-time the Indian players with captive iron ore enjoyed a considerable cost advantage over those relying on imports. Since the iron ore availability issues have intensified over the last 2 years, this advantage has been significantly reduced.

Figure 55: Steel spreads (US$/t)

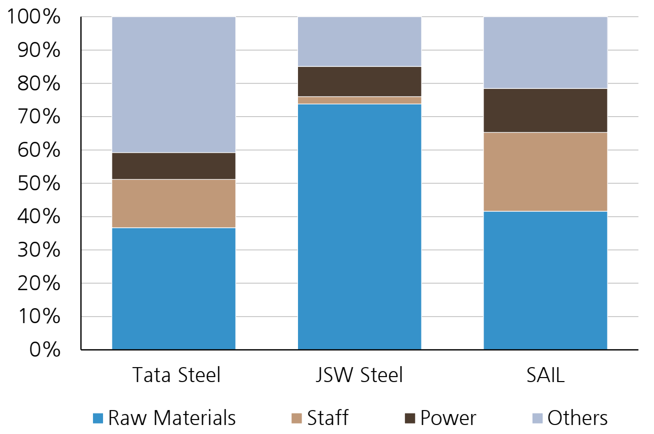


Source: Metal Bulletin, NMDC, Platts, Tata Steel, SAIL, UBS. Note: Case 1 -is spread for captive iron ore, market linked coking coal & steel cost/price; Case 2 is spread for domestic iron ore, market linked coking coal & steel cost/price; Case 3 is spread for imported iron ore, market linked coking coal & steel cost/price

Tata Steel and SAIL historically have been the biggest beneficiaries of captive supply so on a relative basis have lost the most in terms of relative competitiveness due to the domestic iron ore supply disruption and falling international prices. This has been compounded for Tata Steel which has c.45% Indian captive coking coal supply, so has also lost some of this advantage as a result of falling global prices.

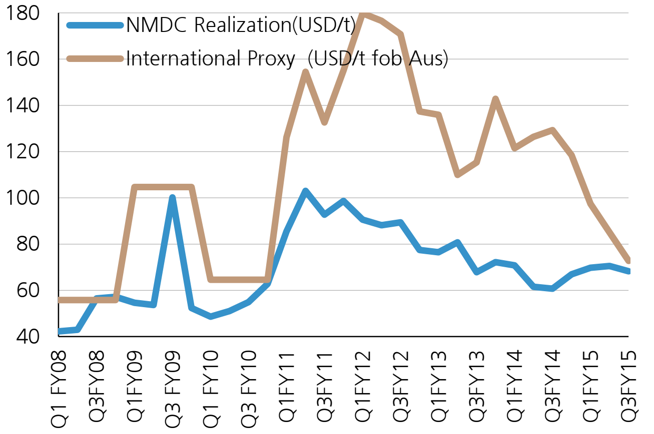
Some loss of relative competitive advantage…

Figure 56: Aggregate cost composition FY15



Source: Company data, UBS; JSPL not included above because the blended cost numbers they report include costs related to pellet, power etc..

Figure 57: Import vs domestic iron ore prices

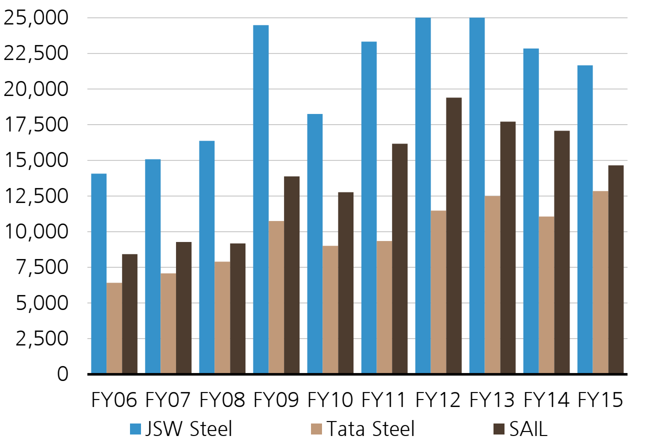


Source: NMDC Company data, UBS; Note: Assumed the NMDC's sales mix as 60:40 between fines and lumps. International proxy is constructed using a similar mix i.e. (60:40 between fines and lumps)

Yet we continue to prefer the model of captive supply. This is not just because of the raw material security it provides (in a normal regulatory environment), but because it provides an additional source of operating leverage into the demand recovery that we anticipate in India. In a normal rising demand environment for steel, the price of iron ore (the key underlying raw material) also traditionally rises, which limits the expansion in the spread. For those players in the Indian market with substantial captive supply the increase in price will not drive a consequent increase in iron ore costs.

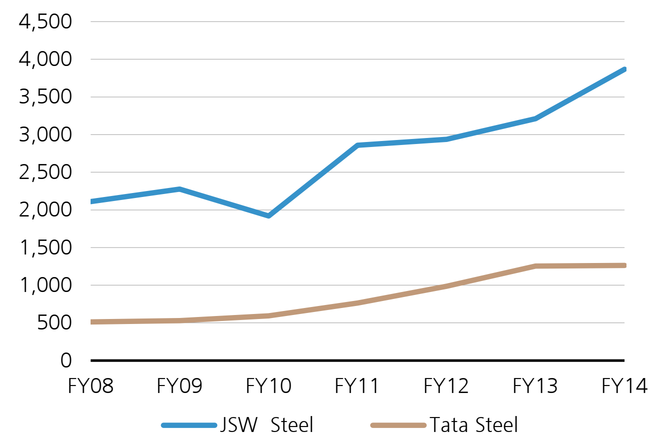
…but source of operating leverage in demand recovery

Figure 58: Raw materials cost/t (India standalone)



Source: Company data, UBS

Figure 59: JSW iron ore cost/t vs Tata Steel



Note: Data for Tata Steel for the years FY13/FY14 is based on UBS-e for total tons of iron ore consumed; also the numbers for Tata Steel might not include the mine level employee cost & royalty. Source: Company data, UBS

Figure 60: An update on the iron ore situation in India

Measure	Issue	Status / comment
Production		
Karnataka	Mining ban gradually introduced by SC (Supreme Court) in July/August 2011 covering 166 mines in total. Some exceptions allowed (eg NMDC). Main cause illegal mining (beyond limits, permitting, dumping issues).	Category A mines and 18 other mines gradually reopened from 2012. 49 leases cancelled in April 2013 on SC order, but mining ban otherwise lifted (with production capped at 30mt). Cancelled leases to be auctioned under SC-approved scheme.
Goa	Mining ban introduced by SC in October 2012. Environmental approvals for 93 mines also suspended. Allowed to sell stock piles in November 2013. Main cause illegal mining (beyond limits, permitting, dumping issues).	Mining ban lifted in April 2014 by SC, but production cap of 20mt. Mining leases gradually renewed in November-January 2014/15. In March 2015 order suspending environmental clearances revoked by government allowing production restart.
Odisha	Mining ban introduced by SC in May 2014. 26 of 56 operating mines impacted of which 8 (belonging to Tata Steel, SAIL and Odisha Mining) spared via express orders. Main cause: mining on lapsed leases (and previous deemed extension treatment).	Ban lapsed following passing of MMDR. Allows automatic renewal of leases awaiting renewal to 2020/2030 for non-captives/captives respectively. Production cap of 52mt in FY13, now 57mt for FY15 (although excludes 15mt of captives).
Jharkhand	Mining suspended in 12/17 operating mines in September 2014 on State Government interpretation of SC ruling on mining lease extensions, similar to Odisha above. Shah commission report in August 2014 also identified illegal mining issues.	Production has already largely restarted for main producers in early 2015, following approval of Jharkhand High Court.
Exports		
Duties	Duty on iron ore exports raised to 20% (from 5%/15% on fines/lumps) and then 30% in February/December 2011. Mainly impacted Goa (top exporting state previously, of largely lower grade ore)	Duty cut on low grades (below 58% iron) to 10% but stays at 30% on higher grades.
Bans	Karnataka banned shipments or iron ore in 2010, one of the first measures against illegal mining. Although ordered in 2011 to lift ban by SC (deemed scope of Central Government only). December 2011, Odisha stops issuing export permits from certain ports (Gangavaram and Kakinda). Goa banned iron ore transport in October 2012.	Goa transport ban lifted in March 2015; we believe other measures still in place. Generally of secondary importance to the industry, compared to the production and duty issues.
Rail	Freight rates for iron ore for export increased 50% in January 2011, with a smaller increase in March 2011, and 9x in total between February 2010 and March 2012. In March 2011, Indian Railways imposed a busy season surcharge of 7% on freight rates between April to June and October to March.	Some moderation of the export iron ore rates in 2012. But generally adverse trends with export iron ore rail freight rates still materially above domestic usage rates. Minimal increase in FY16 Railway Budget, but increase of Rs90 in FY15. No change in FY14.
Tax / levies		
General	Complex system of both central and local taxes, dead rent, royalties and cesses.	No material change in FY16 Union Budget.
Central	Royalty rates on iron ore.	Increased by Central Government to 15% (from 10%) as recently as August 2014. Press commentary* suggests some States pushed for higher increases.
MMDR	Recently-passed legislations proposes: 1) District Mineral Foundation (DMF) for the benefit of persons in districts affected by mining related operations; 2) National Mineral Exploration Trust (NMET) for regional and detailed mine exploration.	Licensees and lease holders shall pay the DMF an amount not more than one-third of the royalty prescribed by the central government, and the NMET two percent of royalty. However existing leaseholders may have to pay up to 100% of the royalty, until the lease is renewed (pending confirmation of final rules).
States	Complex additional levies on iron ore in addition to Central Government Royalties and MMDR proposals. In Goa there is an additional 10% to Goan Permanent Iron Ore Fund. In Karnataka there is a 12% Forest Development Tax. Odisha charges additional royalty for the Peripheral Development Fund at rate equivalent to Central Government level.	No material recent change. Amendment possible in our view following conclusion of State deliberations on MMDR-mandated District Mineral Foundation (DMF).

Source: UBS estimates, company data; government information; press; * - Economic Times 14 July 2014

Company pages

Tata Steel

Look forward, not back

Equities

India
Steel

12-month rating	**Buy**
	Prior: Not Rated
12m price target	**Rs420.00**
	Prior: -
Price	**Rs297.45**

RIC: TISC.BO **BBG:** TATA IB

Trading data and key metrics

52-wk range	Rs568.10-294.45
Market cap.	Rs289bn/US$4.55bn
Shares o/s	971m (ORD)
Free float	69%
Avg. daily volume ('000)	5,051
Avg. daily value (m)	Rs1,696.5
Common s/h equity (03/16E)	Rs345bn
P/BV (03/16E)	0.8x
Net debt / EBITDA (03/16E)	5.2x

EPS (UBS, diluted) (Rs)

	From	To	% ch	Cons.
03/16E	-	35.65	-	27.63
03/17E	-	41.46	-	38.89
03/18E	-	56.21	-	50.57

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Final stretch

Risks and rewards in FY16 are evenly balanced and Tata Steel has much to do: ramp up Kalinganagar in a tricky domestic environment, resolve the future of its long products business in Europe and deal with industrial action in the UK. Yet, we believe each case is much closer to the end than the beginning which should allow the company and investors to look forward. They also provide additional sources of leverage (financial and operational) into any demand recovery.

Mixed blessings; improvement in Europe and India

Does the (poorly timed) European/Corus expansion provide diversification for investors or dilution from exposure to the Indian market? While steel markets in general are still difficult, we think diversity should be beneficial in the medium term. UBS is relatively positive on European markets and following the disposal of long products, Tata Steel would have more focused/profitable exposure. In India, the short-term demand picture is tepid and prices are under pressure from imports. However, we think the longer-term outlook is attractive and Tata Steel is the longest-standing incumbent with a track record of profitability and new capacity, which is focused on attractive segments.

Debt and pension issues have peaked

Net debt increased again in FY15, but we think leverage ratios have peaked as capex reduces and earnings improve from here. We anticipate positive free cash-flow (after more than five years of outflows) on a one- to two-year view. Well-known pension issues are manifesting themselves via union issues in the UK, final resolution of which should be a positive catalyst. Nonetheless, we believe the company can fund likely increased contributions without any material risk to the balance sheet or covenants.

Valuation: risk/reward favourably skewed; initiate coverage with a Buy rating

We base our price target on mid-cycle EV/Sales and EV/EBITDA multiples on FY17 earnings and we see sufficient upside to drive a Buy rating. The risk/reward spread is wide, but skewed to the upside (valuations of Rs890 and Rs190, respectively), not unexpected for a company early in the cycle with both operational and financial leverage.

Highlights (Rsm)	03/13	03/14	03/15	03/16E	03/17E	03/18E	03/19E	03/20E
Revenues	1,347,115	1,486,136	1,395,037	1,357,357	1,359,725	1,475,232	1,559,018	1,647,938
EBIT (UBS)	67,459	105,698	65,922	92,974	103,689	127,590	153,508	179,107
Net earnings (UBS)	3,323	36,225	32	34,630	40,275	54,606	71,430	90,858
EPS (UBS, diluted) (Rs)	3.42	37.29	0.03	35.65	41.46	56.21	73.53	93.53
DPS (Rs)	8.00	10.00	8.00	12.01	13.36	18.91	22.03	25.27
Net (debt) / cash	(451,337)	(598,081)	(697,350)	(715,793)	(719,617)	(714,699)	(691,110)	(653,388)

Profitability/valuation	03/13	03/14	03/15	03/16E	03/17E	03/18E	03/19E	03/20E
EBIT margin %	5.0	7.1	4.7	6.8	7.6	8.6	9.8	10.9
ROIC (EBIT) %	8.4	11.8	6.5	8.9	9.7	11.6	13.6	15.6
EV/EBITDA (core) x	6.8	5.3	9.0	7.5	7.0	6.0	5.1	4.4
P/E (UBS, diluted) x	NM	8.7	NM	8.3	7.2	5.3	4.0	3.2
Equity FCF (UBS) yield %	(10.3)	(20.0)	(17.3)	(7.7)	3.9	9.1	16.8	23.0
Net dividend yield %	2.0	3.1	1.8	4.0	4.5	6.4	7.4	8.5

Source: Company accounts, Thomson Reuters, UBS estimates. Metrics marked as (UBS) have had analyst adjustments applied. Valuations: based on an average share price that year, (E): based on a share price of Rs297.45 on 07 Jul 2015 22:38 HKT

Pivotal Questions

Q: How is Tata Steel positioned in terms of capacity?

It has modern capacity in India (Odisha phase 1 expansion should be completed in FY16) and is the most diverse Indian player. It is optimising exposure in Europe (long products disposal) to focus on profitability but has options to expand further in India should the market allow.

Q: Can it withstand the price/cost pressures?

Profitability in India has been hit by regulatory issues around raw materials, which are gradually clearing. The long products disposal in Europe should leave it with more focused and profitable exposure going forward.

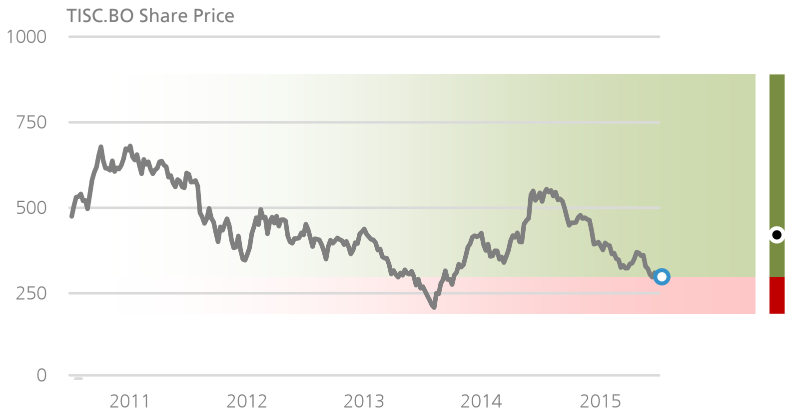
Q: How secure is the debt position?

Debt has been an issue since the Corus acquisition in 2007. But as capex reduces and market conditions improve we expect improvement. We also note the significant refinancing concluded in H214 meaning good liquidity.

Investment Thesis

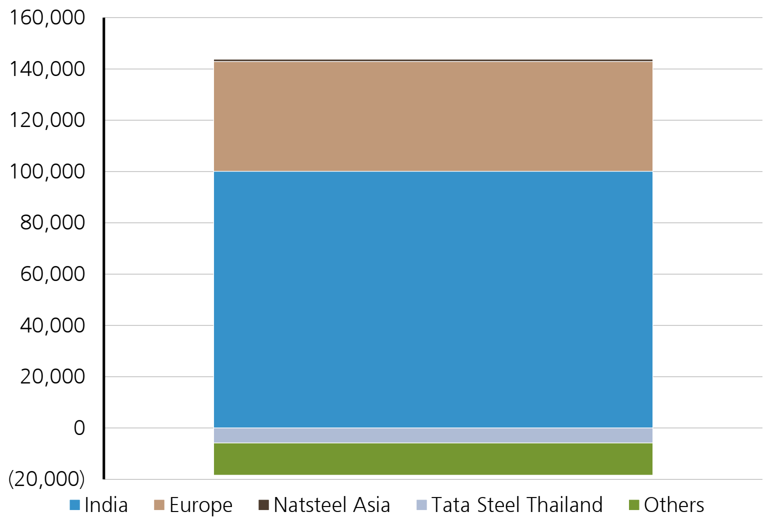
The debate around Tata Steel has focused on the progress of its Kalinganagar expansion, conditions in Europe (and the sale of its long products business), and the high levels of debt. We expect these issues to clear on a one- to two-year view. Kalinganagar adds capacity in attractive segments in India, although market conditions in the short term are to remain tough. UBS is relatively positive on Europe as a market and post the long products disposal, Tata Steel should have more profitable exposure. Union issues in the UK are also close to final resolution in our view. All this benefits cash flow and we believe the anticipated improvement in cash flow and debt represents an interesting turning point.

Pricing Paths and Upside/Downside Skew



	Price (+12 mo.)		EPS (FY16e)	P/E
+199%	890Rs upside	=	48Rs *	18.6
+41%	420Rs base case	=	36Rs *	11.8
-36%	190Rs downside	=	10Rs *	18.8
	297Rs	=	28Rs *	10.8
	price (07 Jul 2015)		cons EPS (FY16e)	P/E

Group EBITDA Split for FY15 (Rs m)



Scenario Assumptions

Upside (Rs890) – Accelerating India growth and more benign pricing. Solid market conditions in Europe. Faster ramp up in Kalinganagar. FCF positive by FY17E.

Base case (Rs420) – A still difficult FY16E in India due to pricing pressure, but gradual subsequent recovery and on-time ramp of Kalinganagar. Europe to benefit from better mix upon disposal of long products in the next 12 months. Leverage ratios to normalise from FY17E.

Downside (Rs190) – Reflects weaker economic conditions in India and Europe, coupled with execution delays. India pricing remains tough (FY16E realisations -10% YoY). Limited profitability growth in Europe. Pressure on operating cash flow means leverage ratios remain stretched.

Source for this page: Thomson Financial, UBS estimates

Q: How is it positioned in terms of capacity?

Tata Steel has established capacity in India and globally, following capacity addition over the past five years. Should demand increase, it has flexibility to expand further in India via brownfield projects. Global capacity adds diversity but reduces gearing to Indian recovery.

Figure 61: Tata Steel crude steel capacity (mt) by plant – past, present and future

Plant	Capacity today*	Capacity 2010	Target Capacity	Aspirational Capacity	Major Product	Integrated
Jamshedpur	9.7	6.8	9.7	9.7	Flat	Yes
Port Talbot	4.9		4.9	4.9	Flat	Yes
Rotherham	0.8	11.5	0.8	0.8	High-grade flat / alloy	Yes
Scunthorpe	4.5		0.0	0.0	Long	Yes
Ijmuiden	7.2	6.9	7.2	7.2	Flat	Yes
Natsteel	0.8	0.7	0.8	0.8	Long	Yes
TSTH	1.7	1.2	1.7	1.7	Long	Yes
Kalinganagar	0.0	0.0	3.0	6.0	Flat	Yes
Manoharpur	0.0	0.0	0.0	12.0	N/A	Yes
Bastar	0.0	0.0	0.0	5.0	N/A	Yes
Tata Steel	**29.6**	**27.1**	**28.1**	**48.1**		

Source: Company data; UBS estimates; press; capacity today is last reported; Capacity 2010 is sourced from December 2010 investor presentation; 2010 Tata Steel UK capacity reported only in aggregate at 11.5m; note European long products business is up for sale (mostly Scunthorpe)

Well-placed in India

Large step-up in domestic capacity almost complete

Tata Steel India has seen 2 significant phases of capacity expansion: 1) the brownfield expansion of its Jamshedpur (in Odisha) plant from 6.8mt to 9.7mt between FY11 and FY14; 2) the ongoing greenfield development of a plant at Kalinganagar (also in Odisha) with 3mt of capacity in Phase 1 and a further 3mt in Phase 2. Risks still remain with Kalinganagar Phase 1 still not operational – however coke ovens have been heated and management expects commercial production around the first week of October 2015.

Medium/long-term additional expansion plans on ice

We think these expansion projects leave Tata Steel with a well-invested asset base. Material near-term expansion beyond this is unlikely in our view, although Phase 2 at Kalinganagar is feasible on a 3-5 year view. Tata Steel has had further aspirations in India to add more greenfield capacity in India: in 2005 it signed MOUs with the Governments of Jharkhand and Chhattisgarh for greenfield projects with capacity of 12mt and 5mt respectively. A combination of the passage of time, focus on other projects and issues elsewhere in the Group since then, especially in Europe, have meant these aspirations have fallen by the wayside.

Capacity expansion in India has been focused on flat products, but reasonable long exposure also

The expansion at Jamshedpur added to the flat capacity at the plant with wider and higher strength HRC. Phase 1 development at Kalinganagar adds further flat product capacity. It will initially produce higher grade HRC (at a Rs1,400-1,500 premium to basic HRC) with the aim of consolidating strong market share in the automotive and branded segments. Tata Steel in India has invested in flat products over longs, but does still have long exposure which is important in a developing economy – the last time this split was reliably disclosed (in FY12) long products were c.40% of volumes and we would estimate this at 25-30% today.

Mixed blessings?

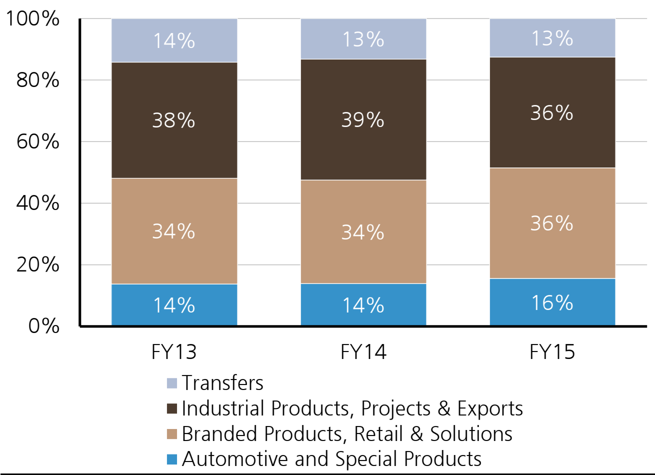
India represents only part of the story for Tata Steel which is the only truly global steel company amongst the Indian peer group. Diversity in terms of geography in particular, but also products, leaves it well-positioned in terms of through-cycle growth. Tata's global capacity is well spread. We discuss the rights and wrongs of the Tata Steel Europe acquisition (Corus) below, but it left the business with >17mt of capacity today (this will fall to c.13mt following the likely sale of the long products business). There is further international capacity in Thailand (TSTH), with a long products business (wire rods, rebars and small sections) and a smaller business in Singapore (Natsteel) focusing on bars and mesh products.

Tata Steel is only truly global steel co based in India

Diversity bodes well for the business and the long-term interests of shareholders. But the Indian steel sector needs a demand pick-up for growth, utilisation of new capacity and profitability to improve, as we have discussed in the industry section of this note. Our main doubt in respect of Tata Steel's exposure is not structural, but tactical. Investors looking to buy an Indian listed steel company need to have a positive view on Indian steel demand and in this situation might prefer a purer play on Indian steel (such as JSW or SAIL). While steel is a global sector, it is generally unusual for demand trends in different markets to move in harmony.

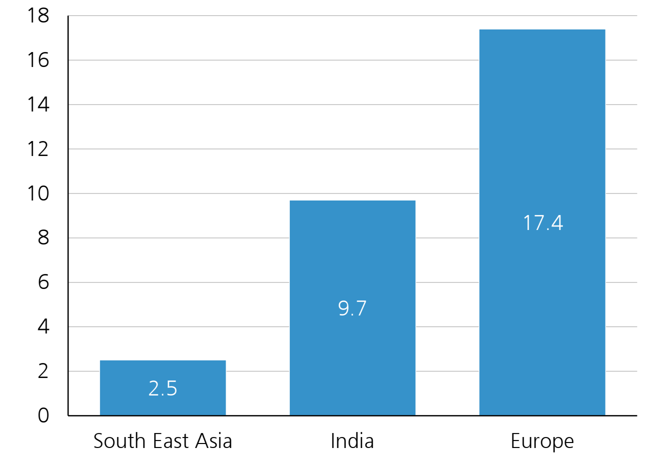
If you believe in an India recovery, then there are purer plays on this theme in the steel sector

Figure 62: India end market mix (sale volume)



Source: Company data, UBS

Figure 63: Tata steel global capacity mix (mt)



Source: Company data, UBS

Q: Can it withstand current cost/price pressures?

Tata Steel's profitability in India has been materially impacted by regulatory issues around raw materials, which are now clearing. Its product range and efficiency provides some mitigation against falling prices.

Tata Steel in India has long operated a captive iron ore supply model which has given it a cost advantage over many competitors. But the iron ore bans in recent years have disrupted this, although the situation is now easing. With c.30mt of captive iron ore capacity, this should satisfy current and planned Indian steel capacity (including Kalinganagar phase 2). All iron ore mines are operational with leases extended for Joda East and Khondbond, while the extension is ongoing for Katamati. Noamundi is operational but the Jharkhand government has yet to take decisions following the passage of the MMDRA legislation. Tata Steel has provided for the new District Mineral Foundation (DMF) charge at the maximum rate (100% of royalties).

Regulatory / iron ore issues in India are clearing

Tata Steel's coal assets, mainly West Bokaro, were insulated from the coal block cancellations in India as they were allocated prior to the 1993 threshold. Tata Steel lost one thermal coal block in the process (Ganeshpur) but this has minimal impacted on operations (although there was a small one-time item in Q215). The majority of non-captive coal is sourced from the seaborne market.

Fewer historical issues with coal

Figure 64: Tata Steel – raw material supply summary

Domestic				
Mine	**State**	**Type**	**Capacity (MT)**	**Comment**
Joda East	Odisha	Iron Ore	12	Some 30km from Noamundi.
Katamati	Odisha	Iron Ore	8	Southern extension of Noamundi.
Noamundi	Jharkhand	Iron Ore	10	C.125km from Jamshedpur.
Khondbond	Odisha	Iron Ore	2	Some manganese also. 18 km from Joda East.
Sukinda	Odisha	Chromite	2.5	Also capacity for 0.5MT pyroxenite.
Sijua	Jharia	Coking coal	0.8	Partially fill coking coal requirements.
Jamadoba	Jharia	Coking coal	0.8	Partially fill coking coal requirements.
Various	West Bokaro	Coal	6	Fulfils 40% of coking coal requirements.
Bamebari	Odisha	Iron Ore / Manganese	n/a	Some 30km from Joda sites.
Joda West	Odisha	Manganese	n/a	Adjoining site to Joda East (iron ore).
International				
Asset	**Country**	**Type**	**Capacity (MT)**	**Comment**
Direct Shipping Ore	Canada	Iron Ore	6	Currently only 0.3m of dispatches in FY15 to date.
Taconite	Canada	Iron Ore	N/A	Feasibility study only alongside NMIC.
Howse	Canada	Iron Ore	NA	51% stake. Reserves total around 24mt.
Nimba	Ivory Coast	Iron Ore	NA	JV with SODEMI. Exploration and feasibility stage only.
Benga	Mozambique	Thermal /coking coal	0.7/0.7	JV with Rio Tinto. Impacted by logistics and security issues.
Sedibeng	South Africa	Iron Ore	2	2 is limit of current rail capacity so could increase.

Source: Company data, Ministry of the Environment, UBS estimates

But raw materials risks remain

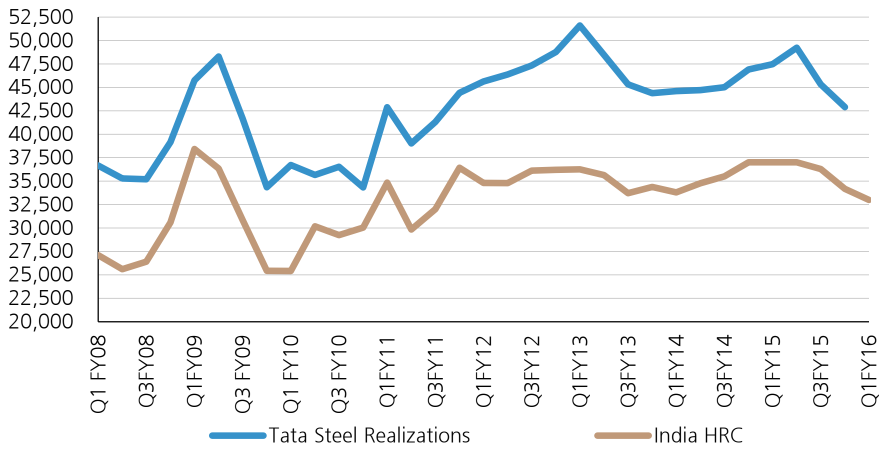
Ferro Alloy division is seeing an ongoing raw material issue

In FY14 Ferro Alloys accounted for c.Rs45bn revenue – it supplies products such as ferro-chrome and ferro-manganese (alloying materials used in downstream steel production), to third parties ("external processing agents" or EPAs). Volumes in FY15 were materially down as mining was disrupted following the suspension of the Sukinda mine, which has now restarted. Yet according to new legislation, mining assets can only be used for captive processing and not third party sales. This is a particular issue for chrome concentrate (c. 60% of FY14 volumes in the division). There should be some improvement in FY16 as Ferro Chrome processing capacity at Gopalpur comes on stream, but the lack of chrome ore processing capacity will continue to materially hold back divisional profitability. Elsewhere, Tata Steel invested in international raw materials projects as it sought to secure supply for its European operations. The majority of these are early phase or exploration and viability has been hit by the decline in raw materials prices over the last 1-2 years.

Pricing environment is opaque, but some levers

Company disclosure makes it difficult to see recent product-wise realisations, as these have not been provided since FY12. Yet on an overall basis these have been under material and increasing pressure (down Rs2,100 sequentially in the market Q415) as Russian, Chinese and Korean imports have an impact. On the Q415 conference call, management guided for another Rs1,500 fall in steel realisations (after 2100 in Q415) in Q116. The near-term outlook for realisations remains very challenging, but there are several mitigating factors.

Figure 65: Tata Steel India realisation vis-à-vis India domestic HRC (Rs/t)



Source: Company data, Metal Bulletin, UBS

Retail and auto channels benefit realisations

A traditional sales organisation of flat and long-products was in FY14 replaced with a product-based organisation with different pricing strategies in each. Automotive is generally priced on 6 month contracts, branded and retail is on a daily/cash basis while industrial products and exports are a combination of both. Realisations can vary widely between products. For example it estimates a $100-150 per ton premium (c.Rs7,500) over commodity HRC in its branded and retail channel. Branded and retail products represented some 35% of volumes in FY15 so are a critical channel. We believe Tata Steel in India has one of the best-developed retail networks and associated brands in the Indian market.

Figure 66: India distribution networks

Company	Sales & Distribution Strategy
Tata Steel	1. They sell through a combination of dealers, distributors & service partners- a network of 62 distributors, 6,000 dealers and 48 service partners 2. They have branded products in steel as well as ferroalloys. In FY15, they sold ~3.1mt thorough their branded products & retail solutions segment, ~36% of overall sales volume 3. Marketing & Sales team that is aligned to end user segments rather than around steel products
JSW Steel	1. Moved away from a single distribution format (JSW Shoppe) 2. They now operate via multiple formats like the JSW Explore (focus on multiple product service center for steel solutions), JSW Shoppe (focus on steel distribution) and the JSW Shoppe Connect which in in turn is linked to JSW Explore/Shoppe (Sales to end consumers & MSME with a focus on talukas and rural areas 3. In FY15 they sold ~2.2mt through the retail channel, ~17% of overall FY volume
JSPL	1. Small but expanding retail presence. 1750 dealer network. Presence in 29 states 2. They have put in place a dedicated sales team to cater to the institutional business
SAIL	1. Operate through a mix of dealer network and direct sales channels. In FY15, they sold ~6.3mt through the dealer network, ~55% of the overall FY15 sales volume

Source: Company data, UBS

Tata Steel is increasing its mix towards higher value flat products

Special steel (which it defines as anything not commodity HRC) can also attract a healthy premium (we estimate Rs8,000-9,000 per ton Tata Steel premium to basic HRC realisations over the last 5 years). Similarly downstream steel (eg tubes, tools) can also attract a material premium. Tata Steel is committed to growing its share in high end flat segments – this is a key long-term driver of the Kalinganagar expansion, even if phase 1 production will only have a c.Rs1,500 premium to HRC.

Q: How secure is the debt position?

Despite financing pressures on the Indian steel industry, we regard Tata Steel as relatively well-positioned in its peer group in terms of debt. However, the return to positive free cash flow is likely to be gradual, while the European pension scheme remains an overhang

Refinancing and wide covenants make the current position secure

Relative financial security comes from the successful recent refinancing (in H2 2014), the reduction in capex as Kalinganagar Phase 1 nears commissioning and disposal options from the still-broad range of non-core assets and investments. Furthermore, covenants are generous (as we have shown, there are none at the European level and approximately 3x debt to equity at the Indian level). Following years of negative free cash flow the swing to positive free cash flow is a significant "moment", although we expect this swing to be gradual given absolute costs of interest payments, still elevated capex and muted trading conditions in FY16.

Figure 67: Debt and FCF history and forecasts

Rs.m	FY11	FY12	FY13	FY14	FY15	FY16E	FY17E	FY18E	FY19E	FY20E
EBITDA	**167,467**	**124,168**	**123,212**	**164,110**	**125,358**	**138,780**	**149,908**	**176,458**	**204,056**	**231,435**
Net change in working capital	(77,508)	11,590	38,407	(12,696)	3,510	16,507	10,765	(5,697)	1,808	2,372
Tax paid	(32,351)	(36,524)	(25,690)	(30,127)	(24,270)	(27,842)	(31,645)	(41,270)	(51,870)	(63,347)
Interest (paid)/received	(45,985)	(35,421)	(31,999)	(36,763)	(56,940)	(44,287)	(46,866)	(48,193)	(48,451)	(45,553)
Other	1,034	19,797	8,000	13,692	11,580	13,185	15,097	16,579	18,443	20,951
Net capital expenditure	(93,360)	(119,586)	(152,224)	(161,255)	(134,920)	(118,556)	(85,905)	(71,466)	(75,359)	(79,422)
FCF	**(80,702)**	**(35,976)**	**(40,294)**	**(63,040)**	**(75,682)**	**(22,213)**	**11,354**	**26,412**	**48,627**	**66,435**
Dividends (common)	(7,162)	(13,864)	(16,248)	(11,905)	(9,092)	(13,654)	(15,179)	(21,493)	(25,038)	(28,714)
FCF Post Divi	**(87,865)**	**(49,840)**	**(56,541)**	**(74,945)**	**(84,774)**	**(35,867)**	**(3,824)**	**4,919**	**23,589**	**37,721**
Gross debt	530,626	499,772	549,934	684,126	723,239	735,815	735,815	735,815	735,815	735,815
Cash and equivalents	(108,591)	(108,016)	(98,597)	(86,045)	(25,889)	(20,022)	(16,197)	(21,116)	(44,705)	(82,427)
Net debt	**422,035**	**391,756**	**451,337**	**598,081**	**697,350**	**715,793**	**719,617**	**714,699**	**691,110**	**653,388**
Net debt:EBITDA (x)	2.52	3.16	3.66	3.64	5.56	5.16	4.80	4.05	3.39	2.82
Debt:Equity (x)	1.14	0.86	1.24	1.40	2.07	2.08	1.95	1.77	1.54	1.28

Source: Company data; UBS estimates

UK pension scheme and related strike

Significant uncertainty around the UK pension scheme

One of several unwelcome features of the Corus acquisition in FY08 was the assumption of 2 pension schemes, the British Steel Pension Scheme and SPH (relating to the Dutch/European parts of the business). On an IAS 19 basis the company reported a net deficit for the pension schemes of £193m in FY15 having traditionally run at a surplus, as falling bond yields have increased the notional value of liabilities.

The funding issues are primarily at the UK scheme (the British Steel Pension Scheme, "BSPS"). In its Annual Report for FY14, BSPS chairman stated that the 2011 funding deficit of £553m was likely to have grown further. Ahead of the results of the 2014 triennial review, the company and press have suggested that the deficit could have grown as high as £2b. The pension scheme has already caused a drag on cash, with the £553m 2011 deficit being funded over 15 years. In October 2011 Tata Steel's main European subsidiary (Tata Steel Europe) made a £50m one off contribution to BSPS (as part of an agreement prior to the refinancing of the European debt) and has been paying a £10m annual contribution for 7 years from 2009 following the Corus Engineering Steels Pension Scheme's merger into BSPS. These ongoing payments are included in employee costs.

This pension scheme is the cause of the possible industrial action at Tata Steel UK. After an initial period of negotiation has broken down, 4 UK unions voted in favour of strike action to commence on the 22 June 2015, although further proposals from the company meant this action was suspended ahead of this.

Signs the pension issues are being resolved

- The company's position is that it remains committed to a "sustainable solution" for pension arrangements for UK employees. It believes the defined benefit scheme (which still covers around 90% of UK employees) is not sustainable and is looking to make a number of changes around terms, especially around retirement age conditions.
- Union sentiment in favour of the strike was strong (with 80-85% of members voting in favour of the strike action) but is not universal. Around 11,000 of 17,000 total UK employees are members of the relevant unions.
- The revised Tata Steel offer is now back with the unions who will put it to members for a vote. According to the press (FT, 19 June 2015) the revised Tata Steel offer keep the scheme open with changes, and would be recommended by the unions to their members.
- In terms of impact of any strike, we believe the company is looking at a number of steps to mitigate it. These could include shifting workers on a temporary basis from facilities in Europe and utilisation of existing inventory (typical inventory holding periods are around 60 days).

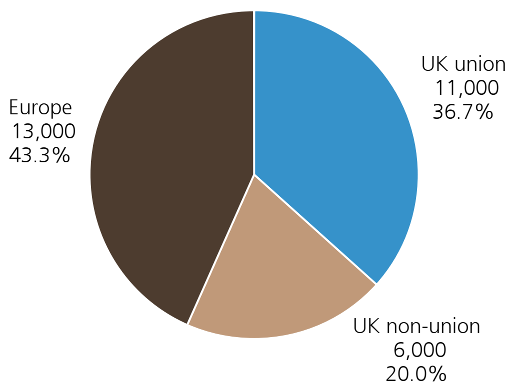
Limited disclosure over Europe/UK

Tata Steel gives limited breakdowns of its UK business so it is hard to assess the financial impact. It has stated the UK business overall is less profitable than Europe, which must imply very low-single-digit margins given the European EBITDA margin for FY15 was 5.3%. This difference is largely due to efficiency, but also some mix. Within the UK, the company has indicated that the long products business is much less profitable than flat, and indeed the implied utilisation in FY15 was only 65%.

Potential for ongoing issues to disrupt long products sale

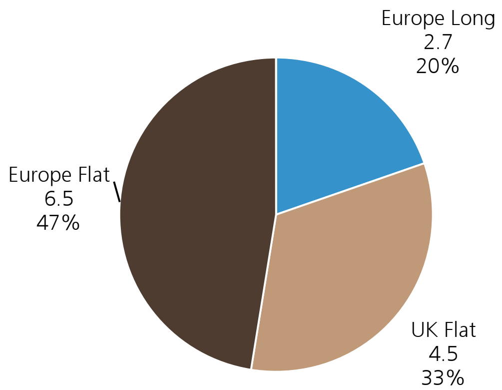
There has been some concern in the media that the strike process could impact the sale of the long products business. We can see why any acquirer would need certainty over the pension situation before proceeding. Tata Steel states the sales process is not impacted and that it has a number of other options for the UK long products business, including the potential spin-off into a separate subsidiary.

Figure 68: Europe employee split



Source: Company data, UBS

Figure 69: Europe approx. FY15 volume split (mt)



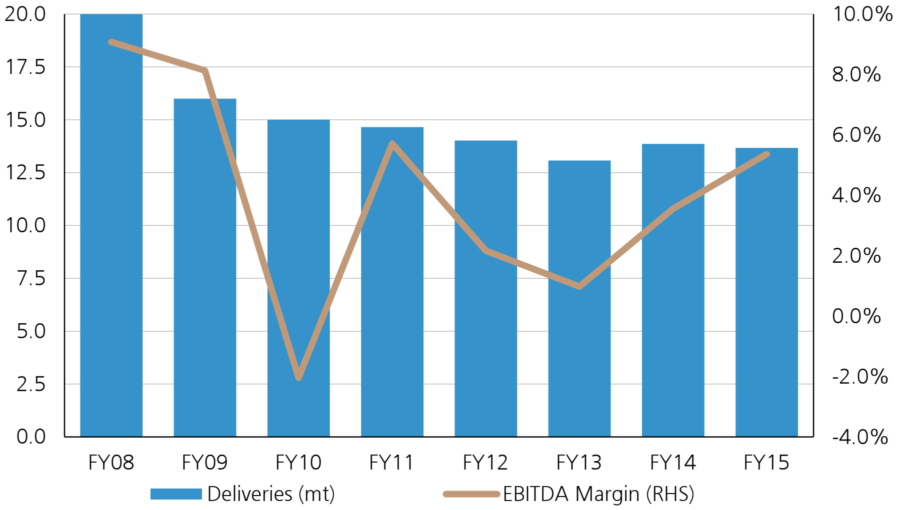
Source: Company data, UBS

Talking of Europe.....

The Corus acquisition has dragged on group performance and resources for years

The acquisition of Corus which Tata Steel finally concluded in early 2007 could not have been worse timed, coming less than a year before the Global Financial Crisis and the ensuing recession in Europe. Many of the key figures related to the deal do not make pleasant reading. The final EV, post an auction process alongside CSN (Brazilian steel maker) was £6.2b, which implies an EV/EBITDA multiple of ~14x the FY15 EBITDA, some 9 years later. Tata Steel shareholders were diluted by rights issues in FY08 to fund the original deal and impacted by significant further write-downs, especially $1.6b in FY13. The business itself has seen a steady stream of disposals and restructuring initiatives in response to the poor economic conditions, which have had cost implications and consumed management time. And we have already highlighted the ongoing debt burden.

Figure 70: Tata Steel Europe growth and margins



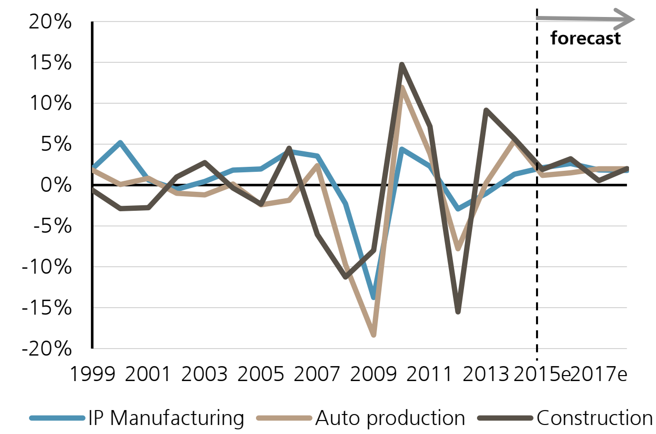
Source: Company data, UBS

Market conditions in Europe have improved; Tata Steel has continued to invest in the business

But today, the European business is undoubtedly in better shape following the improvement in the European economic environment over the last 2 years. Tata Steel has continued to invest in the capacity of the business (spending GBP 1,703m; 3.8% of sales over the last 5 years) as it looks to improve efficiency and increase the spread of special steel (which is now >1/3 of divisional sales, up from <20% in the last 5 years). Prospects for Europe are encouraging and it remains one of the favoured global steel markets at UBS, alongside the US. This optimism on Europe is founded on a combination of improving demand from the macro outlook, benefits of industry capacity reduction that has already started, currency weakness which benefits European steel makers (by driving down imports) as well as some recent protectionist measures against dumping, especially the EU commission.

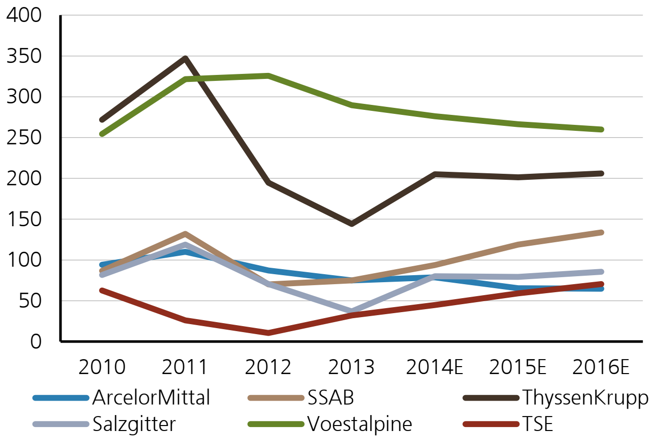
But the view is for moderate recovery only: Tata Steel follows industry associations in assuming 1.8% demand growth in Europe in 2015, although UBS analyst Carsten Riek is slightly more positive than this. In terms of profitability, given the continued likely pressures on raw materials and steel prices, UBS sees only a very gradual recovery in EBITDA/t in the short/medium-term. Tata Steel's ability to participate in this gradual recovery will be conditional on it finally resolving or mitigating the strike action in its UK business (related to the pension issues that we have referred to above).

Figure 71: Europe demand forecasts



Source: UBS estimates

Figure 72: Europe- EBITDA/t trends and forecasts (US$/t)



Source: Company data, UBS estimates

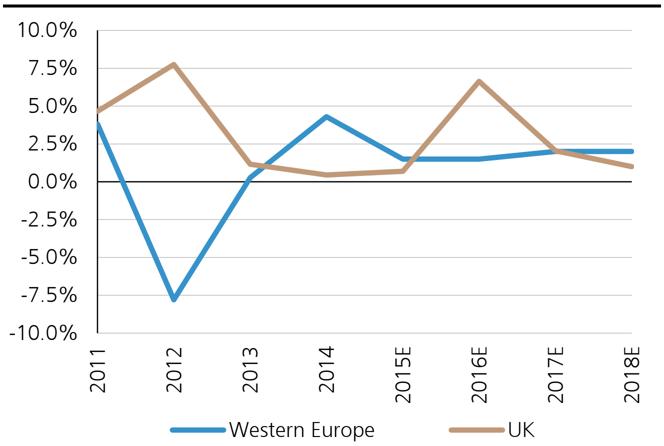
Long products business sale process is ongoing; leaves more attractive exposure to flat products

Following restructuring attempts over several years, Tata Steel announced in 2014 that it has signed an MOU for the disposal of its long products business (based out of the Scunthorpe Plant) to Klesch Group, an investment and restructuring company. Flat products are spread mainly across Rotherham, Port Talbot and Ijmuiden as well as a broader European and global downstream/finishing network.

There is limited disclosure of segmental performance in Europe, but we believe automotive remains the largest end-market. Tata Steel in Europe also has leading positions in tubes, packaging and colour products. We are reasonably positive on automotive prospects in 2015/16, as we show in the chart below, despite noting that UK automotive sales growth is likely to be some way below the regional average.

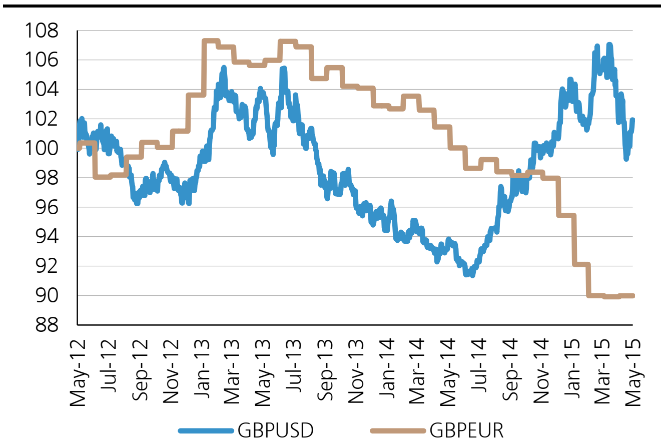
There is some currency pressure in the UK business. While the economic outlook for the UK remains relatively better than mainland Europe, currency movements have been unhelpful: the strong $ effectively increases costs of raw materials but the weak Euro reduces realisations in Europe. More generally currency translation between € and INR is a risk to estimates going forward, in-terms of transactions (Tata Steel does hedge via derivatives) and translation.

Figure 73: Automotive growth – PC & LCV Production



Note: PC – Passenger Cars, LCV – Light Commercial Vehicles.
Source: Global Insights, UBS estimates

Figure 74: GBP vs USD & EUR-indexed to 100



Source: Bloomberg, UBS

Forecasts, assumptions and scenarios

Base case

Base incorporates a subdued FY16 and then a gradual recovery

For India this is consistent with a difficult FY16, mainly due to pricing pressures in the Indian market, and then a gradual recovery, consistent with the UBS macro view on India and our constructive stance on the Indian economy. We assume Kalinganagar is on schedule, but overall India realisations remain under pressure as a result of price pressures in the market from imports/new capacity. In Europe we assume the sale of long products across FY16/17, resulting in temporarily reduced volumes, compensated by better overall prices (from flat/mix benefit). Europe improvement in FY16 offsets India muted profit, but across the forecast period the EBITDA growth is evenly balanced between the two main divisions. On the balance sheet side, we have followed the company's guidance of a 20% reduction in capex in FY16. Debt ratios look stretched in the short-term, especially on debt:equity, but these do reduce from FY16 and we forecast the company finally returning to a positive free cash flow position in FY17.

Upside scenario

We think this scenario is reflective of accelerating domestic growth in India, with some of the structural opportunities we discussed in the main section of this note (eg steel penetration, more infrastructure projects) starting to come through. It would reflect continued solid market conditions in Europe. It assumes faster Kalinganagar ramp up and greater mix benefit from the long products disposal in Europe. Better growth would drive continued capex investment in our view, but stronger operating cashflow mean the group is still FCF positive by FY17.

Downside scenario

We think this scenario is reflective of both weaker economic conditions in Europe and India and problems in execution. Volumes are anaemic in India, both because of muted underlying demand and because Kalinganagar is delayed by another year. In this scenario we see a strong dip in India realisations in FY16 (-10.0%) and then gradual improvement only from FY18, implying that current import pressures continue for a prolonged period. We see a gradual decline in European realisations as benefits of greater mix are competed away domestically or via imports. This all combines to pressurise operating cash-flows. We do believe there is some natural offset from capex that would revert to the underlying maintenance level as projects are postponed. In this case debt ratios remain above 6x throughout the forecast period. Across all three scenarios, the most sensitive number is the realisation assumption. We show sensitivity of our FY16 EBITDA forecast to realisation and volume.

Figure 75: Consolidated EBITDA sensitivity (price)*

		India Steel Realisations				
		36,647	38,575	40,606	42,636	44,768
TSE average realisations	54,318	109,478	121,473	134,098	146,724	159,981
	57,177	111,759	123,754	136,379	149,005	162,262
	60,186	114,160	126,154	138,780	151,406	164,663
	63,195	116,561	128,555	141,181	153,806	167,063
	66,355	119,082	131,076	143,702	156,327	169,584

Source: UBS estimates; * FY16 EBITDA

Figure 76: Consolidated EBITDA sensitivity (volume)*

		India Volumes* (mt)				
		8.0	8.5	9.0	9.5	10.0
TSE volumes (mt)	11	113,989	122,466	130,942	139,419	147,895
	12	117,820	126,296	134,773	143,249	151,726
	13	121,650	130,127	138,603	147,080	155,556
	14	125,481	133,957	142,434	150,910	159,387
	15	129,311	137,788	146,264	154,741	163,217

Source: UBS estimates; * FY16 EBITDA

Figure 77: Tata Steel forecasts, and upside and downside scenario assumptions summary

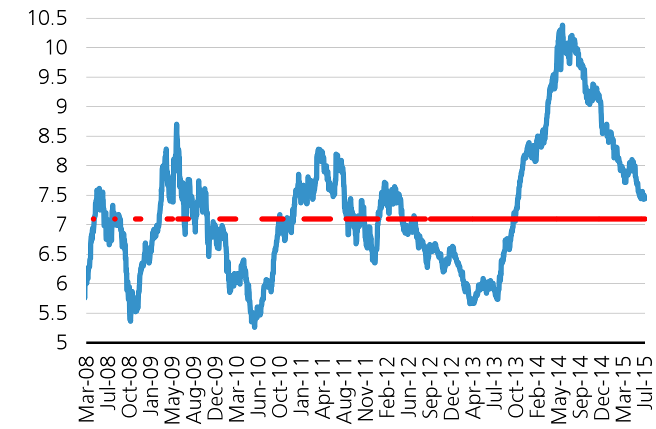
Base	FY11	FY12	FY13	FY14	FY15	FY16E	FY17E	FY18E	FY19E	FY20E
India volumes (mt)	7.9	8.0	8.6	9.5	9.1	9.9	11.1	12.3	12.5	12.6
India realisations (INR)	37,296	42,502	44,253	43,796	45,782	42,153	41,543	42,955	44,843	46,793
India EBITDA (INRm)	114,823	115,368	111,262	128,169	100,088	94,681	100,496	114,828	128,951	141,490
India EBITDA/t (INR)	14,568	14,450	12,890	13,457	10,966	9,574	9,032	9,348	10,357	11,202
Europe volumes (mt)	14.7	14.0	13.1	13.9	13.7	12.5	11.4	11.7	12.1	12.4
Europe realisations (INR)	50,405	58,597	59,688	61,087	58,433	60,186	61,992	63,851	65,767	67,740
Europe EBITDA (INRm)	42,152	17,754	7,640	30,080	42,850	48,016	51,890	62,526	74,264	87,200
Europe EBITDA/t (INR)	2,877	1,266	585	2,170	3,135	3,830	4,565	5,341	6,159	7,021
Group EBITDA (INRm)	167,467	124,168	123,212	164,110	125,358	138,780	149,908	176,458	204,056	231,435
Margin	14.1%	9.3%	9.1%	11.0%	9.0%	10.2%	11.0%	12.0%	13.1%	14.0%
FCF (post capex) (Rs.m)	-80,702	-35,976	-40,294	-63,040	-75,682	-22,213	11,354	26,412	48,627	66,435
Net debt/(cash)	422,035	391,756	451,337	598,081	697,350	715,793	719,617	714,699	691,110	653,388
Net debt:EBITDA (x)	2.52	3.16	3.66	3.64	5.56	5.16	4.80	4.05	3.39	2.82
Upside	**FY11**	**FY12**	**FY13**	**FY14**	**FY15**	**FY16E**	**FY17E**	**FY18E**	**FY19E**	**FY20E**
India volumes (mt)	7.9	8.0	8.6	9.5	9.1	10.0	11.8	12.7	13.1	13.6
India realisations (INR)	37,296	42,502	44,253	43,796	45,782	43,483	45,178	47,141	49,246	51,436
India EBITDA (INRm)	114,823	115,368	111,262	128,169	100,088	100,674	134,647	166,059	197,241	229,440
India EBITDA/t (INR)	14,568	14,450	12,890	13,457	10,966	10,103	11,386	13,062	15,022	16,893
Europe volumes (mt)	14.7	14.0	13.1	13.9	13.7	12.8	11.8	12.4	13.1	13.7
Europe realisations (INR)	50,405	58,597	59,688	61,087	58,433	60,186	61,992	63,851	65,767	67,740
Europe EBITDA (INRm)	42,152	17,754	7,640	30,080	42,850	56,639	68,747	90,229	114,756	142,682
Europe EBITDA/t (INR)	2,877	1,266	585	2,170	3,135	4,432	5,805	7,256	8,789	10,408
Group EBITDA (INRm)	167,467	124,168	123,212	164,110	125,358	158,751	206,567	261,534	319,709	382,749
Margin	14.1%	9.3%	9.1%	11.0%	9.0%	11.8%	14.5%	16.7%	18.8%	20.8%
Upgrade	0.0%	0.0%	0.0%	0.0%	0.0%	14.4%	37.8%	48.2%	56.7%	65.4%
FCF (post capex) (Rs.m)	-80,702	-35,976	-40,294	-63,040	-75,682	-19,092	12,464	41,626	98,137	156,444
Net debt/(cash)	422,035	391,756	451,337	598,081	697,350	679,265	683,121	661,312	586,489	456,855
Net debt:EBITDA (x)	2.52	3.16	3.66	3.64	5.56	4.28	3.31	2.53	1.83	1.19
Downside	**FY11**	**FY12**	**FY13**	**FY14**	**FY15**	**FY16E**	**FY17E**	**FY18E**	**FY19E**	**FY20E**
India volumes (mt)	7.9	8.0	8.6	9.5	9.1	9.1	9.6	10.1	10.6	11.1
India realisations (INR)	37,296	42,502	44,253	43,796	45,782	41,453	41,147	41,812	42,522	43,273
India EBITDA (INRm)	114,823	115,368	111,262	128,169	100,088	75,045	72,810	74,197	75,315	73,829
India EBITDA/t (INR)	14,568	14,450	12,890	13,457	10,966	8,222	7,563	7,327	7,087	6,635
Europe volumes (mt)	14.7	14.0	13.1	13.9	13.7	12.3	10.9	11.0	11.1	11.2
Europe realisations (INR)	50,405	58,597	59,688	61,087	58,433	57,849	57,270	56,698	56,131	55,569
Europe EBITDA (INRm)	42,152	17,754	7,640	30,080	42,850	28,442	31,211	37,450	43,687	49,923
Europe EBITDA/t (INR)	2,877	1,266	585	2,170	3,135	2,314	2,864	3,402	3,929	4,446
Group EBITDA (INRm)	167,467	124,168	123,212	164,110	125,358	102,273	104,021	112,755	121,174	126,945
Margin	14.1%	9.3%	9.1%	11.0%	9.0%	8.4%	9.2%	9.7%	10.2%	10.5%
Downngrade	0.0%	0.0%	0.0%	0.0%	0.0%	-35.6%	-49.6%	-56.9%	-62.1%	-66.8%
FCF (post capex) (Rs.m)	-80,702	-35,976	-40,294	-63,040	-75,682	-21,571	-19,142	-17,836	2,347	17,148
Net debt/(cash)	422,035	391,756	451,337	598,081	697,350	708,921	728,063	745,898	743,552	726,404
Net debt:EBITDA (x)	2.52	3.16	3.66	3.64	5.56	6.93	7.00	6.62	6.14	5.72

Source: Company data; UBS estimates

Valuation

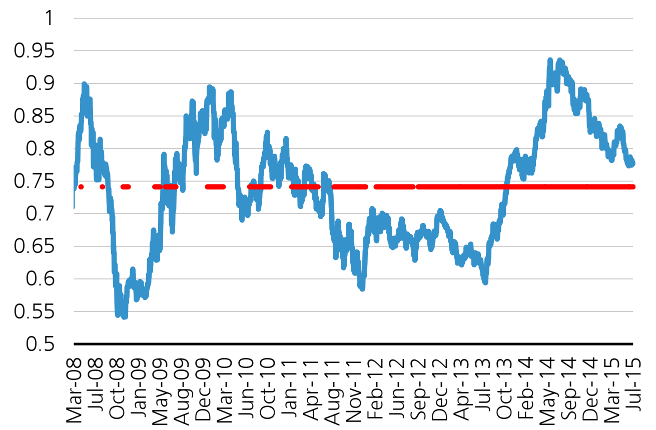
Valuing a cyclical company is difficult, especially one that has invested substantially in the last 5 years, meaning an absence of free cash-flow. This and the wide range of outcomes in our scenarios means long-term, cash-flow based methodologies are inappropriate in our view. The volatility in earnings and leverage is reflected in historic multiples. Our 1 year forward PT is based on mid-cycle multiples on FY17 earnings. We also show upside and downside sensitivity in the table below.

Figure 78: Tata Steel EV/EBITDA (x)



Source: Bloomberg, Company data, UBS estimates; Based on actual 12m fwd rolling numbers

Figure 79: Tata Steel EV/Sales (x)



Source: Bloomberg, Company data, UBS estimates; Based on actual 12m fwd rolling numbers

Figure 80: Valuation scenarios and PT derivation

	FY15	FY16E	FY17E	FY18E	FY19E	FY20E	Comment
Base							
Net sales (Rs.m)	1,395,037	1,357,357	1,359,725	1,475,232	1,559,018	1,647,938	
Multiple (x)	0.8	0.8	0.8	0.8	0.8	0.8	
Per Share (Rs.m)	470	382	380	485	582	698	Rs420 Price target (1 year forward) is average of 2 methodologies on FY17 estimates.
EBITDA (Rs.m)	125,358	138,780	149,908	176,458	204,056	231,435	
Multiple (x)	8.0	8.0	8.0	8.0	8.0	8.0	
Per Share (Rs)	301	357	445	670	923	1,188	
Upside							
Net sales (Rs.m)	1,395,037	1,346,245	1,426,994	1,568,118	1,698,045	1,839,777	
Multiple (x)	0.9	0.9	0.9	0.9	0.9	0.9	
Per Share (Rs.m)	591	545	618	774	975	1,243	We assume rerating in both multiples given the stronger recovery in our earnings. Share price upside is compounded by faster delveraging. Average FY17 valuation is 890 INR.
EBITDA (Rs.m)	125,358	158,751	206,567	261,534	319,709	382,749	
Multiple (x)	9.0	9.0	9.0	9.0	9.0	9.0	
Per Share (Rs)	425	735	1,174	1,706	2,322	3,039	
Downside							
Net sales (Rs.m)	1,395,037	1,210,875	1,133,437	1,158,423	1,184,592	1,211,984	
Multiple (x)	0.8	0.8	0.8	0.8	0.8	0.8	We do not assume de-rating. Cyclical stocks do not typically trade on trough multiples on trough earnings. Earnings pressure and the leverage still enough to drive a c.50% fall in the valuation from current levels. Average FY17 valuation is 190 INR.
Per Share (Rs.m)	470	226	139	142	168	209	
EBITDA (Rs.m)	125,358	102,273	104,021	112,755	121,174	126,945	
Multiple (x)	10.0	10.0	10.0	10.0	10.0	10.0	
Per Share (Rs)	554	232	230	301	391	468	

Source: UBS estimates

Tata Steel (TISC.BO)

Income statement (Rsm)	03/13	03/14	03/15	03/16E	% ch	03/17E	% ch	03/18E	03/19E	03/20E
Revenues	1,347,115	1,486,136	1,395,037	1,357,357	-2.7	1,359,725	0.2	1,475,232	1,559,018	1,647,938
Gross profit	276,350	341,836	312,970	296,802	-5.2	272,259	-8.3	312,974	347,822	383,001
EBITDA (UBS)	123,212	164,110	125,358	138,780	10.7	149,908	8.0	176,458	204,056	231,435
Depreciation & amortisation	(55,753)	(58,412)	(59,436)	(45,806)	-22.9	(46,219)	0.9	(48,868)	(50,549)	(52,328)
EBIT (UBS)	67,459	105,698	65,922	92,974	41.0	103,689	11.5	127,590	153,508	179,107
Associates & investment income	2,753	2,483	7,962	13,185	65.6	15,097	14.5	16,579	18,443	20,951
Other non-operating income	0	0	0	0	-	0	-	0	0	0
Net interest	(37,642)	(40,683)	(48,477)	(44,287)	8.6	(46,866)	-5.8	(48,193)	(48,451)	(45,553)
Exceptionals (incl goodwill)	(73,899)	(276)	(39,287)	0	-	0	-	0	0	0
Profit before tax	(41,329)	67,221	(13,881)	61,872	-	71,920	16.2	95,976	123,500	154,505
Tax	(32,294)	(30,582)	(25,674)	(27,842)	-8.4	(31,645)	-13.7	(41,270)	(51,870)	(63,347)
Profit after tax	(73,624)	36,640	(39,555)	34,030	-	40,275	18.4	54,706	71,630	91,158
Preference dividends	0	0	0	0	-	0	-	0	0	0
Minorities	3,048	(691)	300	600	100.1	0	-	(100)	(200)	(300)
Extraordinary items	0	0	0	0	-	0	-	0	0	0
Net earnings (local GAAP)	(70,576)	35,949	(39,255)	34,630	-	40,275	16.3	54,606	71,430	90,858
Net earnings (UBS)	3,323	36,225	32	34,630	NM	40,275	16.3	54,606	71,430	90,858
Tax rate (%)	0.0	45.5	0.0	45.0	-	44.0	-2.2	43.0	42.0	41.0

Per share (Rs)	03/13	03/14	03/15	03/16E	% ch	03/17E	% ch	03/18E	03/19E	03/20E
EPS (UBS, diluted)	3.42	37.29	0.03	35.65	NM	41.46	16.3	56.21	73.53	93.53
EPS (local GAAP, diluted)	(72.65)	37.01	(40.41)	35.65	-	41.46	16.3	56.21	73.53	93.53
EPS (UBS, basic)	3.42	37.29	0.03	35.65	NM	41.46	16.3	56.21	73.53	93.53
Net DPS (Rs)	8.00	10.00	8.00	12.01	50.2	13.36	11.2	18.91	22.03	25.27
Cash EPS (UBS, diluted)[1]	60.81	97.42	61.22	82.80	35.3	89.04	7.5	106.52	125.57	147.40
Book value per share	375.28	440.76	346.21	354.79	2.5	380.62	7.3	414.71	462.47	526.44
Average shares (diluted)	971.41	971.41	971.41	971.41	0.0	971.41	0.0	971.41	971.41	971.41

Balance sheet (Rsm)	03/13	03/14	03/15	03/16E	% ch	03/17E	% ch	03/18E	03/19E	03/20E
Cash and equivalents	98,597	86,045	25,889	20,022	-22.7	16,197	-19.1	21,116	44,705	82,427
Other current assets	514,744	561,763	552,072	572,901	3.8	585,133	2.1	636,984	678,438	723,152
Total current assets	613,341	647,808	577,961	592,923	2.6	601,331	1.4	658,100	723,143	805,579
Net tangible fixed assets	692,132	859,806	833,709	876,460	5.1	916,145	4.5	938,743	963,553	990,648
Net intangible fixed assets	130,650	157,488	134,075	134,075	0.0	134,075	0.0	134,075	134,075	134,075
Investments / other assets	32,942	51,342	21,032	21,132	0.5	21,232	0.5	21,332	21,432	21,532
Total assets	1,469,064	1,716,445	1,566,777	1,624,589	3.7	1,672,783	3.0	1,752,250	1,842,203	1,951,833
Trade payables & other ST liabilities	423,418	467,372	359,337	388,734	8.2	402,997	3.7	439,543	472,236	507,697
Short term debt	81,146	160,262	36,287	36,287	0.00	36,287	0.00	36,287	36,287	36,287
Total current liabilities	504,563	627,634	395,624	425,021	7.4	439,284	3.4	475,830	508,523	543,984
Long term debt	468,788	523,864	686,952	699,528	1.8	699,528	0.0	699,528	699,528	699,528
Other long term liabilities	114,547	119,500	130,918	138,858	6.1	147,592	6.3	157,200	167,768	179,393
Preferred shares	0	0	0	0	-	0	-	0	0	0
Total liabilities (incl pref shares)	1,087,899	1,270,998	1,213,494	1,263,407	4.1	1,286,404	1.8	1,332,558	1,375,819	1,422,905
Common s/h equity	364,472	428,070	336,244	344,644	2.5	369,741	7.3	402,854	449,245	511,390
Minority interests	16,694	17,377	17,039	16,539	-2.9	16,639	0.6	16,839	17,139	17,539
Total liabilities & equity	1,469,064	1,716,444	1,566,777	1,624,589	3.7	1,672,783	3.0	1,752,250	1,842,203	1,951,833

Cash flow (Rsm)	03/13	03/14	03/15	03/16E	% ch	03/17E	% ch	03/18E	03/19E	03/20E
Net income (before pref divs)	(70,576)	35,949	(39,255)	34,630	-	40,275	16.3	54,606	71,430	90,858
Depreciation & amortisation	55,753	58,412	59,436	45,806	-22.9	46,219	0.9	48,868	50,549	52,328
Net change in working capital	38,407	(12,696)	3,510	16,507	370.3	10,765	-34.8	(5,697)	1,808	2,372
Other operating	88,346	16,550	35,547	(600)	-	0	-	100	200	300
Operating cash flow	111,930	98,216	59,238	96,343	62.6	97,259	1.0	97,878	123,986	145,858
Tangible capital expenditure	(152,224)	(161,255)	(134,920)	(118,556)	12.1	(85,905)	27.5	(71,466)	(75,359)	(79,422)
Intangible capital expenditure	0	0	0	0	-	0	-	0	0	0
Net (acquisitions) / disposals	(2,510)	(961)	29,615	0	-	0	-	0	0	0
Other investing	18,190	(5,814)	30,130	30,000	-	0	-	0	0	0
Investing cash flow	(136,545)	(168,030)	(75,174)	(88,556)	-17.8	(85,905)	3.0	(71,466)	(75,359)	(79,422)
Equity dividends paid	(16,248)	(11,905)	(9,092)	(13,654)	-50.2	(15,179)	-11.2	(21,493)	(25,038)	(28,714)
Share issues / (buybacks)	208	114	0	0	-	0	-	0	0	0
Other financing	1,067	(37)	0	0	-	0	-	0	0	0
Change in debt & pref shares	29,168	58,737	39,113	0	-	0	-	0	0	0
Financing cash flow	14,195	46,909	30,021	(13,654)	-	(15,179)	-11.2	(21,493)	(25,038)	(28,714)
Cash flow inc/(dec) in cash	(10,420)	(22,906)	14,084	(5,867)	-	(3,824)	34.8	4,919	23,589	37,721
FX / non cash items	1,001	10,355	(74,240)	0	-	0	-	0	0	0
Balance sheet inc/(dec) in cash	(9,419)	(12,552)	(60,156)	(5,867)	90.2	(3,824)	34.8	4,919	23,589	37,721

Source: Company accounts, UBS estimates. (UBS) metrics use reported figures which have been adjusted by UBS analysts.[1]Cash EPS (UBS, diluted) is calculated using UBS net income adding back depreciation and amortization.

Tata Steel (TISC.BO)

Valuation (x)	**03/13**	**03/14**	**03/15**	**03/16E**	**03/17E**	**03/18E**	**03/19E**	**03/20E**
P/E (local GAAP, diluted)	NM	8.8	NM	8.3	7.2	5.3	4.0	3.2
P/E (UBS, diluted)	NM	8.7	NM	8.3	7.2	5.3	4.0	3.2
P/CEPS	6.6	3.3	7.4	3.6	3.3	2.8	2.4	2.0
Equity FCF (UBS) yield %	(10.3)	(20.0)	(17.3)	(7.7)	3.9	9.1	16.8	23.0
Net dividend yield (%)	2.0	3.1	1.8	4.0	4.5	6.4	7.4	8.5
P/BV x	1.1	0.7	1.3	0.8	0.8	0.7	0.6	0.6
EV/revenues (core)	0.6	0.6	0.8	0.8	0.8	0.7	0.7	0.6
EV/EBITDA (core)	6.8	5.3	9.0	7.5	7.0	6.0	5.1	4.4
EV/EBIT (core)	12.5	8.3	17.2	11.2	10.2	8.3	6.8	5.6
EV/OpFCF (core)	6.8	5.3	9.1	7.5	7.0	6.0	5.1	4.4
EV/op. invested capital	1.0	1.0	1.1	1.0	1.0	1.0	0.9	0.9

Enterprise value (Rsm)	**03/13**	**03/14**	**03/15**	**03/16E**	**03/17E**	**03/18E**	**03/19E**	**03/20E**
Market cap.	391,540	314,925	438,196	288,886	288,886	288,886	288,886	288,886
Net debt (cash)	421,547	524,709	647,715	706,571	717,705	717,158	702,904	672,249
Buy out of minorities	13,803	17,035	17,208	16,789	16,589	16,739	16,989	17,339
Pension provisions/other	13,750	15,500	31,000	31,000	31,000	31,000	31,000	31,000
Total enterprise value	**840,639**	**872,169**	**1,134,120**	**1,043,246**	**1,054,180**	**1,053,783**	**1,039,779**	**1,009,474**
Non core assets	0	0	0	0	0	0	0	0
Core enterprise value	**840,639**	**872,169**	**1,134,120**	**1,043,246**	**1,054,180**	**1,053,783**	**1,039,779**	**1,009,474**

Growth (%)	**03/13**	**03/14**	**03/15**	**03/16E**	**03/17E**	**03/18E**	**03/19E**	**03/20E**
Revenue	1.4	10.3	-6.1	-2.7	0.2	8.5	5.7	5.7
EBITDA (UBS)	-0.8	33.2	-23.6	10.7	8.0	17.7	15.6	13.4
EBIT (UBS)	-14.6	56.7	-37.6	41.0	11.5	23.1	20.3	16.7
EPS (UBS, diluted)	-83.6	NM	-99.9	NM	16.3	35.6	30.8	27.2
Net DPS	-33.3	25.0	-20.0	50.2	11.2	41.6	16.5	14.7

Margins & Profitability (%)	**03/13**	**03/14**	**03/15**	**03/16E**	**03/17E**	**03/18E**	**03/19E**	**03/20E**
Gross profit margin	20.5	23.0	22.4	21.9	20.0	21.2	22.3	23.2
EBITDA margin	9.1	11.0	9.0	10.2	11.0	12.0	13.1	14.0
EBIT margin	5.0	7.1	4.7	6.8	7.6	8.6	9.8	10.9
Net earnings (UBS) margin	0.2	2.4	0.0	2.6	3.0	3.7	4.6	5.5
ROIC (EBIT)	8.4	11.8	6.5	8.9	9.7	11.6	13.6	15.6
ROIC post tax	0.1	6.4	NM	4.9	5.4	6.6	7.9	9.2
ROE (UBS)	0.8	9.1	0.0	10.2	11.3	14.1	16.8	18.9

Capital structure & Coverage (x)	**03/13**	**03/14**	**03/15**	**03/16E**	**03/17E**	**03/18E**	**03/19E**	**03/20E**
Net debt / EBITDA	3.7	3.6	5.6	5.2	4.8	4.1	3.4	2.8
Net debt / total equity %	118.4	134.3	197.4	198.2	186.2	170.3	148.2	123.5
Net debt / (net debt + total equity) %	54.2	57.3	66.4	66.5	65.1	63.0	59.7	55.3
Net debt/EV %	53.7	68.6	61.5	68.6	68.3	67.8	66.5	64.7
Capex / depreciation %	NM	NM	NM	NM	185.9	146.2	149.1	151.8
Capex / revenue %	11.3	10.9	9.7	8.7	6.3	4.8	4.8	4.8
EBIT / net interest	1.8	2.6	1.4	2.1	2.2	2.6	3.2	3.9
Dividend cover (UBS)	0.4	3.7	0.0	3.0	3.1	3.0	3.3	3.7
Div. payout ratio (UBS) %	233.9	26.8	NM	33.7	32.2	33.6	30.0	27.0

Revenues by division (Rsm)	**03/13**	**03/14**	**03/15**	**03/16E**	**03/17E**	**03/18E**	**03/19E**	**03/20E**
Europe (Net)	780,120	846,660	798,780	754,438	704,606	747,517	793,041	841,337
India (Net)	381,994	417,110	417,850	416,874	462,223	527,627	558,337	591,030
Natsteel Asia (Net)	93,930	121,280	81,880	88,404	95,254	102,447	109,999	117,929
Other Businesses (Net)	46,711	52,485	47,927	49,041	49,041	49,041	49,041	49,041
Tata Steel Thailand (Net)	44,360	48,600	48,600	48,600	48,600	48,600	48,600	48,600
Others	0	0	0	0	0	0	0	0
Total	**1,347,115**	**1,486,136**	**1,395,037**	**1,357,357**	**1,359,725**	**1,475,232**	**1,559,018**	**1,647,938**

EBIT (UBS) by division (Rsm)	**03/13**	**03/14**	**03/15**	**03/16E**	**03/17E**	**03/18E**	**03/19E**	**03/20E**
Others	67,459	105,698	65,922	92,974	103,689	127,590	153,508	179,107
Total	**67,459**	**105,698**	**65,922**	**92,974**	**103,689**	**127,590**	**153,508**	**179,107**

Source: Company accounts, UBS estimates. (UBS) metrics use reported figures which have been adjusted by UBS analysts.

JSW Steel

Geared (but not too much) to India growth

Attractively positioned in the India market

JSW is focused on the Indian domestic market (exports c.25% of sales) and on flat products (c.85% of sales). It is one of the market leaders in terms of production and has a unique base in the south and west of the country. Production capacity in two locations (Vijayanagar and Dolvi) is diverse and technologically advanced (note the 15% stake of Japanese firm JFE and the strategic partnership) with further scope for cheaper brownfield expansion should market conditions support this.

Pressures of expansion easing; pricing the key risk

Like the rest of the major listed Indian steel companies, JSW has invested in capacity expansion in recent years. New capacity comes on stream in the next 12-24 months and the associated capex will reduce from here. However, while JSW was relatively the most optimistic on realisations (average selling price) into FY16, this is the key risk to profitability, especially as domestic capacity is set to grow and imports remain high.

Differentiated business model; less gearing, more options

If you believe in the India growth story, then there is a case for buying into the greater leverage at SAIL or JSPL. It is hard to disagree: if prices recover and the hoped-for infrastructure/urbanisation boom comes, then the rising tide will lift all boats. Yet we prefer the security of the higher starting point at JSW in terms of profitability, and lower levels of debt. We like the simplicity of the business model and the relative lack of direct risk from external factors (unions, raw material supply etc). All this means options: whether brownfield expansion, bidding for mines in potential auctions, or acquiring new assets. Also, we think JSW's track record of profitability/efficiency leaves it best-placed to maintain/grow profit if the Indian recovery remains tepid.

Valuation: good upside to fair value; initiate coverage with a Buy rating

We base our price target on mid-cycle EV/Sales and EV/EBITDA multiples on FY17E earnings and we see sufficient upside to drive our Buy rating. The upside and downside risk is evenly balanced (valuations of Rs2,040 and Rs520, respectively), not unexpected for a company early in the cycle with both operational and financial leverage.

Equities

India
Steel

12-month rating	**Buy**
	Prior: Not Rated
12m price target	**Rs1,200.00**
	Prior: -
Price	**Rs876.50**

RIC: JSTL.BO **BBG:** JSTL IB

Trading data and key metrics

52-wk range	Rs1,347.05-839.35
Market cap.	Rs212bn/US$3.34bn
Shares o/s	242m (ORD)
Free float	44%
Avg. daily volume ('000)	750
Avg. daily value (m)	Rs685.1
Common s/h equity (03/16E)	Rs240bn
P/BV (03/16E)	0.9x
Net debt / EBITDA (03/16E)	3.6x

EPS (UBS, diluted) (Rs)

	From	To	% ch	Cons.
03/16E	-	84.28	-	88.76
03/17E	-	109.96	-	108.94
03/18E	-	155.85	-	127.57

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Highlights (Rsm)	03/13	03/14	03/15	03/16E	03/17E	03/18E	03/19E	03/20E
Revenues	382,097	512,196	529,715	520,058	555,263	612,834	673,862	738,123
EBIT (UBS)	42,664	59,829	59,678	60,973	68,219	82,028	96,429	114,695
Net earnings (UBS)	13,001	21,321	18,110	20,373	26,581	37,671	49,290	63,555
EPS (UBS, diluted) (Rs)	58.27	88.20	74.92	84.28	109.96	155.85	203.91	262.92
DPS (Rs)	10.00	11.00	11.00	11.00	11.00	19.00	24.00	29.00
Net (debt) / cash	(198,281)	(347,956)	(358,050)	(349,900)	(329,072)	(306,790)	(280,276)	(251,860)

Profitability/valuation	03/13	03/14	03/15	03/16E	03/17E	03/18E	03/19E	03/20E
EBIT margin %	11.2	11.7	11.3	11.7	12.3	13.4	14.3	15.5
ROIC (EBIT) %	12.7	13.1	10.5	10.5	11.6	13.9	15.9	18.3
EV/EBITDA (core) x	5.5	5.8	6.7	5.7	5.0	4.3	3.7	3.1
P/E (UBS, diluted) x	12.5	8.8	15.2	10.4	8.0	5.6	4.3	3.3
Equity FCF (UBS) yield %	(7.8)	(30.0)	(2.5)	5.5	11.5	13.2	15.9	17.4
Net dividend yield %	1.4	1.4	1.0	1.3	1.3	2.2	2.7	3.3

Source: Company accounts, Thomson Reuters, UBS estimates. Metrics marked as (UBS) have had analyst adjustments applied. Valuations: based on an average share price that year, (E): based on a share price of Rs876.50 on 07 Jul 2015 22:38 HKT

JSW Steel

Price Target **Rs1,200, Buy**

Pivotal Questions

Q: How is JSW positioned in terms of capacity?

Expansion via acquisitions and mostly brownfield expansion is largely complete and leaves JSW as a market leader with well diversified and well invested capacity. It has a broad spread of end markets and products and is thus well-placed ahead of any demand recovery in India. It has options to expand further via existing facilities or acquisitions, should market conditions allow.

Q: Can it withstand the price/cost pressures?

JSW's current model of non-captive raw materials is unique in its main peer group. This allows it the benefits of low raw materials prices, but lack of security is a risk, while it also limits operating leverage into an upturn. JSW seeks to counter this by being the lowest-cost/most efficient producer in India.

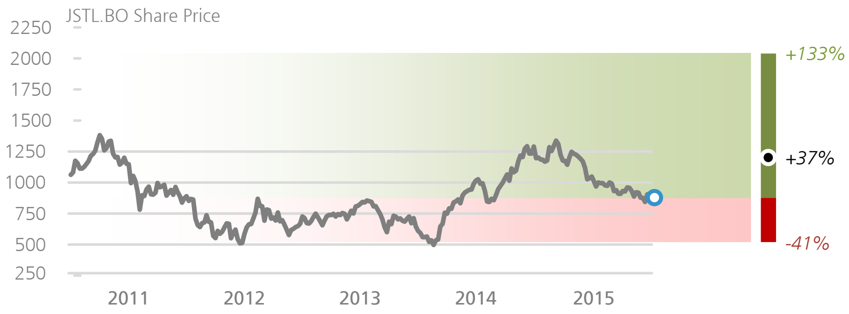
Q: How secure is the debt position?

We regard JSW's debt position as relatively secure as capacity expansion programmes come to an end and capex reduces. Faster deleveraging is dependent on a demand recovery in India.

Investment Thesis

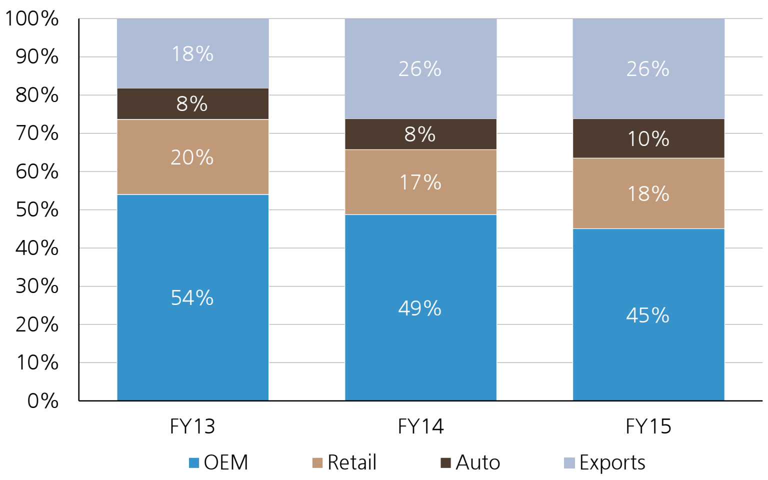
We believe JSW presents a balanced way to play the favourable long-term prospects in the Indian steel market. It is focused on India with a successful programme of capacity expansion almost complete. It is a market leader in terms of efficiency and profitability which leaves it well positioned to drive earnings/cash if market conditions remain tepid. And while debt is high relative to history, this is set to reduce from FY16E. Risks remain over its relative lack of raw material security compared with some peers, although this has been an advantage in a period of low prices.

Pricing Paths and Upside/Downside Skew



	Price (+12 mo.)		EPS (FY16e)		P/E
+133%	2040Rs upside	=	113Rs	*	18.1
+37%	1200Rs base case	=	84Rs	*	14.2
-41%	520Rs downside	=	31Rs	*	16.9
	877Rs price (07 Jul 2015)	=	89Rs cons EPS (FY16e)	*	9.9 P/E

End Market Exposure by Volume (FY13-15)



Scenario Assumptions

Upside (Rs2,040) – Reflects accelerating domestic growth aiding steel demand in India. We see lower pressure on realisations in FY16E and a subsequent stronger pick up. Improved cash flows will help in reducing leverage ratios to <.3x by FY17E.

Base case (Rs1,200) – We incorporate solid volumes driven by new capacity, but falling FY16E realisations (-7.5%) due to higher market capacity and imports, but a gradual recovery thereafter. Profitability holds in FY16E followed by a gradual improvement. Leverage ratios stabilise in FY16E and then decline on falling capex.

Downside (Rs520) – Reflects subdued domestic growth and ongoing import pressure impacting realisations in FY16E and FY17E (FY16 forecast -15% YoY). This and slower subsequent recovery translates to lower cash flows with leverage ratios worsening in FY16E and FY17E.

Source for this page: Thomson Financial, UBS estimates

Q: How is JSW positioned in terms of capacity?

Acquisitions and almost complete (and mostly brownfield) expansion have left JSW with the largest capacity in India today. It has a broad spread of end markets, products and a meaningful export business. Overall it particularly well-placed ahead of any demand recovery in India.

Well invested and technologically advanced

Unique base in South and West of India

JSW capacity is concentrated in 2 main locations in India and is focused on the Southern and Western part of the country, whereas the majority of producers are in the North and East. Vijayanagar is by far the largest plant and is a relatively new facility having only been commissioned in 1997. The Dolvi plant was acquired by JSW when it took over Ispat Steel, originally founded by the Mittal family in 1984. JSW also acquired the Salem facility in 2004 when it took over SISCO, which like Ispat was a company in financial and operational difficulty.

Figure 81: JSW steel crude steel capacity by plant – past, present and future

Plant	Capacity today*	Capacity 2010	Target Capacity	Aspirational Capacity	Major Product	Integrated
Dolvi	3.3	0	5.0	15.0	Flat	Yes
Vijayanagar	10.1	6.8	12.0	20.0	Flat	Yes
Salem	1.0	1.0	1.2	1.2	Long (auto)	Yes
Salboni	0.0	0.0	0.0	10.0	N/A	Yes
Ranchi	0.0	0.0	0.0	10.0	N/A	Yes
JSW Steel	**14.4**	**7.8**	**18.2**	**56.2**		

Source: Company data; UBS estimates; press; capacity today is last reported; aspirational capacity is mooted longer term projects

Range of production technology; diverse downstream assets

The combination of organic and acquired growth has left JSW with a diverse, but well-invested asset base. It combines blast furnace and Corex steel production technology at Vijayanagar and Dolvi with CONARC at Dolvi. There is a wider network of downstream and coating and finishing plants, both adjacent to Dolvi and separately at Kalmeshwar in central India.

Good signs of innovation via JFE partnership, automotive segment, beneficiation technology

One unique feature of current capacity is the involvement of JFE. It holds a 15% equity stake in JSW and has board representation. There is also a strategic partnership which gives JSW access to JFE's expertise. This has been particularly important in growing JSW's expertise in the automotive market (in FY14 JSW stated the partnership had allowed them to develop two new auto grade steels) and sharing in other areas of best practice such as plant efficiency. Other areas of innovation at JSW include its development of a beneficiation plant at Vijayanagar which allows the use of low grade ore (45-55% Fe) in steel production.

Final steps in FY16/FY17 of increasing overall group capacity by c.4mt

Recent programmes of capacity addition are largely complete. By FY17 JSW is looking to add c.2mt of capacity to Vijayanagar via a combination of blast furnace refurbishment/expansion and associated melting shops and rolling mills, although this remains subject to environmental clearance. The company expects completion by FY17. At Dolvi, JSW is increasing capacity from c.3mt to 5mt again via blast furnace modification, a new sinter plant and new billet caster and bar mill, and anticipates completion in the second half of FY16. There is a moderate capacity expansion planned at Salem (some 0.2mt) linked to a blast furnace modification.

Options going forward

It will take some time or much better market conditions for JSW to make the next step in capacity addition

Overall, the strategy of "selective growth" that the company follows is reassuring. Organically, JSW has aspirations to expand beyond its 18mt near term target. It has previously spoken of plans to expand Dolvi to around 15mt and to double Vijayanagar capacity to 20mt. We would not see either of these projects as likely in the short-term given the uncertain recovery path in India and the relatively high levels of debt.

It is reassuring though that JSW has the possibility of further meaningful capacity expansion via the cheaper brownfield route, should market conditions allow. The company believes its capacity addition so far at Vijayanagar has been materially below the industry benchmark of $1000/t. JSW has previously targeted further greenfield plants in both Jharkhand and West Bengal and signed MOUs with the respective state governments. However issues around approvals and raw materials supply externally and funding internally mean neither of these is likely in the short/medium-term in our view.

JSW still the most likely acquirer in the Indian market

Inorganic growth in capacity is part of the JSW Steel strategy, where opportunities can be shown to be value accretive. We have described the SISCO and Ispat transactions above, in both cases distressed assets. Given the high leverage at some of the smaller Indian steel-makers (see the debt section of our sector note above) it is possible that further assets become available. For example M&A sources in India (DealCurry/ET news) suggested in December 2014 that JSW was considering buying assets of Bhushan Steel, specifically its unit in Odisha.

Q: Can JSW withstand market cost/price pressures?

JSW's model of non-captive raw materials is unique in its main peer group. It allows it to see the benefits of low materials prices, but lack of security is a risk. It also limits operating leverage, a situation JSW seeks to counter by being the lowest-cost/most efficient producer in India.

Pure "convertor"; indirect hit from iron ore availability issues

JSW stands out amongst its immediate peers in traditionally having had no captive source of raw material supply. Its strategy has been to operate as a pure convertor buying iron ore domestically mainly from Karnataka (its main Vijayanagar plant is located close to the Bellary district iron ore mines). But there are signs this is changing. The company was severely impacted by the Karnataka mining ban in 2011; while it sourced iron ore effectively from other parts of India which were operating and additional imports, there was an adverse cost impact.

Figure 82: JSW Steel – raw material supply summary

Domestic				
Mine	**State**	**Type**	**Capacity (MT)**	**Comment**
Moitra Coal Block	Jharkhand	Thermal	1	Won in the recent coal block auction for Rs1,512/t
International				
Asset	**Location**	**Type**	**Capacity (MT)**	**Comment**
US Coal	West Virginia	Coking coal	1	7 mines (2 operational).
Chile Iron Ore	Atacama	Iron ore	1	Original JV with SFM in 2008. Shutdowns considered?
Mozambique	Tete	Coking coal/iron ore	N/A	5 licences at exploration stage only.

Source: Company data, Ministry of the Environment, UBS estimates

Recent developments in Indian minerals policy have presented the company with some options which could be potentially positive. Rules for the auction of mines have been released by the Ministry of Mines and the auction of cancelled "Category C" mines in Karnataka is imminent, but the precise timetable is not yet known. We would expect JSW to participate in any auction process: the Economic Times reported in June 2014 that the company had identified 16/51 mines as targets. JSW already won the Moitra coal block in the last auctions.

JSW looking to secure some captive raw materials in more open procurement environment under new government

Captive supply historically meant competitive raw materials costs, but this advantage has been eroded by depressed international prices. Procurement of iron ore mines would be positive for JSW in our view: even without this cost advantage it would give it more security of supply. Yet any benefit would be marginal: JSW stated in Q4 that Karnataka was expected to produce some 25mt in FY16, vs the Supreme Court cap of 30mt and peak production (pre-mining ban) of 46mt. JSW believes it can feed its current capacity with Karnataka supply in FY16 as well as its own stock. So greater iron ore availability and visibility should help lower domestic prices which have remained high, but we would not expect the sourcing strategy of JSW to materially change in the near-term.

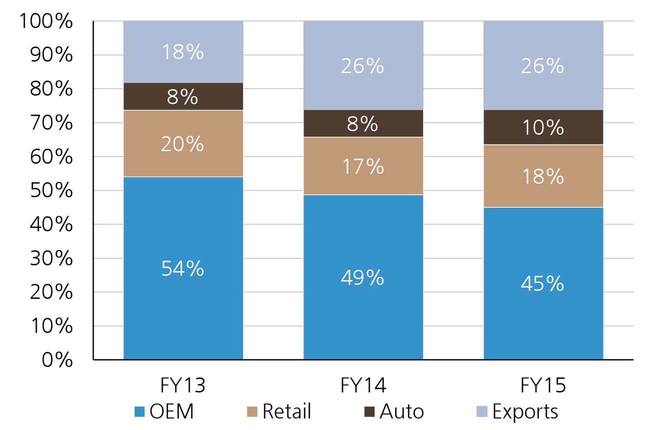
But marginal benefit from new captive supply only in the short-term

Mix and efficiency helps mitigate pricing pressures

The business is focused on flat products with a broad 85:15 flat:long volume ratio being maintained historically with some fluctuations. There is a similar mix of import to exports with a broad 80:20 turnover ratio being observed over the last 8 years. So we concur with the company's view that it has domestic market leadership currently, alongside flexibility in terms of products and distribution. The proportion of value added and special products (which JSW defines as anything that is not commodity HRC) has been rising steadily and was 33% of revenue for FY15. The company has aspirations for this to reach 45-50% in due course. Around 25% of domestic sales come from the retail channel, a wide network of branded distribution outlets. Around 15% of domestic sales come from the automotive segment, which is the company's single biggest end-market channel.

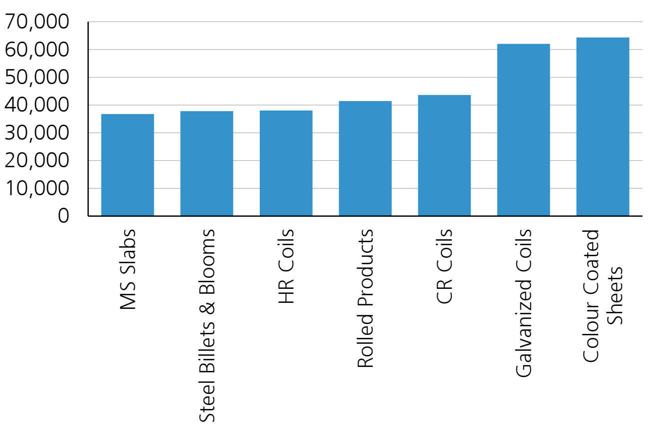
Range of products and end markets benefits realisations

Figure 83: Product mix proportion by end market



Source: Company data, UBS

Figure 84: Gross realisation by product (Rs)



Source: Company data, UBS

Finally, we note JSW's leading position in terms of cost efficiency relative to peers, something we believe it has focused on as a result of its more recent development and its different raw material strategy. JSW stands out in the peer group in terms of its lower employee cost in India and lower cost of conversion (all costs excluding raw material costs). While its realisations (average selling price per ton) are at the lower end of the peer group, overall EBITDA/t is at the upper end.

Figure 85: Per ton cost comparison by company (India steel operations only)

Per Ton	FY06	FY07	FY08	FY09	FY10	FY11	FY12	FY13	FY14	FY15
Realizations (US$/t) - JSW Steel	660	707	832	895	673	842	861	737	638	608
Realizations (US$/t) - Tata Steel	753	783	999	989	819	966	1020	886	776	731
Realizations (US$/t) - SAIL	559	628	794	842	704	801	844	736	639	615
Raw Material Cost (US$/t) - JSW Steel	318	333	406	535	385	513	556	466	379	344
Raw Material Cost (US$/t) - Tata Steel	145	156	196	235	190	205	241	230	184	204
Raw Material Cost (US$/t) - SAIL	191	205	228	303	269	355	406	326	284	233
Employee Cost (US$/t) - JSW Steel	14	15	20	18	13	19	17	14	11	12
Employee Cost (US$/t) - Tata Steel	67	65	81	94	77	93	92	84	68	81
Employee Cost (US$/t) - SAIL	81	92	157	162	95	144	146	143	132	132
Conversion Cost (US$/t) - JSW Steel	148	139	153	155	115	135	137	126	123	135
Conversion Cost (US$/t) - Tata Steel	245	253	308	289	259	290	341	314	285	272
Conversion Cost (US$/t) - SAIL	155	148	181	204	170	159	178	185	165	195
Total Operating Cost (US$/t) - JSW Steel	480	487	578	709	513	667	710	606	514	491
Total Operating Cost (US$/t) - Tata Steel	458	474	585	618	526	588	673	628	537	556
Total Operating Cost (US$/t) - SAIL	426	446	565	669	534	658	730	654	580	559
Total Opex Ex-Raw Material (US$/t) - JSW Steel	162	154	173	174	128	154	154	140	135	147
Total Opex Ex-Raw Material (US$/t) - Tata Steel	313	318	390	383	336	383	433	398	354	352
Total Opex Ex-Raw Material (US$/t) - SAIL	236	241	338	366	264	302	324	328	296	327
EBITDA (US$/t) - JSW Steel	**180**	**221**	**253**	**186**	**160**	**175**	**151**	**131**	**124**	**117**
EBITDA (US$/t) - Tata Steel	**296**	**309**	**414**	**372**	**293**	**377**	**347**	**258**	**238**	**175**
EBITDA (US$/t) - SAIL	**133**	**182**	**228**	**173**	**170**	**143**	**115**	**81**	**59**	**56**

Note: Conversion cost is Total Operating cost less raw materials and employee. Source: Company data, UBS

Q: How secure is the debt position?

We regard JSW's debt position as relatively secure as capacity expansion programmes come to an end and capex reduces, although material deleveraging is dependent on a demand recovery in India.

Debt is peaking; helpful recent partial refinancing; reasonable headroom against covenants

JSW has used leverage to fund its growth ambitions, through a combination of capex to fund the capacity expansions we have described and as a relatively active participant in M&A. The situation should ease as capex reduces, while the partial refinancing completed in Q315 ($500m bond issue) is reassuring. Yet finding good return investment opportunities is as important to the company as reducing the absolute levels of debt (which could make some investors nervous in our view). Like its peers in the India steel sector, JSW has not made positive free cash flow for a number of years. However there is reasonable headroom against covenants (which broadly sit, at the standalone level only, at 3.75x net debt: EBITDA and 1.75x debt:equity, with varying interest cover covenants across the different lines).

Figure 86: Cash flow and debt summary (consolidated)

Rs.m	FY11	FY12	FY13	FY14	FY15	FY16E	FY17E	FY18E	FY19E	FY20E
EBITDA	**48,679**	**61,019**	**65,039**	**91,655**	**94,023**	**98,318**	**108,564**	**121,373**	**134,774**	**152,040**
Net change in working capital	-13,137	-10,622	5,888	-35,195	-10,000	-361	-6,885	-7,956	-7,519	-7,050
Tax paid	-4,264	-4,071	-5,105	-4,038	-8,194	-9,592	-12,645	-18,073	-23,704	-30,596
Interest (paid)/received	-9,540	-10,873	-14,692	-23,791	-26,830	-24,778	-23,005	-20,598	-18,159	-15,686
Other	-2,841	-11,020	-7,282	-26,264	0	0	0	0	0	0
Net capital expenditure	-52,994	-40,660	-56,180	-57,443	-56,000	-52,000	-41,764	-46,764	-51,764	-61,764
FCF	**-34,096**	**-16,227**	**-12,333**	**-55,076**	**-7,001**	**11,588**	**24,265**	**27,982**	**33,629**	**36,944**
Dividends (common)	-2,397	-3,501	-2,269	-3,155	-3,437	-3,437	-3,437	-5,700	-7,114	-8,528
FCF Post Divi	**-36,494**	**-19,728**	**-14,603**	**-58,231**	**-10,438**	**8,150**	**20,827**	**22,282**	**26,515**	**28,416**
Gross debt	167,552	201,881	216,250	355,265	377,186	367,186	357,186	347,186	337,186	327,186
Cash and equivalents	-23,063	-32,510	-17,969	-7,310	-19,136	-17,286	-28,113	-40,395	-56,910	-75,326
Net debt	**144,489**	**169,372**	**198,281**	**347,956**	**358,050**	**349,900**	**329,072**	**306,790**	**280,276**	**251,860**
Net debt:EBITDA (x)	3.0	2.8	3.0	3.8	3.8	3.6	3.0	2.5	2.1	1.7
Debt:Equity (x)	0.9	1.0	1.2	1.6	1.6	1.5	1.2	1.0	0.8	0.6

Source: Company data; UBS estimates

Forecasts, assumptions, scenarios

Base case

Our base case anticipates a difficult FY16, mainly due to pricing pressures in the Indian market, and then a gradual recovery, consistent with the UBS macro view on India and our constructive stance on the Indian economy. We expect FY16 to be a broadly stable year in terms of profitability, before a recovery thereafter. Despite company optimism over Q116 (realisations "approaching stability") we anticipate a 7.5% fall in realisations in FY16 and only a gradual stabilisation in FY17, before modest improvement thereafter The volume growth we forecast is somewhat below the company guidance for FY16 of 6/7%. We do not see any real acceleration in volume growth through our forecast period. On the balance sheet and cash side, we do expect the leverage position to gradually improve. Leverage ratios in FY15 were broadly stable YoY and should improve further due to reduced capex guidance and stabilising interest costs.

Base case incorporates further pricing pressure in FY16, but solid profitability and a long term recovery

Upside case

This is reflective of accelerating domestic growth in India, with some of the structural opportunities we discussed in the main section of this note (eg steel penetration, more infrastructure projects) starting to come through. It incorporates both more modest pressure on realisations in the short-term and better subsequent growth thereafter also as the company is successful in improving its mix. The better earnings clearly help the operating cash-flows. Some of this is offset by higher working capital requirements as the company funds the higher volumes of raw materials. However we do not believe there would need to be a material increase in capex – the ramp in capacity to 18mt is already included in the company's capex guidance and maintenance capex is only Rs10-12bn pa.

Upside scenario implies a milder FY16 and strong India growth thereafter

Downside case

This reflects subdued domestic growth that we see in the short-term continuing. We look for a big step down in realisations in FY16 (-15%) to show the ongoing impact of cheap imports and adverse impact / irrational market behaviour post capacity additions. We see very gradual improvement after this. This negative scenario would put pressure on cash-flow and would drive an increase in net debt and ratios in FY16 and FY17. This is even assuming a reduction in capex as the company would likely scale back on expansion projects and downstream investment and a working capital inflow from lower raw material requirements.

Downside scenario reflects tepid India growth continuing and more pricing pressure

Across all three scenarios, the most sensitive number is the realisation assumption. For illustrative purposes, we show the sensitivity of our FY16 EBITDA forecast to different realisation assumptions.

Figure 87: FY16 EBITDA* Sensitivity

		Realisations				
		37,353	36,395	35,437	34,479	33,522
Volume growth	0.0%	103,044	92,828	82,611	72,395	62,178
	2.0%	108,577	98,130	87,683	77,236	66,789
	4.0%	114,109	103,431	92,754	82,077	71,399
	6.0%	119,641	108,733	97,825	86,917	76,010
	8.0%	125,173	114,035	102,897	91,758	80,620

Note:* Standalone EBITDA only. Source: UBS estimates

Figure 88: UBS forecast and scenario assumptions – JSW Steel (Standalone business only; 95% of FY15 EBITDA)

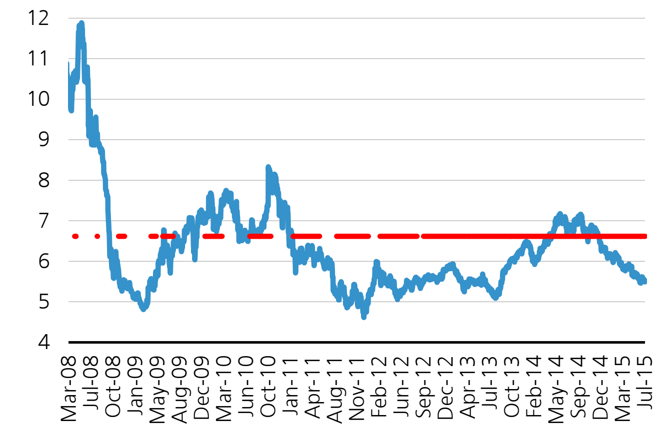
Base	FY11	FY12	FY13	FY14	FY15	FY16E	FY17E	FY18E	FY19E	FY20E
Volume (t)	6,099	7,815	8,873	11,801	12,030	12,511	13,137	13,925	14,760	15,646
Growth	n/a	28%	14%	33%	2%	4%	5%	6%	6%	6%
Realisations (Rs)	38,313	41,103	39,998	38,386	38,310	35,437	36,146	37,953	39,661	41,247
Realisations ($)	842	861	737	638	608	562	574	602	630	655
Growth	n/a	7%	-3%	-4%	0%	-8%	2%	5%	4%	4%
Net revenue (Rs.m)	241,059	343,681	382,097	512,196	529,715	520,058	555,263	612,834	673,862	738,123
Raw materials spread (INR)	14,986	14,565	14,723	15,543	16,644	17,218	18,091	18,936	19,757	21,165
EBITDA (Rs.m)	48,523	56,308	63,088	87,826	88,716	92,754	102,729	115,255	128,358	146,623
Margin	20.1%	16.4%	16.5%	17.1%	16.7%	17.8%	18.5%	18.8%	19.0%	19.9%
EBITDA/t	7,956	7,205	7,110	7,442	7,375	7,414	7,820	8,277	8,696	9,371
EBITDA/t (USD)	175	151	131	124	117	118	124	131	138	149
Other EBITDA	156	4,711	1,951	3,829	5,307	5,564	5,834	6,118	6,416	5,416
Consolidated EBITDA	**48,679**	**61,019**	**65,039**	**91,655**	**94,023**	**98,318**	**108,564**	**121,373**	**134,774**	**152,040**
FCF (post capex) (Rs.m)	-34,096	-16,227	-12,333	-55,076	-7,001	11,588	24,265	27,982	33,629	36,944
Net debt/(cash)	144,489	169,372	198,281	347,956	358,050	349,900	329,072	306,790	280,276	251,860
Net debt:EBITDA (x)	3.0	2.8	3.0	3.8	3.8	3.6	3.0	2.5	2.1	1.7
Upside	**FY11**	**FY12**	**FY13**	**FY14**	**FY15**	**FY16E**	**FY17E**	**FY18E**	**FY19E**	**FY20E**
Volume (t)	6,099	7,815	8,873	11,801	12,030	12,511	13,262	14,323	15,469	16,706
Growth	n/a	28%	14%	33%	2%	4%	6%	8%	8%	8%
Realisations (Rs)	38,313	41,103	39,998	38,386	38,310	36,395	38,215	41,081	44,162	46,811
Realisations ($)	842	861	737	638	608	578	607	652	701	743
Growth	n/a	7%	-3%	-4%	0%	-5%	5%	8%	8%	6%
Net revenue (Rs.m)	241,059	343,681	382,097	512,196	529,715	455,343	506,796	588,391	683,122	782,038
Raw materials spread (INR)	14,986	14,565	14,723	15,543	16,644	17,511	18,197	19,724	21,466	23,815
EBITDA (Rs.m)	48,523	56,308	63,088	87,826	88,716	98,628	111,145	141,742	179,770	233,048
Margin	20.1%	16.4%	16.5%	17.1%	16.7%	21.7%	21.9%	24.1%	26.3%	29.8%
EBITDA/t	7,956	7,205	7,110	7,442	7,375	7,883	8,381	9,896	11,622	13,950
EBITDA/t (USD)	175	151	131	124	117	125	133	157	184	221
Other EBITDA	156	4,711	1,951	3,829	5,307	11,643	12,776	14,023	15,394	16,902
Consolidated EBITDA	**48,679**	**61,019**	**65,039**	**91,655**	**94,023**	**110,271**	**123,921**	**155,764**	**195,164**	**249,950**
Upgrade	**0%**	**0%**	**0%**	**0%**	**0%**	**12%**	**14%**	**28%**	**45%**	**64%**
FCF (post capex) (Rs.m)	-34,096	-16,227	-12,333	-55,076	-7,001	14,100	28,988	46,545	69,540	99,695
Net debt/(cash)	144,489	169,372	198,281	347,956	358,050	348,917	326,347	287,671	227,450	138,524
Net debt:EBITDA (x)	3.0	2.8	3.0	3.8	3.8	3.2	2.6	1.8	1.2	0.6
Downside	**FY11**	**FY12**	**FY13**	**FY14**	**FY15**	**FY16E**	**FY17E**	**FY18E**	**FY19E**	**FY20E**
Volume (t)	6,099	7,815	8,873	11,801	12,030	12,271	12,516	12,766	13,022	13,282
Growth	n/a	28%	14%	33%	2%	2%	2%	2%	2%	2%
Realisations (Rs)	38,313	41,103	39,998	38,386	38,310	32,564	32,564	33,215	33,879	34,557
Realisations ($)	842	861	737	638	608	517	517	527	538	549
Growth	n/a	7%	-3%	-4%	0%	-15%	0%	2%	2%	2%
Net revenue (Rs.m)	241,059	343,681	382,097	512,196	529,715	399,577	407,569	424,034	441,165	458,988
Raw materials spread (INR)	14,986	14,565	14,723	15,543	16,644	15,846	16,716	17,980	19,258	20,225
EBITDA (Rs.m)	48,523	56,308	63,088	87,826	88,716	71,772	74,285	81,119	87,502	89,034
Margin	20.1%	16.4%	16.5%	17.1%	16.7%	18.0%	18.2%	19.1%	19.8%	19.4%
EBITDA/t	7,956	7,205	7,110	7,442	7,375	5,849	5,935	6,354	6,720	6,703
EBITDA/t (USD)	175	151	131	124	117	93	94	101	107	106
Other EBITDA	156	4,711	1,951	3,829	5,307	0	0	0	0	0
Consolidated EBITDA	**48,679**	**61,019**	**65,039**	**91,655**	**94,023**	**71,772**	**74,285**	**81,119**	**87,502**	**89,034**
Downgrade	**0%**	**0%**	**0%**	**0%**	**0%**	**-27%**	**-32%**	**-33%**	**-35%**	**-41%**
FCF (post capex) (Rs.m)	-34,096	-16,227	-12,333	-55,076	-7,001	99	9,954	12,787	15,571	12,659
Net debt/(cash)	144,489	169,372	198,281	347,956	358,050	358,277	348,649	336,188	320,944	308,611
Net debt:EBITDA (x)	3.0	2.8	3.0	3.8	3.8	5.0	4.7	4.1	3.7	3.5

Source: Company data; UBS estimates

Valuation

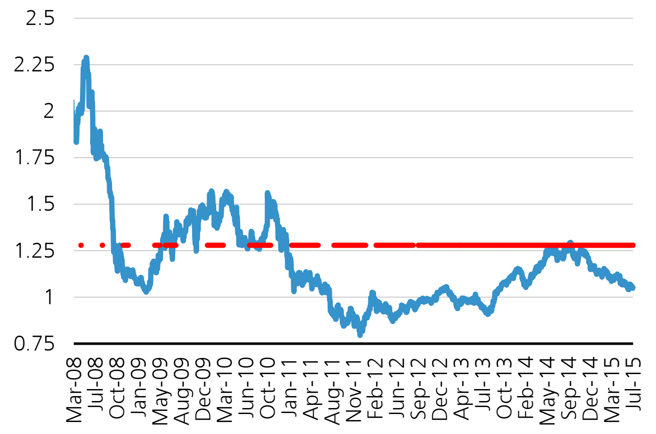
Valuing a cyclical company is difficult, especially one that has invested substantially in the last 5 years, meaning an absence of free cash-flow. This and the wide range of outcomes in our scenarios means long-term, cash-flow based methodologies are inappropriate in our view. The volatility in earnings and leverage is reflected in historic multiples. Our 1 year forward PT is based on mid-cycle multiples on FY17 earnings. We also show upside and downside sensitivity in the table below.

Figure 89: JSW EV/EBITDA (x)



Source: Bloomberg, Company data, UBS estimates; Based on actual 12m fwd rolling numbers

Figure 90: JSW EV/Sales (x)



Source: Bloomberg, Company data, UBS estimates; Based on actual 12m fwd rolling numbers

Figure 91: Valuation scenarios and PT derivation

	FY15	FY16E	FY17E	FY18E	FY19E	FY20E	Comment
Base							
Net sales (Rs.m)	529,715	520,058	555,263	612,834	673,862	738,123	
Multiple (x)	1.0	1.0	1.0	1.0	1.0	1.0	
Per Share (Rs)	798	790	1,028	1,368	1,740	2,134	Rs1200 price target (1 year forward) is average of 2 methodologies on FY17 estimates.
EBITDA (Rs.m)	94,023	98,318	108,564	121,373	134,774	152,040	
Multiple (x)	6.0	6.0	6.0	6.0	6.0	6.0	
Per Share (Rs)	868	1,009	1,351	1,764	2,208	2,757	
Upside							
Net sales (Rs.m)	529,715	535,590	594,853	685,038	789,218	898,529	
Multiple (x)	1.2	1.2	1.2	1.2	1.2	1.2	
Per Share (Rs)	1,254	1,322	1,721	2,347	3,134	4,066	We assume rerating in both multiples given the stronger recovery in our earnings. Share price upside is compounded by faster delveraging. Average FY17 valuation is 2040 INR.
EBITDA (Rs.m)	94,023	110,271	123,921	155,764	195,164	249,950	
Multiple (x)	7.2	7.2	7.2	7.2	7.2	7.2	
Per Share (Rs)	1,338	1,863	2,366	3,480	4,911	6,922	
Downside							
Net sales (Rs.m)	529,715	472,725	480,717	497,182	514,313	532,136	
Multiple (x)	1.0	1.0	1.0	1.0	1.0	1.0	
Per Share (Rs)	798	552	626	748	885	1,013	We do not assume de-rating. Historically stocks re-rate into the trough in earnings. Nonetheless the earnings pressure and the leverage is enough to drive an almost 50% fall in the share price from current levels. Average FY17 valuation is 520 INR.
EBITDA (Rs.m)	94,023	71,772	74,285	81,119	87,502	89,034	
Multiple (x)	6.0	6.0	6.0	6.0	6.0	6.0	
Per Share (Rs)	868	311	414	636	859	948	

Source: UBS estimates

JSW Steel (JSTL.BO)

Income statement (Rsm)	03/13	03/14	03/15	03/16E	% ch	03/17E	% ch	03/18E	03/19E	03/20E
Revenues	**382,097**	**512,196**	**529,715**	**520,058**	-1.8	**555,263**	6.8	**612,834**	**673,862**	**738,123**
Gross profit	56,456	79,270	83,560	82,060	-1.8	90,554	10.4	106,601	123,384	143,999
EBITDA (UBS)	**65,097**	**91,655**	**94,023**	**98,318**	4.6	**108,564**	10.4	**121,373**	**134,774**	**152,040**
Depreciation & amortisation	(22,432)	(31,826)	(34,345)	(37,345)	8.7	(40,345)	8.0	(39,345)	(38,345)	(37,345)
EBIT (UBS)	**42,664**	**59,829**	**59,678**	**60,973**	2.2	**68,219**	11.9	**82,028**	**96,429**	**114,695**
Associates & investment income	697	858	1,114	1,114	0.0	1,114	0.0	1,114	1,114	1,114
Other non-operating income	0	0	0	0	-	0	-	0	0	0
Net interest	(19,675)	(30,479)	(34,930)	(32,365)	7.3	(30,149)	6.8	(27,141)	(24,091)	(21,000)
Exceptionals (incl goodwill)	(3,694)	(17,127)	(471)	0	-	0	-	0	0	0
Profit before tax	**19,993**	**13,081**	**25,391**	**29,722**	17.1	**39,184**	31.8	**56,002**	**73,452**	**94,809**
Tax	(8,452)	(9,201)	(8,194)	(9,592)	-17.1	(12,645)	-31.8	(18,073)	(23,704)	(30,596)
Profit after tax	**11,541**	**3,880**	**17,197**	**20,130**	17.1	**26,539**	31.8	**37,929**	**49,748**	**64,213**
Preference dividends	(324)	(326)	(326)	(326)	-	(326)	-	(326)	(326)	(326)
Minorities	(1,910)	640	769	569	-26.0	369	-35.2	69	(131)	(331)
Extraordinary items	0	0	0	0	-	0	-	0	0	0
Net earnings (local GAAP)	**9,307**	**4,193**	**17,639**	**20,373**	15.5	**26,581**	30.5	**37,671**	**49,290**	**63,555**
Net earnings (UBS)	**13,001**	**21,321**	**18,110**	**20,373**	12.5	**26,581**	30.5	**37,671**	**49,290**	**63,555**
Tax rate (%)	42.3	70.3	32.3	32.3	0.0	32.3	0.0	32.3	32.3	32.3

Per share (Rs)	03/13	03/14	03/15	03/16E	% ch	03/17E	% ch	03/18E	03/19E	03/20E
EPS (UBS, diluted)	58.27	88.20	74.92	84.28	12.5	109.96	30.5	155.85	203.91	262.92
EPS (local GAAP, diluted)	41.71	17.35	72.97	84.28	15.5	109.96	30.5	155.85	203.91	262.92
EPS (UBS, basic)	58.27	88.20	74.92	84.28	12.5	109.96	30.5	155.85	203.91	262.92
Net DPS (Rs)	10.00	11.00	11.00	11.00	0.0	11.00	0.0	19.00	24.00	29.00
Cash EPS (UBS, diluted)[1]	158.81	219.87	217.01	238.78	10.0	276.87	16.0	318.61	362.55	417.42
Book value per share	779.03	875.97	922.13	993.45	7.7	1,090.46	9.8	1,223.99	1,399.67	1,628.57
Average shares (diluted)	223.12	241.72	241.72	241.72	0.0	241.72	0.0	241.72	241.72	241.72

Balance sheet (Rsm)	03/13	03/14	03/15	03/16E	% ch	03/17E	% ch	03/18E	03/19E	03/20E
Cash and equivalents	17,969	7,310	19,136	17,286	-9.7	28,113	62.6	40,395	56,910	75,326
Other current assets	134,948	198,685	247,693	193,461	-21.9	206,992	7.0	230,036	254,481	280,226
Total current assets	**152,917**	**205,995**	**266,829**	**210,746**	-21.0	**235,105**	11.6	**270,431**	**311,391**	**355,552**
Net tangible fixed assets	393,004	548,838	588,562	603,217	2.5	604,636	0.2	612,055	625,474	649,893
Net intangible fixed assets	13,143	15,619	15,854	15,854	0.0	15,854	0.0	15,854	15,854	15,854
Investments / other assets	16,064	5,947	5,990	5,990	0.0	5,990	0.0	5,990	5,990	5,990
Total assets	**575,128**	**776,399**	**877,234**	**835,807**	-4.7	**861,584**	3.1	**904,329**	**958,708**	**1,027,288**
Trade payables & other ST liabilities	150,052	182,270	240,162	192,042	-20.0	204,718	6.6	225,234	246,979	269,874
Short term debt	39,528	80,595	65,595	50,595	-22.87	35,595	-29.65	20,595	15,595	10,595
Total current liabilities	**189,580**	**262,865**	**305,757**	**242,637**	-20.6	**240,313**	-1.0	**245,829**	**262,573**	**280,468**
Long term debt	173,932	267,026	303,946	308,946	1.6	313,946	1.6	318,946	313,946	308,946
Other long term liabilities	36,207	25,454	36,013	36,013	0.0	36,013	0.0	36,013	36,013	36,013
Preferred shares	2,790	7,644	7,644	7,644	0.00	7,644	0.00	7,644	7,644	7,644
Total liabilities (incl pref shares)	**402,509**	**562,990**	**653,361**	**595,241**	-8.9	**597,917**	0.4	**608,433**	**620,177**	**633,072**
Common s/h equity	170,647	211,739	222,896	240,137	7.7	263,586	9.8	295,863	338,345	393,678
Minority interests	1,972	1,670	976	429	-56.1	81	-81.1	33	186	538
Total liabilities & equity	**575,128**	**776,399**	**877,234**	**835,807**	-4.7	**861,584**	3.1	**904,329**	**958,708**	**1,027,288**

Cash flow (Rsm)	03/13	03/14	03/15	03/16E	% ch	03/17E	% ch	03/18E	03/19E	03/20E
Net income (before pref divs)	9,631	4,520	17,966	20,699	15.2	26,907	30.0	37,998	49,617	63,881
Depreciation & amortisation	22,432	31,826	34,345	37,345	8.7	40,345	8.0	39,345	38,345	37,345
Net change in working capital	5,888	(35,195)	(10,000)	(361)	96.4	(6,885)	NM	(7,956)	(7,519)	(7,050)
Other operating	5,896	1,216	6,688	5,904	-11.7	5,661	-4.1	5,360	4,950	4,531
Operating cash flow	**43,847**	**2,367**	**48,999**	**63,588**	29.8	**66,029**	3.8	**74,746**	**85,393**	**98,708**
Tangible capital expenditure	(56,180)	(57,443)	(56,000)	(52,000)	7.1	(41,764)	19.7	(46,764)	(51,764)	(61,764)
Intangible capital expenditure	0	0	0	0	-	0	-	0	0	0
Net (acquisitions) / disposals	0	0	0	0	-	0	-	0	0	0
Other investing	1,313	168	0	0	-	0	-	0	0	0
Investing cash flow	**(54,868)**	**(57,275)**	**(56,000)**	**(52,000)**	7.1	**(41,764)**	19.7	**(46,764)**	**(51,764)**	**(61,764)**
Equity dividends paid	(2,269)	(3,154)	(3,437)	(3,437)	0.0	(3,437)	0.0	(5,700)	(7,114)	(8,528)
Share issues / (buybacks)	0	0	0	0	-	0	-	0	0	0
Other financing	0	0	0	0	0.00	0	0.00	0	0	0
Change in debt & pref shares	9,546	60,290	0	(10,000)	-	(10,000)	0.00	(10,000)	(10,000)	(10,000)
Financing cash flow	**7,277**	**57,135**	**(3,437)**	**(13,437)**	-290.9	**(13,437)**	0.0	**(15,700)**	**(17,114)**	**(18,528)**
Cash flow inc/(dec) in cash	**(3,744)**	**2,227**	**(10,438)**	**(1,850)**	82.3	**10,827**	-	**12,282**	**16,515**	**18,416**
FX / non cash items	(10,797)	(12,886)	22,264	0	-100.0	0	0.0	0	0	0
Balance sheet inc/(dec) in cash	**(14,541)**	**(10,659)**	**11,826**	**(1,850)**	-	**10,827**	-	**12,282**	**16,515**	**18,416**

Source: Company accounts, UBS estimates. (UBS) metrics use reported figures which have been adjusted by UBS analysts.[1]Cash EPS (UBS, diluted) is calculated using UBS net income adding back depreciation and amortization.

JSW Steel (JSTL.BO)

Valuation (x)	03/13	03/14	03/15	03/16E	03/17E	03/18E	03/19E	03/20E
P/E (local GAAP, diluted)	17.4	44.7	15.6	10.4	8.0	5.6	4.3	3.3
P/E (UBS, diluted)	12.5	8.8	15.2	10.4	8.0	5.6	4.3	3.3
P/CEPS	4.6	3.5	5.2	3.7	3.2	2.8	2.4	2.1
Equity FCF (UBS) yield %	(7.8)	(30.0)	(2.5)	5.5	11.5	13.2	15.9	17.4
Net dividend yield (%)	1.4	1.4	1.0	1.3	1.3	2.2	2.7	3.3
P/BV x	0.9	0.9	1.2	0.9	0.8	0.7	0.6	0.5
EV/revenues (core)	0.9	1.0	1.2	1.1	1.0	0.8	0.7	0.6
EV/EBITDA (core)	5.5	5.8	6.7	5.7	5.0	4.3	3.7	3.1
EV/EBIT (core)	8.4	8.9	10.6	9.2	7.9	6.3	5.1	4.0
EV/OpFCF (core)	5.7	6.0	7.0	6.0	5.2	4.4	3.8	3.2
EV/op. invested capital	1.1	1.2	1.1	1.0	0.9	0.9	0.8	0.7

Enterprise value (Rsm)	03/13	03/14	03/15	03/16E	03/17E	03/18E	03/19E	03/20E
Market cap.	159,106	183,893	274,801	211,868	211,868	211,868	211,868	211,868
Net debt (cash)	198,281	347,956	358,050	349,900	329,072	306,790	280,276	251,860
Buy out of minorities	1,972	1,670	976	429	81	33	186	538
Pension provisions/other	0	0	0	0	0	0	0	0
Total enterprise value	**359,359**	**533,518**	**633,827**	**562,196**	**541,021**	**518,691**	**492,329**	**464,265**
Non core assets	0	0	0	0	0	0	0	0
Core enterprise value	**359,359**	**533,518**	**633,827**	**562,196**	**541,021**	**518,691**	**492,329**	**464,265**

Growth (%)	03/13	03/14	03/15	03/16E	03/17E	03/18E	03/19E	03/20E
Revenue	11.2	34.0	3.4	-1.8	6.8	10.4	10.0	9.5
EBITDA (UBS)	6.5	40.8	2.6	4.6	10.4	11.8	11.0	12.8
EBIT (UBS)	2.3	40.2	-0.3	2.2	11.9	20.2	17.6	18.9
EPS (UBS, diluted)	-5.3	51.4	-15.1	12.5	30.5	41.7	30.8	28.9
Net DPS	33.3	10.0	0.0	0.0	0.0	72.7	26.3	20.8

Margins & Profitability (%)	03/13	03/14	03/15	03/16E	03/17E	03/18E	03/19E	03/20E
Gross profit margin	14.8	15.5	15.8	15.8	16.3	17.4	18.3	19.5
EBITDA margin	17.0	17.9	17.7	18.9	19.6	19.8	20.0	20.6
EBIT margin	11.2	11.7	11.3	11.7	12.3	13.4	14.3	15.5
Net earnings (UBS) margin	3.4	4.2	3.4	3.9	4.8	6.1	7.3	8.6
ROIC (EBIT)	12.7	13.1	10.5	10.5	11.6	13.9	15.9	18.3
ROIC post tax	8.2	9.1	7.2	7.1	7.9	9.4	10.8	12.4
ROE (UBS)	7.8	11.2	8.3	8.8	10.6	13.5	15.5	17.4

Capital structure & Coverage (x)	03/13	03/14	03/15	03/16E	03/17E	03/18E	03/19E	03/20E
Net debt / EBITDA	3.0	3.8	3.8	3.6	3.0	2.5	2.1	1.7
Net debt / total equity %	114.9	163.0	159.9	145.4	124.8	103.7	82.8	63.9
Net debt / (net debt + total equity) %	53.5	62.0	61.5	59.3	55.5	50.9	45.3	39.0
Net debt/EV %	55.2	65.2	56.5	62.2	60.8	59.1	56.9	54.2
Capex / depreciation %	NM	180.5	163.1	139.2	103.5	118.9	135.0	165.4
Capex / revenue %	14.7	11.2	10.6	10.0	7.5	7.6	7.7	8.4
EBIT / net interest	2.2	2.0	1.7	1.9	2.3	3.0	4.0	5.5
Dividend cover (UBS)	5.8	8.0	6.8	7.7	10.0	8.2	8.5	9.1
Div. payout ratio (UBS) %	17.2	12.5	14.7	13.1	10.0	12.2	11.8	11.0

Revenues by division (Rsm)	03/13	03/14	03/15	03/16E	03/17E	03/18E	03/19E	03/20E
Standalone (Net)	354,918	452,977	460,873	443,360	474,839	528,495	585,414	645,361
Other Businesses (Net)	27,027	63,503	73,148	76,698	80,425	84,338	88,448	92,762
Others	152	(4,284)	(4,306)	0	0	0	0	0
Total	**382,097**	**512,196**	**529,715**	**520,058**	**555,263**	**612,834**	**673,862**	**738,123**

EBIT (UBS) by division (Rsm)	03/13	03/14	03/15	03/16E	03/17E	03/18E	03/19E	03/20E
Others	42,664	59,829	59,678	60,973	68,219	82,028	96,429	114,695
Total	**42,664**	**59,829**	**59,678**	**60,973**	**68,219**	**82,028**	**96,429**	**114,695**

Source: Company accounts, UBS estimates. (UBS) metrics use reported figures which have been adjusted by UBS analysts.

Steel Authority of India

Well positioned long-term; but debt/FCF weighs

Equities

India
Steel

12-month rating	**Neutral**
	Prior: Not Rated
12m price target	**Rs67.00**
	Prior: -
Price	**Rs63.25**

RIC: SAIL.BO **BBG:** SAIL IB

Trading data and key metrics

52-wk range	Rs90.45-59.35
Market cap.	Rs261bn/US$4.12bn
Shares o/s	4,130m (ORD)
Free float	25%
Avg. daily volume ('000)	2,820
Avg. daily value (m)	Rs191.5
Common s/h equity (03/16E)	Rs445bn
P/BV (03/16E)	0.6x
Net debt / EBITDA (03/16E)	6.6x

EPS (UBS, diluted) (Rs)

	From	To	% ch	Cons.
03/16E	-	4.68	-	5.95
03/17E	-	5.63	-	8.16
03/18E	-	7.14	-	25.77

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India market leader; "steel maker for the nation"

As capacity ramps towards 20mt and with minimal exports, we believe Steel Authority of India (SAIL) should regain its domestic market-leading position. The company is long-established with a broad range of products and nationwide distribution capabilities. As an SOE (state-owned-enterprise; the Indian government holds a 75% stake) it is also uniquely placed amongst its competitors. So we see it as a likely direct beneficiary of the BJP government's infrastructure/urbanisation plans.

Capacity expansion almost over; capex not quite

An almost decade-long capacity expansion and modernisation programme is coming to an end in FY16/FY17, led by the commissioning of new facilities at plants in Bhilai, Rourkela and IISCO. Expansion gives capacity in long products (from 2.5mt to 7.5mt+) and higher quality finished products, as well as more efficiency. Yet the company has guided for high capex to continue for the next one to two years as facilities are completed. SAIL is likely to be at the forefront of any future Indian capacity expansion plans (the government has a long-term target to triple capacity to 300mt), but we believe this is only likely in the very long term or in a much faster demand recovery.

Operating and financial leverage into an upcycle; but high debt weighs

With Indian market prices weak, and weakening further in Q1, and capex still high, we do not expect meaningful improvement in debt ratios until FY17 and a slower improvement towards positive FCF than peers. Long term, we do see an attractive mix of exposure to the India infrastructure growth story, with operational and financial gearing. Yet in the short term, we think there are safer ways to access the same themes in India (for example JSW Steel) with more attractive cash/debt profiles.

Valuation: risk/reward wide, but evenly balanced; initiate with a Neutral rating

We base our price target on mid-cycle EV/Sales and EV/EBITDA multiples on FY17E earnings. On this basis the market appears to be pricing in the gradual recovery which we anticipate, so we initiate coverage with a Neutral rating. The upside and downside risk from our scenarios is wide (valuations of Rs150 and Rs35, respectively), not unexpected for a company early in the cycle with both operational and financial leverage.

Highlights (Rsm)	03/13	03/14	03/15	03/16E	03/17E	03/18E	03/19E	03/20E
Revenues	449,745	471,012	453,406	469,276	527,935	595,907	656,987	724,328
EBIT (UBS)	34,437	25,068	23,558	26,979	40,850	50,468	61,137	74,203
Net earnings (UBS)	25,174	15,417	21,175	19,346	23,239	29,492	38,900	47,798
EPS (UBS, diluted) (Rs)	6.09	3.73	5.13	4.68	5.63	7.14	9.42	11.57
DPS (Rs)	2.00	2.02	2.00	2.00	2.00	2.00	2.64	3.24
Net (debt) / cash	(183,036)	(228,873)	(275,928)	(303,100)	(329,919)	(348,214)	(348,813)	(334,220)

Profitability/valuation	03/13	03/14	03/15	03/16E	03/17E	03/18E	03/19E	03/20E
EBIT margin %	7.7	5.3	5.2	5.7	7.7	8.5	9.3	10.2
ROIC (EBIT) %	6.2	4.0	3.5	3.7	5.4	6.3	7.4	8.7
EV/EBITDA (core) x	10.8	11.1	14.6	12.1	9.6	8.3	7.1	5.9
P/E (UBS, diluted) x	14.1	15.6	15.7	13.5	11.2	8.9	6.7	5.5
Equity FCF (UBS) yield %	(17.9)	(12.7)	(18.1)	(6.8)	(6.7)	(3.4)	4.5	11.5
Net dividend yield %	2.3	3.5	2.5	3.2	3.2	3.2	4.2	5.1

Source: Company accounts, Thomson Reuters, UBS estimates. Metrics marked as (UBS) have had analyst adjustments applied. Valuations: based on an average share price that year, (E): based on a share price of Rs63.25 on 07 Jul 2015 22:38 HKT

Steel Authority of India

Price Target **Rs67.00, Neutral**

Pivotal Questions

Q: How is SAIL positioned in terms of capacity?

The long-running expansion programme is finally nearing completion Driving adequate returns/cash is dependent on demand. SAIL will be at the forefront of India capacity expansion, but we expect this only in the long term.

Q: Can it withstand the price/cost pressures?

It benefits from iron ore security / low coal prices. Diversification via new capacity helps price/mix, but the Indian market remains tough in FY16E.

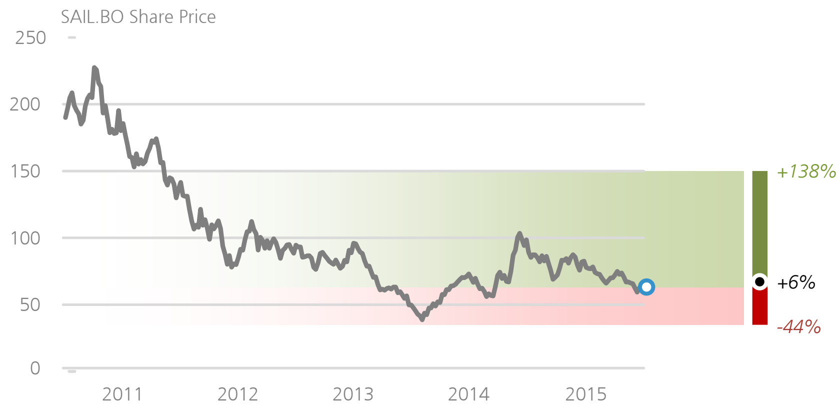
Q: How secure is the debt position?

We do not see material risk from debt, but FCF improvement will only be gradual due to ongoing capex, which could weigh on sentiment/valuation.

Investment Thesis

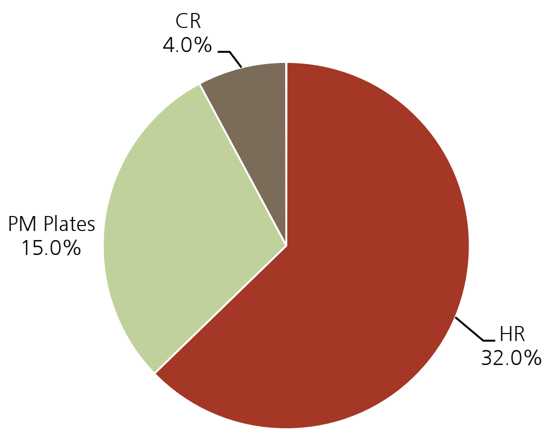
As market leader and a pure-play on the Indian market and an SOE, SAIL is particularly geared to the infrastructure/urbanisation story which is a priority of the Modi BJP government. In a sustained growth environment, we also see operational and financial leverage. Yet in the short term, we expect residual capex from the capacity expansion programme to slow FCF improvement and weigh on the valuation / investor sentiment. We see safer ways to play many of the same themes in the short/medium term, such as JSW Steel.

Pricing Paths and Upside/Downside Skew



Price (+12 mo.)		EPS (FY16e)	P/E
150Rs upside	=	**7Rs** *	**22.1**
67Rs base case	=	**5Rs** *	**14.3**
35Rs downside	=	**1Rs** *	**33.3**
63Rs	=	*6Rs* *	*10.6*
price (07 Jul 2015)		*cons EPS (FY16e)*	*P/E*

Product Mix by Volume (FY15)



Scenario Assumptions

Upside (Rs150) – Still anticipate a subdued 12m, but see good demand/solid prices beyond this. Margin support from modest raw material prices and a limited hit from wage hikes in FY17E. Debt ratios peak in FY16E and SAIL is FCF positive in FY18E.

Base case (Rs67) – Subdued 12m in terms of pricing, but successful execution of final leg in expansion programme drives improvement in volumes. Realisations improve gradually from FY16E. Debt ratios reduce gradually, but FCF positive only in FY19E.

Downside (Rs35) – Subdued volume growth due to weak India demand. FY16 realisations step down and remain flat until FY18E (implying price offsets mix benefit). All this would impact cash flow adversely, so debt ratios remain high and FCF positive only in FY20E.

Source for this page: Company data, UBS estimates, Thomson Financial

Q: How is SAIL positioned in terms of capacity?

The long-running capacity and expansion programme is finally nearing completion. We can see the benefits of greater efficiency, but successful ramp-up is dependent on adequate market demand.

Decade-long expansion programme nears completion

4 major brownfield and 1 greenfield project to take capacity >20mt

SAIL is nearing the end of a long process of capacity expansion which was conceived almost a decade ago. The majority of this has been across 4 existing steel plants utilising existing infrastructure and available land, although there was also one significant greenfield expansion at IISCO. Over the years, the scope of the expansion has reduced slightly (the target reduced from 24.6m to 21.4m in FY10) and we believe the programme is running some 2-3 years behind schedule. In recent months, SAIL has commissioned new facilities at Bhilai, Rourkela, Bokaro and IISCO. In May 2015, the company guided to incremental production of broadly 2.5mt pa over the next 3 years as utilisation at new capacity increases. The company aims for saleable steel production of 19mt by FY18 as a result of this process (implicitly up nearly 50% from FY15 levels).

Further capacity expansion only a long-term possibility in our view

SAIL is on the record targeting further capacity increases to a level around 50mt, but we do not see this as at all likely in the short/medium-term given debt levels and a subdued demand picture in India. Aspirations reflect the company's position as an SOE with the implicit obligation to support government targets around steel production (we have highlighted the government's aspiration for India to hit 300mt of capacity by 2030 in the attached sector note).

Figure 92: SAIL crude steel capacity by plant – past, present and future

Plant	Capacity today*	Capacity 2010	Target Capacity	Aspirational Capacity	Major Product	Integrated
Bhilai (BSP)	5.1	4.6	7.0	14.5	Mixed (50% long)	Yes
Bokaro (BSL)	3.8	3.5	4.6	9.5	Flats	Yes
Durgapur (DSP)	2.0	1.9	2.2	4.6	Semis and Longs	Yes
Rourkela (RSP)	2.3	2.0	4.2	8.7	Flats	Yes
IISCO (ISP)	0.1	0.4	2.5	5.2	Longs	Yes
Other	0.2	0.1	0.9	1.9	Various	Various
Sindri	0.0	0.0	0.0	5.6	N/A	N/A
SAIL	**13.5**	**12.5**	**21.4**	**50.0**		

Source: Company data; UBS estimates; Ministry of Steel; capacity today is as at Q315

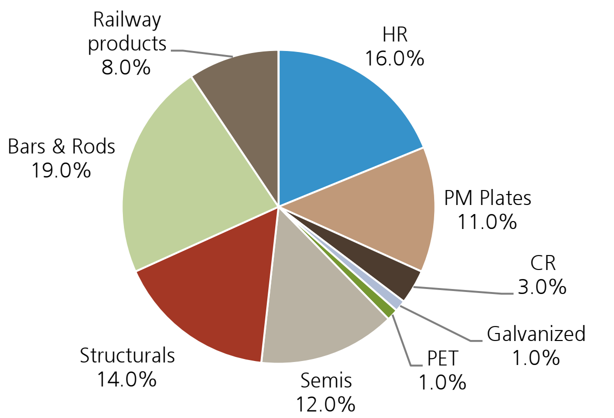
Higher debt, but better product mix

Not cheap, but expansion also does not leave co balance sheet particularly stretched

It is hard to argue that these capacity additions have been cheap (an incremental 7mt of crude steel capacity at a total cost of Rs720bn implies an incremental cost per ton of >US$1,500 at current levels). And capex will continue for the next 12-24 months as facilities are finalised and raw material development (mines and pellet plant) continues. Leverage has grown, but key ratios have remained under control (debt: equity still <1).

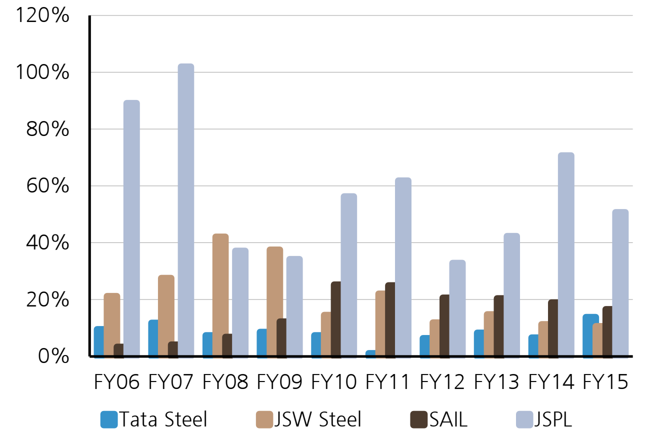
The capex programme was also not just about expansion of capacity, but also about upgrading the existing facilities. SAIL has targeted the virtual elimination of the ingot route of casting to continuous casting (from 71% or production pre-expansion to 94% post expansion). Similarly the twin hearth furnace route will also be eliminated. Investment in new coke making and raw material preparation facilities should also reduce the raw material consumption of the Group going forward. SAIL also hopes to diversify its exposure via this programme. It wants to move further towards finished steel and reduce its exposure to semis. In addition much of the new capacity is in the long products segment with SAIL seeing a long-term opportunity from growth in infrastructure and construction end markets.

Figure 93: Diverse product mix – post MEP



Source: Company data, UBS; MEP- for Modernization and Expansion program

Figure 94: Capex % of sales – SAIL and peers



Source: Company data, UBS

Q: Can it withstand current cost/price pressures?

SAIL has always enjoyed iron ore security and low coal prices now are in its favour. On the price side, diversification via new capacity should help SAIL, but the market remains tough.

US$140/t optimistic, but operating leverage is not

A number of supportive pricing levers

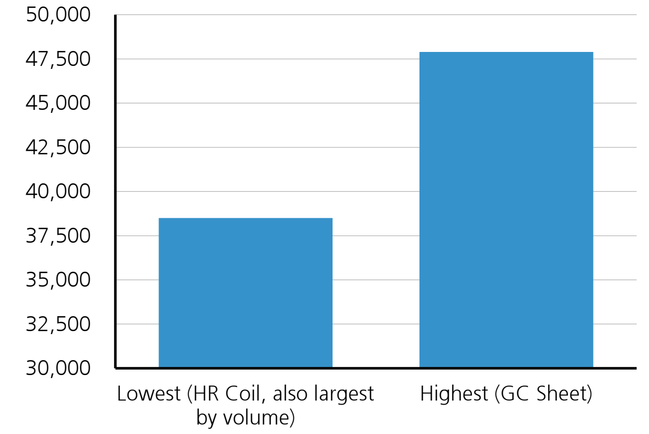
The company aspires to EBITDA/t of $140. This looks optimistic in the short/medium-term, given it implies a 150% increase from FY15 levels, although we concede these are depressed, given pressures on realisations in the Indian market. However we do see a number of drivers of improvement.

- On the pricing side, the improving mix we have discussed above should benefit realisations. Greater contribution from rails (new capacity at Bhilai), higher end wire rods (new capacity at IISCO) and wider plates (new capacity at Rourkela) and higher end plates should all drive up net realisations. Retail sales should also benefit pricing: pure retail sales (focused on TMT rebar, light sections and GP/GC sheets) however are only around 0.6m (or 5% of FY15 volumes) and the company expects this contribution to gradually increase.

Risks and rewards from long focus

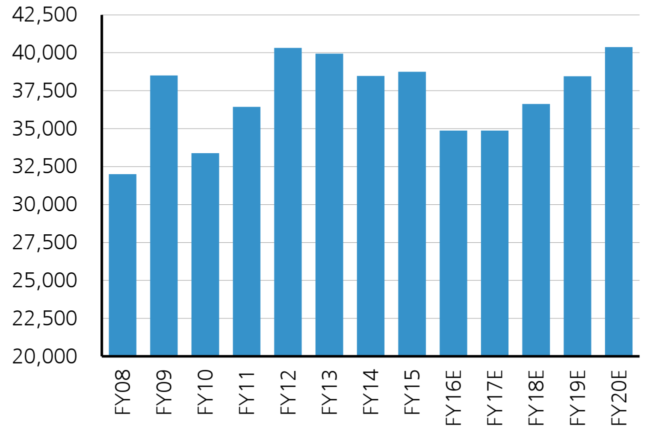
- The greater mix in long products could be a drag on group realisations. Traditionally in India benchmark long product market prices have been c.20% below flats –now are closer to parity). However, they are likely to be earlier cycle than flat products given their use in construction and infrastructure. In addition the fact that there is more limited import competition in long products does insulate this segment from the non-domestic pressures we have already outlined in this note.

Figure 95: Range of realisation for FY14 (Rs/t)



Source: Company data, UBS

Figure 96: Blended net realisation history and forecasts



Source: Company data, UBS estimates

Fully captive iron ore; mostly captive coal

Favourable cost and raw materials security outlook

On the cost side we see SAIL in a generally favourable position. Iron ore supply for both existing and new capacity is fully captive – the company has 3bt of reserves lasting some 30-40 years. As well as ongoing expansion of existing mines, SAIL is developing new mines, at Rowghat, Barsua, Kalta and Taldih for which relevant environment and statutory clearances have already been received. In FY15 SAIL saw only temporary disruption from mining bans to its Odisha mines and no cost impact. In Jharkhand its mines were also impacted for around one quarter in late 2014, but again there was little cost impact as iron ore requirements were met from existing inventory and the company was not required to buy iron ore from the market. The strategy on coal is somewhat different with the majority being sourced from the international markets (domestic coal is only c.15% of requirements, broadly evenly split between captive mines and Coal India supply). Most of the imported coal comes from Australia where international prices have plummeted over the last 12-18 months with a consequent cost benefit for SAIL.

Figure 97: SAIL– raw material supply summary

Domestic Mine	State	Type	Capacity (MT)	Comment
Kiriburu	Jharkhand	Iron ore	4.3	Iron ore generally close to steel plants in Chhattisgarh (BSP), West Bengal (ISP, DSP), Jharkhand (BSL) and Odisha (RSP). Capacity expansion planned for all iron ore assets alongside steel capacity expansion plan. Mainly: Bolani and Gua are targeting 10mt each; Rowghat 12mt. There will also be a new pellet plant.
Meghataburu	Jharkhand	Iron ore	4.3	
Bolani	Odisha	Iron ore	4.1	
Gua	Jharkhand	Iron ore	2.4	
Barsua, Kalta, Taldih	Odisha	Iron ore	3.3	
Rowghat	Chhattisgarh	Iron ore	0	
Chiria	Jharkhand	Iron ore	1.5	
Chasnalla	Jharkhand	Coking coal*	0.6	0.1/0.6mt is thermal coal. Coking coal from various small assets (majority is imported (70%) or sourced from Coal India. SAIL is looking to develop Sitanala and Tasra blocks as part of the expansion programme.
Jitpur	Jharkhand	Coking coal*		
Tasra	Jharkhand	Coking coal*		
Sitanala	Jharkhand	Coking coal*		
Ramnagore	West Bengal	Coking coal*		
International				
Just the ICVL JV for coal in Mozambique				

Source: Company data; * per mine split is not disclosed

Some risks around FY17 wage hike

There is more risk on wage cost in our view. SAIL believes it can maintain the headcount at around 90,000 even as new capacity comes on stream. It will add heads, but this will be offset by a reduction from retiring employees of >12,000 over the next 2-3 years. However it does have to contend with a national wage agreement that becomes due in January 2017. Executive pay will be mandated by the Central Government, but this impacts only 15% of the total workforce. The remaining 85% will need to be negotiated with the unions. SAIL remains confident that this process will take account of prevailing market conditions and does not believe it will be subject to increases similar to other SOEs (we forecast a 25% hike for Coal India for example). However the only mechanism it has to pass such wage increases through to customers is market prices, meaning there is some margin risk in FY17.

FY17 wage hike is the biggest cost risk in our view

Q: How secure is the debt position?

The expansion and modernisation programme has largely driven the increase in leverage. This should peak in FY16, ratios generally remain modest and implicit government support is also reassuring.

Debt levels to peak in FY16

Reducing capex and increasing production should mean that debt ratios will start to reduce from here, although we expect absolute net debt to increase further from here. The investment it made in the expansion/modernisation programme was a noteworthy departure for a company that previously had held a net cash position. It has increased balance sheet risk and the company admits it is close to some of the P&L covenants in the short-term on certain credit lines. However it also believes that this has not reduced banks willingness to lend or had a material impact on its cost of debt. There are no immediate or material refinancing requirements and SAIL continues to successfully access debt markets for regular refinancing (issuing several blocks of commercial paper since April).

High debt should reduce, relatively conservative company attitude to debt

SAIL has maintained a relatively modest debt:equity ratio through its expansion programme and continued to pay a respectable dividend (its stated policy is to pay out the greater of 20% of net profit or paid up capital).

Figure 98: Cash-flow summary table

Rs.m	FY11	FY12	FY13	FY14	FY15	FY16E	FY17E	FY18E	FY19E	FY20E
EBITDA	**77,278**	**63,228**	**49,740**	**42,332**	**41,110**	**45,979**	**60,850**	**71,968**	**84,137**	**98,703**
Net change in working capital	-32,854	-32,256	-22,363	22,976	-13,963	15,538	2,426	-6,804	-6,881	-9,123
Tax paid	-23,000	-14,699	-9,906	-8,538	-2,754	-2,516	-5,810	-9,831	-12,967	-20,485
Interest (paid)/received	11,398	11,997	132	-4,843	-18,190	-9,683	-9,845	-9,238	-7,409	-4,108
Other	1,882	558	10,729	6,624	2,009	-2,009	0	0	0	0
Net capital expenditure	-108,123	-95,898	-91,765	-89,228	-68,400	-65,000	-65,000	-55,000	-45,000	-35,000
FCF	**-73,419**	**-67,070**	**-63,433**	**-30,676**	**-60,189**	**-17,690**	**-17,379**	**-8,905**	**11,881**	**29,987**
Dividends (common)	-13,993	-11,617	-11,616	-11,904	-9,825	-9,825	-9,825	-9,825	-12,959	-15,923
FCF Post Divi	**-87,411**	**-78,687**	**-75,049**	**-42,580**	**-70,014**	**-27,515**	**-27,204**	**-18,730**	**-1,079**	**14,064**
Gross debt	204,751	173,608	225,388	260,896	298,980	325,587	331,302	353,445	351,874	341,460
Cash and equivalents	-177,971	-67,093	-42,352	-32,023	-23,052	-22,487	-1,383	-5,231	-3,061	-7,240
Net debt	**26,780**	**106,515**	**183,036**	**228,873**	**275,928**	**303,100**	**329,919**	**348,214**	**348,813**	**334,220**
Net debt:EBITDA (x)	0.3	1.7	3.7	5.4	6.7	6.6	5.4	4.8	4.1	3.4
Debt:Equity (x)	0.1	0.3	0.4	0.5	0.6	0.7	0.7	0.7	0.7	0.6

Source: Company data; UBS estimates

Forecasts, assumptions, scenarios

Base case

We anticipate a difficult 12m, due to pricing pressures in India, and then a steady recovery, consistent with the UBS macro view on India and our constructive stance on the Indian economy. We forecast no growth in prices until FY18. On volume we see improvement in FY16 as new capacity ramps up, but are below the 2mt+ incremental guided to by the company. Raw materials costs should remain relatively low due to captive supply of iron ore and depressed global coking coal prices. We forecast a 10% wage hike in FY17, based on company guidance that it expects a reasonable negotiated outcome given pressures in the industry. On the balance sheet side, we are more cautious than the company's assertion that debt levels peak in FY16 and do not see a reduction in absolute net debt levels until 2 years later. However the debt ratios should start to improve from FY16.

Base case is cautious on a 12m view and then sees gradual recovery in price / profitability

Upside scenario

This is reflective of the company being successful in executing on its expansion plan. We think it would need a strong improvement in steel demand in India, consistent with the long-term structural opportunity we discuss in the main sector note. We see 3 years of double digit volume growth, albeit still slightly below the company's guidance. We still forecast a dip in realisations in FY16, but then a steady improvement thereafter. This likely implies some moderation in external pressures on the market, such as government intervention against low quality imports. The better earnings help cash-flows, but there would be a short-term hit to working capital as raw materials imports (mainly coal) increase. The company would be FCF positive by FY18 and leverage ratios rapidly fall below 3x.

Upside has strong demand and volume growth, solid prices and operational leverage

Downside scenario

This scenario is reflective of subdued domestic growth in India. In this case we look for 5% volume growth. This would be above the assumption made for some peers in a similar economic scenario, but consistent with the greater capacity additions. Offsetting this would be a 15% step down in realisations in FY16 and no growth until FY19. There would be some respite on the cost side from our assumption that the coking coal price remains subdued initially; and we keep our assumption that SAIL could return the iron ore cost from captive mining to levels seen prior to regulatory issues. The dip in EBITDA would have a negative impact on cash flow and net debt, although this will be partially offset by some working capital inflows from lower raw material imports and a reduction in capex.

Downside sees more muted volume growth and pressure on profitability from pricing and capacity utilisation

Across all three scenarios, the most sensitive number is the realisation assumption. For illustrative purposes, we show the sensitivity of our FY16 EBITDA forecast to different realisation assumptions.

Figure 99: FY16 EBITDA Sensitivity

		Realisations				
		38,753	**36,815**	**33,909**	**31,002**	**29,065**
Incremental volume (t)	-	47,995	25,324	(8,681)	(42,687)	(65,357)
	585,000	64,703	40,900	5,194	(30,512)	(54,316)
	1,170,000	81,412	56,475	19,069	(18,337)	(43,275)
	1,755,000	98,121	72,050	32,944	(6,162)	(32,233)
	2,340,000	114,830	87,625	46,819	6,012	(21,192)

Source: Company data; UBS estimates

Figure 100: UBS forecast and scenario assumptions

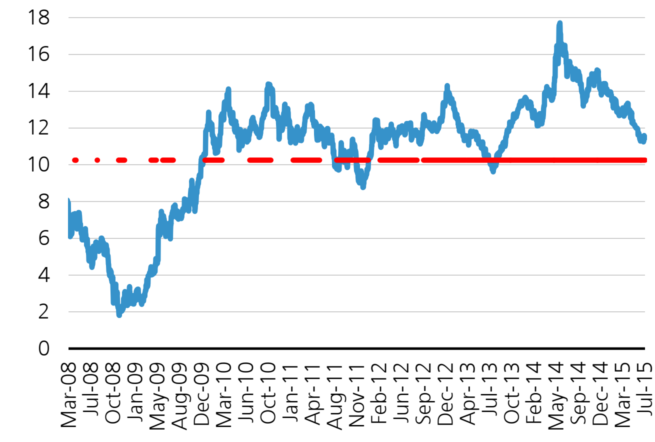
Base	FY11	FY12	FY13	FY14	FY15	FY16E	FY17E	FY18E	FY19E	FY20E
Volume (t)	11,881,137	11,547,761	11,258,942	12,243,599	11,700,000	13,455,000	15,136,875	16,272,141	17,085,748	17,940,035
Growth	-4%	-3%	-3%	9%	-4%	15%	13%	8%	5%	5%
Realisations (Rs)	36,435	40,317	39,946	38,470	38,753	34,877	34,877	36,621	38,452	40,375
Realisations ($)	801	844	736	639	615	554	554	581	610	641
Growth	9%	11%	-1%	-4%	1%	-10%	0%	5%	5%	5%
Net revenue (Rs.m)	432,887	465,570	449,745	471,012	453,406	469,276	527,935	595,907	656,987	724,328
Raw materials spread (INR)	20,270	20,918	22,225	21,392	24,103	22,296	22,528	23,088	24,200	25,410
EBITDA (Rs.m)	77,278	63,228	49,740	42,332	41,110	45,979	60,850	71,968	84,137	98,703
Margin	17.9%	13.6%	11.1%	9.0%	9.1%	9.8%	11.5%	12.1%	12.8%	13.6%
EBITDA/t	6,506	5,469	4,415	3,552	3,514	3,417	4,020	4,423	4,924	5,502
EBITDA/t (USD)	143	115	81	59	56	54	64	70	78	87
FCF (post capex) (Rs.m)	-73,419	-67,070	-63,433	-30,676	-60,189	-17,690	-17,379	-8,905	11,881	29,987
Net debt/(cash)	26,780	106,515	183,036	228,873	275,928	303,100	329,919	348,214	348,813	334,220
Net debt:EBITDA (x)	0.3	1.7	3.7	5.4	6.7	6.6	5.4	4.8	4.1	3.4
Upside	**FY11**	**FY12**	**FY13**	**FY14**	**FY15**	**FY16E**	**FY17E**	**FY18E**	**FY19E**	**FY20E**
Volume (t)	11,881,137	11,547,761	11,258,942	12,243,599	11,700,000	13,455,000	15,473,250	17,020,575	18,297,118	19,669,402
Growth	-4%	-3%	-3%	9%	-4%	15%	15%	10%	8%	8%
Realisations (Rs)	36,435	40,317	39,946	38,470	38,753	38,753	39,721	41,708	43,793	45,983
Realisations ($)	801	844	736	639	615	615	630	662	695	730
Growth	9%	11%	-1%	-4%	1%	0%	2%	5%	5%	5%
Net revenue (Rs.m)	432,887	465,570	449,745	471,012	453,406	521,417	614,621	709,887	801,285	904,450
Raw materials spread (INR)	20,270	20,918	22,225	21,392	24,103	23,809	24,385	25,549	27,194	28,953
EBITDA (Rs.m)	77,278	63,228	49,740	42,332	41,110	62,043	86,060	109,109	137,016	170,159
Upgrade	0%	0%	0%	0%	0%	35%	41%	52%	63%	72%
Margin	17.9%	13.6%	11.1%	9.0%	9.1%	11.9%	14.0%	15.4%	17.1%	18.8%
EBITDA/t	6,506	5,469	4,415	3,552	3,514	4,611	5,562	6,410	7,488	8,651
EBITDA/t (USD)	143	115	81	59	56	73	88	102	119	137
FCF (post capex) (Rs.m)	-73,419	-67,070	-63,433	-30,676	-60,189	-14,378	-16,400	1,943	24,575	43,761
Net debt/(cash)	26,780	106,515	183,036	228,873	275,928	300,131	326,356	334,239	319,489	285,553
Net debt:EBITDA (x)	0.3	1.7	3.7	5.4	6.7	4.8	3.8	3.1	2.3	1.7
Downside	**FY11**	**FY12**	**FY13**	**FY14**	**FY15**	**FY16E**	**FY17E**	**FY18E**	**FY19E**	**FY20E**
Volume (t)	11,881,137	11,547,761	11,258,942	12,243,599	11,700,000	12,870,000	13,513,500	14,054,040	14,475,661	14,765,174
Growth	-4%	-3%	-3%	9%	-4%	10%	5%	4%	3%	2%
Realisations (Rs)	36,435	40,317	39,946	38,470	38,753	32,940	32,940	32,940	34,587	36,316
Realisations ($)	801	844	736	639	615	523	523	523	549	576
Growth	9%	11%	-1%	-4%	1%	-15%	0%	0%	5%	5%
Net revenue (Rs.m)	432,887	465,570	449,745	471,012	453,406	423,935	445,132	462,937	500,666	536,214
Raw materials spread (INR)	20,270	20,918	22,225	21,392	24,103	21,331	21,372	20,691	21,428	22,274
EBITDA (Rs.m)	77,278	63,228	49,740	42,332	41,110	31,588	38,829	33,443	45,075	55,643
Downgrade	0%	0%	0%	0%	0%	-31%	-36%	-54%	-46%	-44%
Margin	17.9%	13.6%	11.1%	9.0%	9.1%	7.5%	8.7%	7.2%	9.0%	10.4%
EBITDA/t	6,506	5,469	4,415	3,552	3,514	2,454	2,873	2,380	3,114	3,769
EBITDA/t (USD)	143	115	81	59	56	39	46	38	49	60
FCF (post capex) (Rs.m)	-73,419	-67,070	-63,433	-30,676	-60,189	-27,568	-40,234	-22,447	-17,224	-5,962
Net debt/(cash)	26,780	106,515	183,036	228,873	275,928	303,496	343,729	366,176	383,401	389,362
Net debt:EBITDA (x)	0.3	1.7	3.7	5.4	6.7	9.6	8.9	10.9	8.5	7.0

Source: Company data; UBS estimates

Valuation

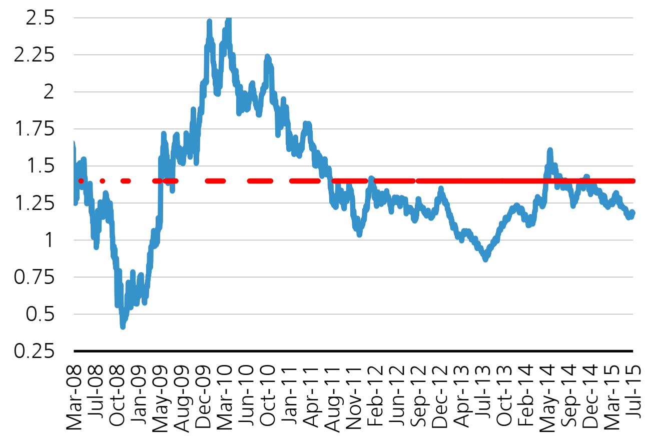
Valuing a cyclical company is difficult, especially one that has invested substantially in the last 5 years, meaning an absence of free cash-flow. This and the wide range of outcomes in our scenarios means long-term, cash-flow based methodologies are inappropriate in our view. Our 1 year forward PT is based on average multiples on FY17 earnings.

Figure 101: SAIL EV/EBITDA (x)



Source: Bloomberg, Company data, UBS estimates; Based on actual 12m fwd rolling numbers

Figure 102: SAIL EV/Sales (x)



Source: Bloomberg, Company data, UBS estimates; Based on actual 12m fwd rolling numbers

Figure 103: Valuation scenarios and PT derivation

Base	FY15	FY16E	FY17E	FY18E	FY19E	FY20E	Comment
Net sales (Rs.m)	453,406	469,276	527,935	595,907	656,987	724,328	
Multiple (x)	1.2	1.2	1.2	1.2	1.2	1.2	
Per Share (Rs)	65	63	74	89	106	130	Rs 67 price target (1 year forward) is average of 2 methodologies on FY17 estimates.
EBITDA (Rs.m)	41,110	45,979	60,850	71,968	84,137	98,703	
Multiple (x)	9.5	9.5	9.5	9.5	9.5	9.5	
Per Share (Rs)	28	33	61	85	116	158	
Upside							
Net sales (Rs.m)	453,406	521,417	614,621	709,887	801,285	904,450	
Multiple (x)	1.4	1.4	1.4	1.4	1.4	1.4	We assume some rerating in both multiples given the stronger recovery in revenue/EBITDA. Share price upside is compounded by faster delveraging. Average FY17 valuation is 150 INR.
Per Share (Rs)	91	109	135	167	202	246	
EBITDA (Rs.m)	41,110	62,043	86,060	109,109	137,016	170,159	
Multiple (x)	11.4	11.4	11.4	11.4	11.4	11.4	
Per Share (Rs)	47	99	159	220	301	400	
Downside							
Net sales (Rs.m)	453,406	423,935	445,132	462,937	500,666	536,214	
Multiple (x)	1.2	1.2	1.2	1.2	1.2	1.2	
Per Share (Rs)	65	50	46	46	53	62	We assume moderate re-rating as the market does not typically put trough earnings on trough multiples if no balance sheet risk. Average FY17 valuation is 35 INR.
EBITDA (Rs.m)	41,110	31,588	38,829	33,443	45,075	55,643	
Multiple (x)	11.4	11.4	11.4	11.4	11.4	11.4	
Per Share (Rs)	47	14	24	4	32	59	

Source: Company data, UBS estimates

Steel Authority of India (SAIL.BO)

Income statement (Rsm)	03/13	03/14	03/15	03/16E	% ch	03/17E	% ch	03/18E	03/19E	03/20E
Revenues	**449,745**	**471,012**	**453,406**	**469,276**	*3.5*	**527,935**	*12.5*	**595,907**	**656,987**	**724,328**
Gross profit	59,469	51,159	49,349	53,517	*8.4*	70,075	*30.9*	83,194	96,888	113,211
EBITDA (UBS)	**49,740**	**42,332**	**41,110**	**45,979**	*11.8*	**60,850**	*32.3*	**71,968**	**84,137**	**98,703**
Depreciation & amortisation	(15,302)	(17,264)	(17,552)	(19,000)	*8.3*	(20,000)	*5.3*	(21,500)	(23,000)	(24,500)
EBIT (UBS)	**34,437**	**25,068**	**23,558**	**26,979**	*14.5*	**40,850**	*51.4*	**50,468**	**61,137**	**74,203**
Associates & investment income	1,976	1,837	10,116	343	*-96.6*	386	*12.5*	435	480	529
Other non-operating income	0	0	0	0	-	0	-	0	0	0
Net interest	73	(4,404)	(9,745)	(5,460)	*44.0*	(12,186)	*-123.2*	(11,580)	(9,751)	(6,450)
Exceptionals (incl goodwill)	(1,883)	11,094	0	0	-	0	-	0	0	0
Profit before tax	**34,603**	**33,594**	**23,929**	**21,862**	*-8.6*	**29,049**	*32.9*	**39,323**	**51,867**	**68,282**
Tax	(11,312)	(7,079)	(2,754)	(2,516)	*8.6*	(5,810)	*-130.9*	(9,831)	(12,967)	(20,485)
Profit after tax	**23,291**	**26,515**	**21,175**	**19,346**	*-8.6*	**23,239**	*20.1*	**29,492**	**38,900**	**47,798**
Preference dividends	0	0	0	0	-	0	-	0	0	0
Minorities	0	(4)	0	0	-	0	-	0	0	0
Extraordinary items	0	0	0	0	-	0	-	0	0	0
Net earnings (local GAAP)	**23,291**	**26,511**	**21,175**	**19,346**	*-8.6*	**23,239**	*20.1*	**29,492**	**38,900**	**47,798**
Net earnings (UBS)	**25,174**	**15,417**	**21,175**	**19,346**	*-8.6*	**23,239**	*20.1*	**29,492**	**38,900**	**47,798**
Tax rate (%)	32.7	21.1	11.5	11.5	*0.0*	20.0	*73.8*	25.0	25.0	30.0

Per share (Rs)	03/13	03/14	03/15	03/16E	% ch	03/17E	% ch	03/18E	03/19E	03/20E
EPS (UBS, diluted)	6.09	3.73	5.13	4.68	*-8.6*	5.63	*20.1*	7.14	9.42	11.57
EPS (local GAAP, diluted)	5.64	6.42	5.13	4.68	*-8.6*	5.63	*20.1*	7.14	9.42	11.57
EPS (UBS, basic)	6.09	3.73	5.13	4.68	*-8.6*	5.63	*20.1*	7.14	9.42	11.57
Net DPS (Rs)	2.00	2.02	2.00	2.00	*0.0*	2.00	*0.0*	2.00	2.64	3.24
Cash EPS (UBS, diluted)[1]	9.80	7.91	9.38	9.28	*-1.0*	10.47	*12.8*	12.35	14.99	17.50
Book value per share	100.82	104.85	105.33	107.63	*2.2*	110.88	*3.0*	115.64	121.92	129.64
Average shares (diluted)	4,130.40	4,130.40	4,130.40	4,130.40	*0.0*	4,130.40	*0.0*	4,130.40	4,130.40	4,130.40

Balance sheet (Rsm)	03/13	03/14	03/15	03/16E	% ch	03/17E	% ch	03/18E	03/19E	03/20E
Cash and equivalents	42,352	32,023	23,052	22,487	*-2.5*	1,383	*-93.8*	5,231	3,061	7,240
Other current assets	276,587	284,202	307,381	264,783	*-13.9*	285,259	*7.7*	310,918	332,981	357,195
Total current assets	**318,940**	**316,225**	**330,434**	**287,270**	*-13.1*	**286,642**	*-0.2*	**316,150**	**336,043**	**364,435**
Net tangible fixed assets	545,449	622,538	653,644	703,867	*7.7*	746,525	*6.1*	777,684	797,342	805,500
Net intangible fixed assets	0	0	0	0	-	0	-	0	0	0
Investments / other assets	655	1,485	9,191	9,191	*0.0*	9,191	*0.0*	9,191	9,191	9,191
Total assets	**865,043**	**940,249**	**993,269**	**1,000,328**	*0.7*	**1,042,358**	*4.2*	**1,103,024**	**1,142,575**	**1,179,126**
Trade payables & other ST liabilities	135,056	162,633	173,857	144,788	*-16.7*	167,690	*15.8*	186,545	201,727	216,818
Short term debt	83,839	119,216	158,724	142,852	*-10.00*	128,567	*-10.00*	115,710	104,139	93,725
Total current liabilities	**218,895**	**281,848**	**332,582**	**287,640**	*-13.5*	**296,257**	*3.0*	**302,255**	**305,866**	**310,543**
Long term debt	141,549	141,681	140,256	182,735	*30.3*	202,735	*10.9*	237,735	247,735	247,735
Other long term liabilities	88,156	83,653	85,383	85,383	*0.0*	85,383	*0.0*	85,383	85,383	85,383
Preferred shares	0	0	0	0	-	0	-	0	0	0
Total liabilities (incl pref shares)	**448,600**	**507,182**	**558,221**	**555,759**	*-0.4*	**584,375**	*5.1*	**625,374**	**638,984**	**643,661**
Common s/h equity	416,443	433,067	435,048	444,569	*2.2*	457,983	*3.0*	477,650	503,591	535,465
Minority interests	0	0	0	0	-	0	-	0	0	0
Total liabilities & equity	**865,043**	**940,249**	**993,269**	**1,000,328**	*0.7*	**1,042,358**	*4.2*	**1,103,024**	**1,142,575**	**1,179,126**

Cash flow (Rsm)	03/13	03/14	03/15	03/16E	% ch	03/17E	% ch	03/18E	03/19E	03/20E
Net income (before pref divs)	23,291	26,511	21,175	19,346	*-8.6*	23,239	*20.1*	29,492	38,900	47,798
Depreciation & amortisation	15,303	17,265	17,552	19,000	*8.3*	20,000	*5.3*	21,500	23,000	24,500
Net change in working capital	(22,362)	22,976	(13,963)	15,538	-	2,426	*-84.4*	(6,804)	(6,881)	(9,123)
Other operating	12,101	(8,201)	(16,552)	(6,575)	*60.3*	1,956	-	1,906	1,862	1,813
Operating cash flow	**28,332**	**58,551**	**8,212**	**47,310**	*NM*	**47,621**	*0.7*	**46,095**	**56,881**	**64,987**
Tangible capital expenditure	(91,765)	(89,228)	(68,400)	(65,000)	*5.0*	(65,000)	*0.0*	(55,000)	(45,000)	(35,000)
Intangible capital expenditure	0	0	0	0	-	0	-	0	0	0
Net (acquisitions) / disposals	0	0	0	0	-	0	-	0	0	0
Other investing	4	248	331	343	-	386	-	435	480	529
Investing cash flow	**(91,761)**	**(88,979)**	**(68,069)**	**(64,657)**	*5.0*	**(64,614)**	*0.1*	**(54,565)**	**(44,520)**	**(34,471)**
Equity dividends paid	(11,616)	(11,904)	(9,825)	(9,825)	*0.0*	(9,825)	*0.0*	(9,825)	(12,959)	(15,923)
Share issues / (buybacks)	7	23	0	0	-	0	-	0	0	0
Other financing	151	13	0	0	-	0	-	0	0	0
Change in debt & pref shares	50,034	32,104	0	26,607	-	5,715	*-78.52*	22,143	(1,571)	(10,414)
Financing cash flow	**38,577**	**20,235**	**(9,825)**	**16,782**	-	**(4,110)**	-	**12,318**	**(14,530)**	**(26,337)**
Cash flow inc/(dec) in cash	**(24,852)**	**(10,193)**	**(69,683)**	**(566)**	*99.2*	**(21,104)**	*NM*	**3,848**	**(2,170)**	**4,179**
FX / non cash items	112	(137)	60,712	0	*-100.0*	0	-	0	0	0
Balance sheet inc/(dec) in cash	**(24,741)**	**(10,329)**	**(8,970)**	**(566)**	*93.7*	**(21,104)**	*NM*	**3,848**	**(2,170)**	**4,179**

Source: Company accounts, UBS estimates. (UBS) metrics use reported figures which have been adjusted by UBS analysts.[1]Cash EPS (UBS, diluted) is calculated using UBS net income adding back depreciation and amortization.

Steel Authority of India (SAIL.BO)

Valuation (x)	03/13	03/14	03/15	03/16E	03/17E	03/18E	03/19E	03/20E
P/E (local GAAP, diluted)	15.2	9.1	15.7	13.5	11.2	8.9	6.7	5.5
P/E (UBS, diluted)	14.1	15.6	15.7	13.5	11.2	8.9	6.7	5.5
P/CEPS	8.8	7.4	8.6	6.8	6.0	5.1	4.2	3.6
Equity FCF (UBS) yield %	(17.9)	(12.7)	(18.1)	(6.8)	(6.7)	(3.4)	4.5	11.5
Net dividend yield (%)	2.3	3.5	2.5	3.2	3.2	3.2	4.2	5.1
P/BV x	0.9	0.6	0.8	0.6	0.6	0.5	0.5	0.5
EV/revenues (core)	1.2	1.0	1.3	1.2	1.1	1.0	0.9	0.8
EV/EBITDA (core)	10.8	11.1	14.6	12.1	9.6	8.3	7.1	5.9
EV/EBIT (core)	15.6	18.7	25.4	20.6	14.2	11.9	9.8	7.9
EV/OpFCF (core)	11.2	11.7	15.5	12.8	10.0	8.7	7.4	6.1
EV/op. invested capital	1.0	0.7	0.9	0.8	0.8	0.8	0.7	0.7

Enterprise value (Rsm)	03/13	03/14	03/15	03/16E	03/17E	03/18E	03/19E	03/20E
Market cap.	354,172	240,635	332,418	261,248	261,248	261,248	261,248	261,248
Net debt (cash)	183,036	228,873	275,928	303,100	329,919	348,214	348,813	334,220
Buy out of minorities	0	0	0	0	0	0	0	0
Pension provisions/other	0	0	0	0	0	0	0	0
Total enterprise value	**537,208**	**469,508**	**608,345**	**564,348**	**591,166**	**609,462**	**610,060**	**595,468**
Non core assets	(655)	(1,485)	(9,191)	(9,191)	(9,191)	(9,191)	(9,191)	(9,191)
Core enterprise value	**536,553**	**468,023**	**599,155**	**555,157**	**581,976**	**600,271**	**600,870**	**586,277**

Growth (%)	03/13	03/14	03/15	03/16E	03/17E	03/18E	03/19E	03/20E
Revenue	-3.4	4.7	-3.7	3.5	12.5	12.9	10.3	10.3
EBITDA (UBS)	-21.3	-14.9	-2.9	11.8	32.3	18.3	16.9	17.3
EBIT (UBS)	-25.6	-27.2	-6.0	14.5	51.4	23.5	21.1	21.4
EPS (UBS, diluted)	-34.9	-38.8	37.3	-8.6	20.1	26.9	31.9	22.9
Net DPS	0.0	1.0	-1.0	0.0	0.0	0.0	31.9	22.9

Margins & Profitability (%)	03/13	03/14	03/15	03/16E	03/17E	03/18E	03/19E	03/20E
Gross profit margin	13.2	10.9	10.9	11.4	13.3	14.0	14.7	15.6
EBITDA margin	11.1	9.0	9.1	9.8	11.5	12.1	12.8	13.6
EBIT margin	7.7	5.3	5.2	5.7	7.7	8.5	9.3	10.2
Net earnings (UBS) margin	5.6	3.3	4.7	4.1	4.4	4.9	5.9	6.6
ROIC (EBIT)	6.2	4.0	3.5	3.7	5.4	6.3	7.4	8.7
ROIC post tax	4.3	2.7	3.1	3.3	4.3	4.7	5.5	6.1
ROE (UBS)	6.1	3.6	4.9	4.4	5.1	6.3	7.9	9.2

Capital structure & Coverage (x)	03/13	03/14	03/15	03/16E	03/17E	03/18E	03/19E	03/20E
Net debt / EBITDA	3.7	5.4	6.7	6.6	5.4	4.8	4.1	3.4
Net debt / total equity %	44.0	52.8	63.4	68.2	72.0	72.9	69.3	62.4
Net debt / (net debt + total equity) %	30.5	34.6	38.8	40.5	41.9	42.2	40.9	38.4
Net debt/EV %	34.1	48.9	46.1	54.6	56.7	58.0	58.1	57.0
Capex / depreciation %	NM	NM	NM	NM	NM	NM	195.7	142.9
Capex / revenue %	20.4	18.9	15.1	13.9	12.3	9.2	6.8	4.8
EBIT / net interest	NM	5.7	2.4	4.9	3.4	4.4	6.3	11.5
Dividend cover (UBS)	3.0	1.8	2.6	2.3	2.8	3.6	3.6	3.6
Div. payout ratio (UBS) %	32.8	54.1	39.0	42.7	35.5	28.0	28.0	28.0

Revenues by division (Rsm)	03/13	03/14	03/15	03/16E	03/17E	03/18E	03/19E	03/20E
Steel (Net)	449,745	471,012	453,406	469,276	527,935	595,907	656,987	724,328
Other Businesses (Net)	0	0	0	0	0	0	0	0
Others	0	0	0	0	0	0	0	0
Total	**449,745**	**471,012**	**453,406**	**469,276**	**527,935**	**595,907**	**656,987**	**724,328**

EBIT (UBS) by division (Rsm)	03/13	03/14	03/15	03/16E	03/17E	03/18E	03/19E	03/20E
Others	34,437	25,068	23,558	26,979	40,850	50,468	61,137	74,203
Total	**34,437**	**25,068**	**23,558**	**26,979**	**40,850**	**50,468**	**61,137**	**74,203**

Source: Company accounts, UBS estimates. (UBS) metrics use reported figures which have been adjusted by UBS analysts.

Jindal Steel & Power

Three layers of leverage; one for the brave

Equities

India
Steel

12-month rating	**Neutral**
	Prior: Not Rated
12m price target	**Rs95.00**
	Prior: -
Price	**Rs82.20**

RIC: JNSP.BO **BBG:** JSP IB

Trading data and key metrics

52-wk range	Rs309.90-82.20
Market cap.	Rs76.5bn/US$1.21bn
Shares o/s	931m (ORD)
Free float	37%
Avg. daily volume ('000)	6,507
Avg. daily value (m)	Rs772.2
Common s/h equity (03/16E)	Rs216bn
P/BV (03/16E)	0.4x
Net debt / EBITDA (03/16E)	7.6x

EPS (UBS, diluted) (Rs)

	From	To	% ch	Cons.
03/16E	-	5.66	-	4.40
03/17E	-	10.91	-	14.05
03/18E	-	16.08	-	8.92

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Lots of "noise" around Jindal Steel & Power (JSPL)

JSPL was perceived to have been substantially disadvantaged in the 2014/2015 coal block auction process, both because it lost operational mines and had successful new bids cancelled by the government (a situation the company is challenging). Chairman Naveen Jindal is under CBI investigation relating to the prior coal block allocation process. The Oman steel business, acquired in 2010, is suffering indirectly from weak oil prices and domestic steel market conditions remain weak, with considerable import-driven price pressure. With a ramp up in debt, the JSPL share price has fallen below 2009 trough levels.

Three layers of leverage (operational, financial and regulatory)

JSPL's operational leverage is substantial in the steel business as new capacity comes on stream in FY16 after several years of development. Its steel business is focused on India and more on long products which increases gearing into economic growth. Regulatory issues are a drag on power in particular, and have hurt sentiment, reduced utilisation and increased cost and debt. Final outcomes for these issues are often binary, but if JSPL could wipe the slate clean with the government/regulators, we think the rerating potential would be substantial. In addition, JSPL cannot reduce debt rapidly without non-operational measures such as asset sales. Until this happens, we believe debt will be a drag on valuation, but this financial leverage adds to the equity upside/downside.

Breadth of assets at a price

JSPL's expansion has been overly aggressive over the past decade. Yet the Indian steel business (70% group EBITDA) now has scale and a differentiated product and technology mix to peers. Execution and price discipline is now key. While JSPL was a relative first mover in merchant power (power is 30% of group EBITDA) with modern, well-invested facilities, the destiny of this business is largely out of its hands due to coal availability, and regulatory and transmission issues.

Valuation: wide risk/reward bands reflect leverage; initiate with a Neutral

We use scenario analysis to value JSPL. In our base case of gradual earnings recovery but slow deleveraging, the fair value is Rs64. In our downside scenario of weak growth and cash flow, and assuming a US$500m equity raising, this falls to Rs47. Yet in our upside scenario of issues clearing, better growth and faster deleveraging, the fair value is Rs264. Our price target is weighted 2/3 to the base and the balance split between upside and downside scenarios.

Highlights (Rsm)	03/13	03/14	03/15	03/16E	03/17E	03/18E	03/19E	03/20E
Revenues	198,068	200,040	201,592	217,197	245,850	267,795	295,952	319,541
EBIT (UBS)	50,293	36,276	27,506	31,329	38,609	41,915	50,508	57,597
Net earnings (UBS)	34,842	19,104	6,335	5,262	10,149	14,958	22,473	29,877
EPS (UBS, diluted) (Rs)	37.27	20.53	6.81	5.66	10.91	16.08	24.16	32.11
DPS (Rs)	1.60	1.50	0.00	0.00	0.00	0.00	0.00	0.00
Net (debt) / cash	(244,180)	(353,529)	(433,767)	(445,032)	(456,374)	(458,270)	(449,713)	(434,707)

Profitability/valuation	03/13	03/14	03/15	03/16E	03/17E	03/18E	03/19E	03/20E
EBIT margin %	25.4	18.1	13.6	14.4	15.7	15.7	17.1	18.0
ROIC (EBIT) %	12.5	7.0	4.5	4.8	5.7	6.0	7.1	7.9
EV/EBITDA (core) x	9.1	10.0	11.1	8.9	7.8	7.4	6.6	5.9
P/E (UBS, diluted) x	11.2	12.5	32.1	14.5	7.5	5.1	3.4	2.6
Equity FCF (UBS) yield %	(16.4)	(44.5)	(23.5)	(20.6)	(14.8)	(2.5)	11.2	19.6
Net dividend yield %	0.4	0.6	0.0	0.0	0.0	0.0	0.0	0.0

Source: Company accounts, Thomson Reuters, UBS estimates. Metrics marked as (UBS) have had analyst adjustments applied. Valuations: based on an average share price that year, (E): based on a share price of Rs82.20 on 07 Jul 2015 22:38 HKT

Jindal Steel & Power

Price Target **Rs95, Neutral**

Pivotal Questions

Q: How is JSPL positioned in terms of capacity?

JSPL is the most diverse of the main listed steel companies, with a range of activities in the group beyond steel, not least Jindal Power. The company has aggressively invested in capacity, leaving it well positioned for any recovery.

Q: Can it withstand the price/cost pressures?

JSPL has a broad product portfolio which should help support realisations in tough market conditions. Yet it is also the most exposed to the regulatory issues around raw materials in steel and power. Volumes should improve, but expect "noise" and disruption around raw materials supply to be an ongoing headwind.

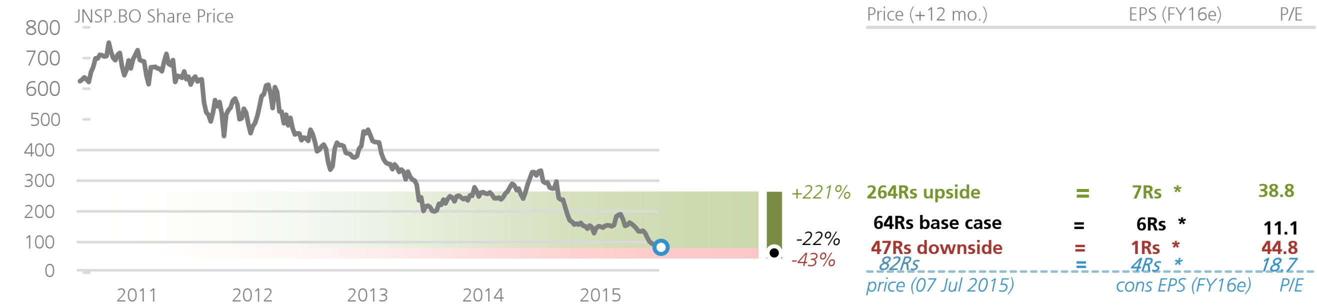
Q: How secure is the debt position?

High leverage is probably the main concern for investors and is the main source of risk/reward. To return to a comfortable level (c.4x net debt:EBITDA), JSPL needs non-operating measures (such as asset sales) as well as a recovery in India.

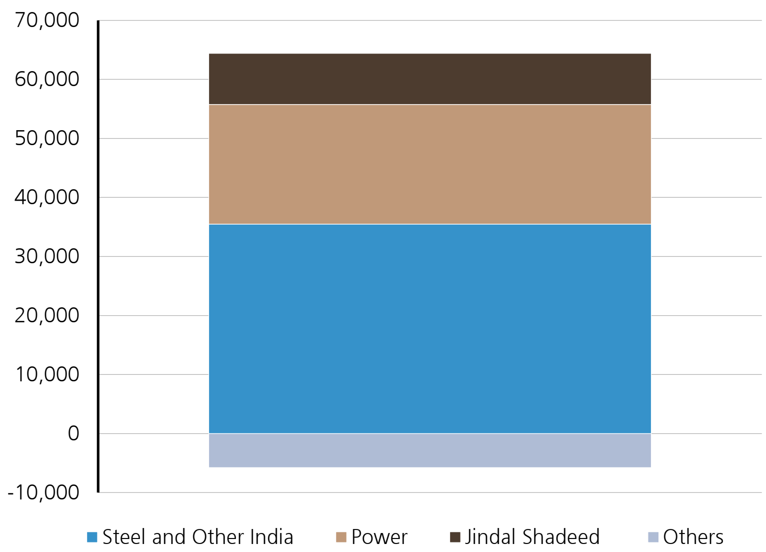
Investment Thesis

We like the asset base in both power and steel, so JSPL will be well placed into the long term for a demand recovery in India. But regulatory noise around fuel availability in coal in particular, high levels of debt and a CBI (Central Bureau of Investigation) investigation into the chairman are of greater current concern to investors, in our view. From an equity perspective, this means the risk reward bands are very wide. A weaker growth environment than we anticipate or an equity raising to repair the balance sheet suggest >50% downside. Yet an option remains on these issues being resolved and deleveraging driving material equity upside. We do not think the risk reward is compelling in either direction, which drives our Neutral rating.

Pricing Paths and Upside/Downside Skew



EBITDA Breakdown by Business Line - FY16E (Rs m)



Scenario Assumptions

Upside (Rs264) – Reflects a strong economy in India, improvement in the Middle East business and resolution to some of the regulatory issues related to coal. Operations and divestments of non-core assets generate strong cash flows and faster deleveraging.

Base case (Rs64) – Reflects an improving market and economy in India. India steel volumes grow as capacity comes on stream, but price pressure offsets this in FY16E. Oman prospects improve as downstream facilities are commercialised. Debt ratios peak in FY16E, but slow deleverage only towards 5x. FCF positive only by FY19E. Our price target is Rs95 which attributes 2/3 probability to the base case and the balance equally to the upside and downside scenarios.

Downside (Rs47) – Tepid market conditions in India continue with muted steel volume growth, despite new capacity, largely due to weak demand. India realisations remain under pressure. The Oman and India power situation is stable, but higher costs weigh on margins. We assume asset sales (50% of the upside scenario) and a US$500m equity raising stabilising the balance sheet, but diluting existing holders.

Source for this page: UBS estimates, Thomson Financial

Q: How is JSPL positioned in terms of capacity?

JSPL is the most diverse of the main listed steel companies, with activities in the group beyond steel, especially power. Future capex is constrained due to debt, but recent capacity expansions are almost complete.

Further steel capex plans firmly on ice

Recent upgrading of technology and capacity

JSPL has a range of different technologies constituting its capacity; and both short and long-term plans for its expansion. The original plant at Raigarh was commissioned in 1991 and has some 3mt of capacity. It combines both DRI and traditional blast furnace iron production to feed its steel melting shop. The company has long-term aspirations to increase steel capacity to 10mt. There is a small cement plant which runs off steel making waste products. Angul is a greenfield expansion project with 2.5mt of capacity that came on stream between FY14 and FY15. Expansion plans here are also ambitious with long-term aspirations for steel capacity to increase to 12.5mt.

Given current concerns around debt we do not believe further expansion of capacity in the short/medium-term is likely: management admitted at Q415 that Angul phase 2 is progressing very slowly. Similarly there are no realistic prospects of JSPL starting new greenfield expansions (Patratu/Asanboni) which have been previously mooted and for which JSPL has received preliminary approvals.

Figure 104: JSPL steel crude steel capacity by plant – past, present and future (mt)

Plant	Capacity today*	Capacity 2010	Target Capacity	Aspirational Capacity	Major Product	Integrated
Raigarh	3.3	3.0	7.3	10.0	Flats and longs	Yes
Angul	2.5	0.0	6.0	12.5	Flats	Yes
Shadeed	2.0	0.0	2.0	2.0	Longs	Yes
Patratu	0.0	0.0	0.0	6.0	N/A	Yes
Asanboni	0.0	0.0	0.0	6.0	N/A	Yes
JSPL	**7.8**	**3.0**	**15.3**	**36.5**		

Source: Company data; UBS estimates; press capacity today is last reported

International expansion also

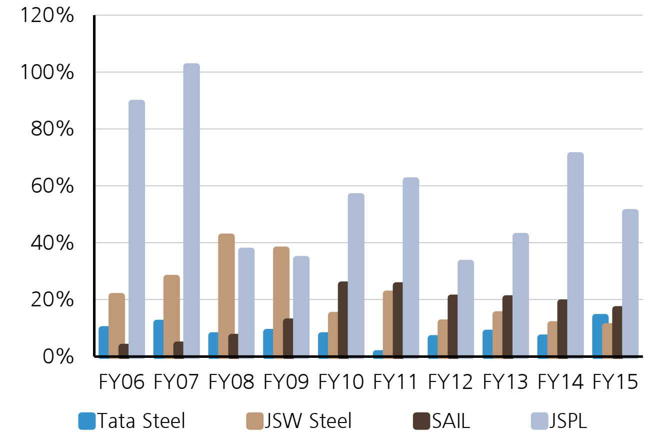
The move internationally via the acquisition of Shadeed Iron and Steel took place in 2010 at a cost of c.$460m. Originally this was just a 1.5mt HBI facility but JSPL has now added 2mt of steel-making capacity. JSPL also has a 9mt pa pellet plant at Barbil which has been operating below capacity due to non-availability of iron ore from its Sarda supplier. The Raigarh and Angul plants also have captive power plants which can sell onto the merchant market when operating at full capacity. So we regard the capacity as well-invested and the revenue streams diverse, even before considering Jindal Power.

Capacity expansion and diversity at a price

Innovative company, but now with legacy of high debt

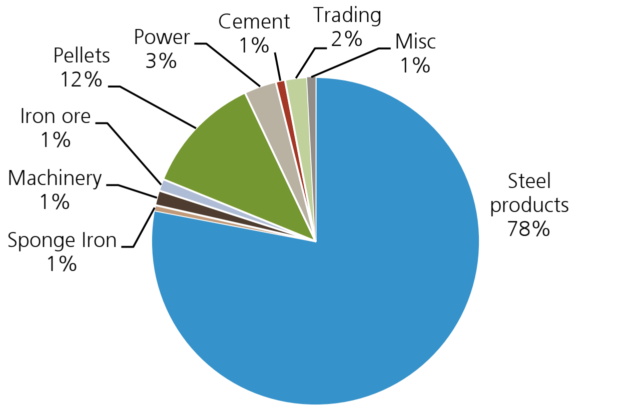
JSPL has been relatively the most aggressive in spending capex over the last decade to expand in both steel and power, and now stands as the most levered of the main listed Indian steel companies. The company deserves credit for its innovation in our view – other than the long-established Tata Steel, JSPL was one of the first private sector companies in the 1990s to develop a business model based on developing/processing abundant domestic natural resources. Yet the raw material strategy that supported this investment has been challenged by the regulatory environment of the last couple of years as we discuss below. Nonetheless the expansion process has also left it with a diverse portfolio of businesses.

Figure 105: Capex % of sales – JSPL and peers



Source: Company data, UBS

Figure 106: S/A revenue* split (Last 3 reported yr. Avg)

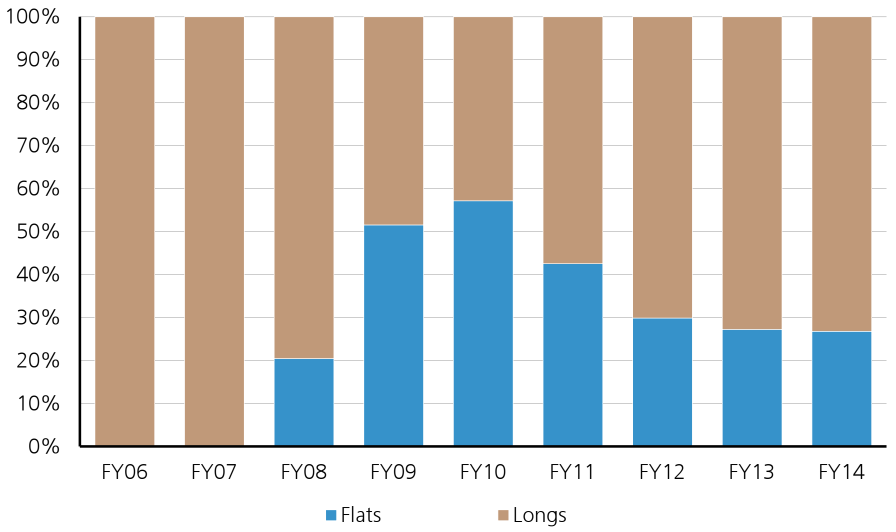


Source: Company data, UBS; * ie excludes international and JPL; S/A = standalone company only

Most financially geared and geared to an Indian recovery

As well as financial gearing and gearing to the regulatory environment, we regard JSPL as most geared to economic recovery in India. This comes from its significant focus on long products, relative to its main competitors. There are benefits to this – long products are more of a domestic than an import market, meaning less pressure from cheaper foreign alternatives than for flat products. Yet it does make the company more dependent on an infrastructure-led recovery in India.

Figure 107: Flats vs longs development (% by volume)



Source: Company data, UBS

Q: Can JSPL withstand current cost/price pressures?

JSPL has one of the broadest product portfolios which helps support realisations in tough market conditions. Yet it is also the most exposed to the regulatory issues around raw material supply. We are confident of a volume improvement and good realisations beyond FY16, but expect further "noise" around raw materials to be an ongoing headwind.

Range of exposure = range of realisations

In terms of steel, JSPL has focused its downstream capacity in flat products on plates (plate mills at both Raigarh and Angul, and a structural steel mill at Raigarh) but in longs more broadly (beam mill at Raigarh, wire rod and rebar mills at Patratu, while it is adding a rebar mill in Oman).

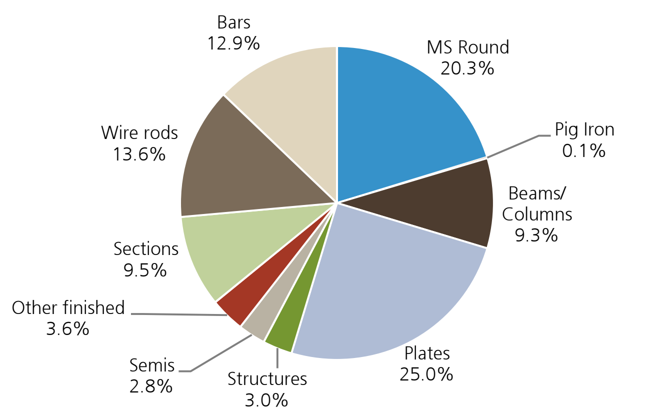
The product mix has a positive mix impact on realisations. This has been compounded by investment in particular areas. For example JSPL's exposure in high quality, hardened rails not only allows it to compete against SAIL in an area that is expected to see strong growth, but is already generates realisations around 25% higher than average. The outlook in structural steel is less favourable given it often supplies to the oil and gas industries, where capex is reducing, but realisations here can at least be double the average levels.

Retail growth should have a positive mix impact

JSPL still has a relatively small retail network although it has invested significantly in the Panther brand. This has driven growth, albeit from low levels (we believe volumes were c.300k in FY15 up from around 120k in FY14, with the company expecting to double volumes in FY16). Consistent with comments from its competitors JSPL believe this is a low-volume but premium price sales channel which will grow in importance as the Indian economy continues to expand.

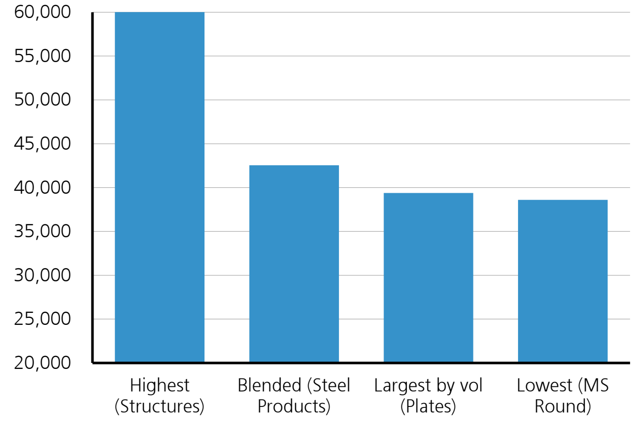
The export strategy has changed somewhat in the last couple of years. One of the intentions of the Oman acquisition was for it to act as an export hub into growth markets in the Middle East and Africa. This intention remains, but recent trading has been hit by the weak oil price and subsequent pressures on investment in these oil-dependent economies. We expect the company to be focused on the domestic business for the short/medium-term.

Figure 108: External sales volume by steel product FY14



Source: Company data, UBS

Figure 109: FY14 Range of gross realisations (Rs/t)



Source: Company data, UBS

Recent cost pressures in all areas

JSPL grew its business via procuring access to captive raw materials. This has been significantly challenged by the following:

- Iron ore. Like all players in the Indian market, supply disruption as a result of regulatory intervention in the iron ore industry has been an issue for JSPL. Its main captive mine at Tensa supplies about 30% of requirements and was only closed briefly following the mining ban in Odisha. However it indirectly suffered from the closure of its main supplier of iron ore for pellets at Sarda. The relationship with Sarda is also under Supreme Court investigation for selling iron ore at below-market prices without appropriate agreements.

- On coal, there are a number of ongoing high-profile issues. 1) Chairman Naveen Jindal is under investigation and has been charged by the Indian CBI for his conduct around securing the allocation of the Amarkonda coal block (since de-allocated); 2) JSPL was seen as one of the biggest losers from the Supreme Court cancellation of coal blocks in September 2015, losing operational blocks at Jitpur and Gare Palma IV; 3) This was compounded when successful bids it made in the March 2015 auctions were cancelled by the government on the basis of the low price achieved; 4) JSPL has even had issues in the regular e-auction process. In May Coal India cancelled the results of an E-Auction in which JSPL had successfully bid for 49,000 tons.

- JSPL has sought to build up a network of overseas mining assets to secure raw material supply. . The viability of a number of projects at the exploration stage are impacted by the recent falls in international commodity prices. Australia production was down substantially in FY15 due to clearance and labour issues, with similar trends and labour issues seen in South Africa. Mozambique production trends are relatively more stable.

Figure 110: JSPL – raw material supply summary (including power)

JSPL - Domestic				
Mine	**State**	**Type**	**Capacity (MT)**	**Comment**
Gare-Palma IV 2/3	Chhattisgarh	Thermal Coal	6.25	Supplies Tamnar power plants. Award being challenged by government.
Tara	Chhattisgarh	Thermal Coal	6	Supplies Tamnar power plants. Award being challenged by government.
Tensa	Odisha	Iron ore	3.1	Supplies Raigarh steel plant.
Sarda	Odisha	Iron ore	15	Private mine but main supplier for Barbil pellet plant (feeds Angul steel plant).
JSPL - International				
Asset	**Location**	**Type**	**Capacity (MT)**	**Comment**
Mpumalanga	South Africa	Anthracite	1.2	Leading Anthracite producer in SA. Production only 340k in 9m FY15 to date.
Moatize	Mozambique	Thermal/coking coal	3	Potential ramp in capacity to 10mt. Production 1mt in 9m FY15 to date.
Wollongong Coal	Australia/NSW	Coking coal	1.5	>600mt of resources. Production only 130k in 9m FY15 to date.
Melmoth	South Africa	Iron ore	20	Exploration under way. Pellet plant being investigated.
CIC Energy	Botswana	Thermal Coal	N/A	Potential 6bt reserves.
West Kalimantan	Indonesia	Thermal Coal	N/A	Potential 400m reserves. Exploration on separate coking coal block.
Khomas	Namibia	Iron ore	N/A	Exploration under way. Pellet plant being investigated.
Mauritania	N/A	Iron ore	N/A	Exploration under way.
Ngovayang	Cameroon	Iron ore	N/A	Acquisition from Legend Mining in Q3 2014.
Africa	Various	Various	N/A	Interests in Tanzania, Madagascar, Zambia and Senegal.

Source: Company data, Ministry of the Environment, UBS estimates

Q: How secure is the debt position?

High leverage is probably the main concern for investors and is the main source of risk/reward. To return to a "comfortable" level, JSPL will need non-operating measures (such as asset sales) as well as a recovery in India.

Debt is a source of concern, albeit not necessarily in the short-term

With FY15 net debt to EBITDA at 7.6x, JSPL is the most-geared of the main listed Indian steel companies. The cost of debt is similar to peers and we do not believe there is a significant near-term issue with covenants, despite elevated current levels. Nor do we see an immediate requirement for the company to refinance. The company's focus is on reducing the absolute level of net debt via stronger cash flows from new capacity in FY16.

Figure 111: Debt summary table (Rs m)

Cash flow and debt	FY12	FY13	FY14	FY15	FY16E	FY17E	FY18E	FY19E	FY20E
EBITDA	**70,405**	**65,685**	**54,568**	**54,835**	**58,635**	**68,626**	**72,717**	**82,020**	**89,818**
Net change in working capital	-20,385	-23,207	12,816	-1,962	5,565	-5,057	-6,667	-5,089	-7,023
Tax paid	-10,421	-7,884	-8,337	882	-1,412	-3,207	-4,977	-7,621	-10,141
Interest (paid)/received	-8,053	-14,648	-19,974	-22,922	-30,023	-30,017	-28,011	-25,956	-25,104
Other	-376	631	743	-19,090	1,493	3,313	5,542	5,703	7,958
Net capital expenditure	-59,688	-84,416	-145,736	-58,204	-50,000	-45,000	-40,500	-40,500	-40,500
FCF (Post capex)	**-28,518**	**-63,838**	**-105,920**	**-46,462**	**-15,742**	**-11,343**	**-1,896**	**8,557**	**15,006**
Dividends (common)	-1,925	-1,569	-1,488	0	0	0	0	0	0
FCF Post Divi	**-30,443**	**-65,407**	**-107,408**	**-46,462**	**-15,742**	**-11,343**	**-1,896**	**8,557**	**15,006**
Gross debt	170,908	246,182	363,682	455,005	495,285	488,580	481,875	475,170	458,465
Cash and equivalents	-1,492	-2,001	-10,153	-25,715	-50,253	-32,206	-23,605	-25,457	-23,758
Net debt	**169,416**	**244,180**	**353,529**	**429,290**	**445,032**	**456,374**	**458,270**	**449,713**	**434,707**
Net debt:EBITDA (x)	2.4	3.7	6.5	7.8	7.6	6.7	6.3	5.5	4.8

Source: Company data, UBS estimates

Asset disposals and stake sales could realise Rs6-8bn of proceeds

However it is also considering "avenues to generate cash flow through the non-operational route", and we believe this is essential for it to reach its broad target leverage ratio of 4x net debt: EBITDA. We have shown the diverse nature of the group and even the standalone business above so we believe there are ways the company can trim its portfolio. We do not include these in our forecasts, but the table below shows how Rs6-8bn of cash could be realised via this route with minimal impact on EBITDA. This will not necessarily be easy and the potential IPOs of Oman and Jindal Power clearly rely on favourable capital market conditions.

Figure 112: Sources of cash inflow, outside of business operations

Asset	Specific	Comment
Candidates for Sell off		
Bolivian Assets	Company believes thereis a strong case for them to recoup their investment in Bolivia from the government	Range of assets with some performance challenges suggests limited stake value, although disclosure is limited
Botswana Coal Mines	JSPL in talks to sell upto 90% in the mines to a entity, that is interested in setting up a power plant	
Australian Mines	Aims to sell one or both of the mines	
Stake Sale Candidates		
Jindal Shadeed, Oman	May sell upto 25%stake in an IPO	Timing is uncertain, but the cash inflow could be real. It is difficult to put a number to it now
Jindal Power, India	May sell some stake in an IPO	

Source: Company data, UBS, press (various)

Current status of Jindal Power (JPL)

New capacity also coming on stream in power

Jindal Power Limited (JPL) is a 96% owned subsidiary of Jindal Steel & Power. The main focus area/business of the company is power generation and sales. They currently have a footprint in thermal power, but aspire to further capacity in power (thermal power/hydro power plants with capacity totalling 2,640MW in thermal and 6,100MW in hydro have been outlined), but this is unlikely given the leverage situation and prevailing regulatory uncertainty in power.

Figure 113: Jindal power capacity, present and future

Facility	Capacity	Type	Location	Comments
Existing Capacity				
1. Tamnar I	1,000MW (4*250MW)	Thermal	Raigarh, Chhattisgarh	Commissioned all 4 units in 2007. Operaiting at 80%+PLF, down from earlier peaks of 95+%
Capacity Under Commissioning				
2. Tamnar II	2,400MW (4*600MW)	Thermal	Raigarh, Chhattisgarh	Recently synchronized the 4th unit, awaiting commissioning.
Planned Capacity				
3.Dumka	1,320MW	Thermal	Dumka, Jharkhand	
4.Godda	1,320MW	Thermal	Godda, Jharkhand	
5.Etalin	4,000MW	Hydro	Etalin, Arunachal Pradesh	
6.Attunli	500MW	Hydro	Attunli, Arunachal Pradesh	
7.Subansiri Middle	1,600MW	Hydro	Subansiri Middle, Arunachal Pradesh	
Future Capacity (Wishlist)				
8.Power Plant	2,640MW	Thermal	Jharkhand	
9.Power Plant	1,320MW	Thermal	Odisha	
10.Power Plant	220MW	Hydro	Nepal	

Source: Company data, UBS

Merchant power / captive raw materials strategy has been derailed by regulation / politics

In the 1990s and early 2000s, management/promoters of JSPL and Jindal Power had a clear focus on building power plants with de-risked raw material sourcing, and tied up coal mines/linkages for the each of the planned power plants. This strategy was hard hit by the Supreme Court cancellation of coal blocks in 2014. The section below outlines the status on raw material sourcing for each of the plants (operational + under execution).

Figure 114: JSPL's raw materials& offtake details

Jindal Power	Plant:	Offtake	Coal Sourcing Mix	Transmission
EUP 1	Tamnar I- 1000MW (250MW*4)	200MW medium-term PPA, rest on bilateral and merchant market	Open Market - Eauction/Imports	Not an issue
EUP 2	Tamnar II- 1,200MW (600MW*2)	PPAs in place for 810MW (450+60+350), but currently servicing only the 450MW PPA, the rest expected to be serviced from Dec'15	Linkage coal from Coal India to the extent of PPA, receiving 100% of committed quantity	Currently Transmission is a bottleneck, company expects to be resolved towards 2015 end
EUP 3	Tamnar II - 1,200MW (600MW*2)	No PPA in place, currently not in commercial production, can scale up quickly whenever required	Scouting for PPAs, may get Coal India linkage to that extent, rest to be sourced from eauctions & imports	Currently Transmission is a bottleneck, company expects to be resolved towards 2015 end

Source: Company data, UBS

UBS India Power Analyst Gopal Ritolia believes that the over-capacity in the Indian power market persists in the medium term even if unfulfilled demand materialises. Paradoxically, India still faces a power deficit due to fuel constraints. Gopal does not agree with the long-held view that there is "unlimited" unfulfilled demand in India. Heuristic and anecdotal data suggests actual demand is 22% above the current level. He believes normalised utilisation of operational coal-fired capacity should be more than sufficient to meet unfulfilled demand and the 87GW under construction can deliver an 8% CAGR over the next five years, in line with GDP growth. He expects fuel availability to determine utilities' demand-supply balance for the foreseeable future.

Figure 115: UBS key assumptions on JPL's business

Tamnar 1 - (EUP I)	FY16E	FY17E	FY18E	FY19E	FY20E	Comments
Operating Capacity (MW)	1,000	1,000	1,000	1,000	1,000	
PLF (%)	80.00%	80.00%	80.00%	80.00%	80.00%	Historically at c.90%+. Dip due to lack of fuel avaialability.
Units Produced (mn kwh)	7,008	7,008	7,008	7,008	7,008	Total guidance across plants for FY16 is 13-15m units
Units Available for Sale (mn kwh)	6,658	6,658	6,658	6,658	6,658	Mix of PPA + Bilateral Contracts + Merchant market
Realization (Rs/kwh)	3.00	3.06	3.12	3.18	3.25	20:80 PPA vs merchant
Primary Fuel Cost (Rs/t)	2,175	2,219	2,263	2,308	2,354	Coal Sourcing completely through Eauction & Imports
Plant Heat Rate (kcal/kwh)	2,100	2,100	2,100	2,100	2,100	
Revenue (INRm)	19,973	20,372	20,780	21,195	21,619	
EBITDA (INRm)	**8,326**	**8,591**	**8,701**	**8,804**	**8,903**	
Tamnar 2 - (EUP II)						
Operating Capacity (MW)	900	1,200	1,200	1,200	1,200	
PLF (%)	60.00%	75.00%	75.00%	75.00%	75.00%	PLF to increase as demand from PPAs materializes
Units Produced (mn kwh)	4,730	7,884	7,884	7,884	7,884	Total guidance across plants for FY16 is 13-15m units
Units Available for Sale (mn kwh)	4,494	7,490	7,490	7,490	7,490	Primarily PPAs & some proportion of open market sales
Realization (Rs/kwh)	3.70	3.77	3.85	3.93	4.00	75:25 PPA vs merchant
Primary Fuel Cost (Rs/t)	1,500	1,700	1,734	1,769	1,804	Linkage for PPA; rest from E-Auction
Plant Heat Rate (kcal/kwh)	2,050	2,050	2,050	2,050	2,050	
Revenue (INRm)	16,627	28,267	28,832	29,408	29,997	
EBITDA (INRm)	**8,688**	**15,889**	**16,389**	**17,005**	**17,621**	
Tamnar 2 - (EUP III)						
Operating Capacity (MW)	900	1,200	1,200	1,200	1,200	
PLF (%)	25.00%	40.00%	50.00%	75.00%	75.00%	
Units Produced (mn kwh)	1,971	4,205	5,256	7,884	7,884	Total guidance across plants for FY16 is 13-15m units
Units Available for Sale (mn kwh)	1,784	3,826	4,783	7,174	7,174	
Realization (Rs/kwh)	2.75	2.81	2.86	2.92	2.98	Pure merchant
Primary Fuel Cost (Rs/t)	2,500	2,550	2,601	2,653	2,706	
Plant Heat Rate (kcal/kwh)	2,050	2,050	2,050	2,050	2,050	
Revenue (INRm)	4,905	10,733	13,685	20,937	21,356	
EBITDA (INRm)	**(1,842)**	**(40)**	**1,178**	**3,964**	**4,463**	

Source: UBS estimates

JPL outlook

Like in steel, significant "noise" surrounding JPL

JPL is currently facing multiple issues like - the non-availability of captive coal mines, lack of PPAs for a significant portion of the capacity and also, evacuation bottlenecks. These aside, merchant power demand is not very high, as reflected in the low prices, also, lack of momentum in new PPA tenders by the State Electricity Boards (SEBs) is a concern. To that extent, JPL is facing challenges at the top line, costs and also at regulatory level.

Coal Availability: We expect coal availability issues to resolve gradually, although it is currently difficult to put a time line to it. JSPL(/JPL) is currently contesting with the govt. in the courts, over the mines it has won in the coal auction process. In the meantime it will have to source costlier E-Auction or imported coal.

Evacuation: There could be relief over the coming quarters as some transmission lines are commissioned by Power Grid (Raipur-Wardha Line I & II in the W3 region, WR to NR - Gwalior Jaipur Line I &II, Champa – Kurukshetra Line, WR to SR – Kolhapur Narendra line). However, the easing of bottlenecks is a double edged sword - at the time as they ease evacuation constraints, they could lower the merchant realization due to increased availability of power.

New PPAs: No major PPAs are being floated by the state electricity boards (SEBs) at the moment. This is mostly due to the financial health of many of the SEBs in India plus a lack of strong end demand. There is no magic wand which can solve these issues. Demand will gradually pick up if the expected economic growth materialises. Government restructuring of SEBs should also help this process, although we expect this to take quite some time.

Forecasts, scenarios, assumptions

JSPL is more than just a steel company. As well as power there are a range of other businesses in India, such as cement, pellets and machinery. Disclosure of these different moving parts is limited. We present three scenarios below.

Base case

Base case is constructive on India in the mid-term but cautious on cash flow and debt

This is consistent with a gradually improving market / macro backdrop in India and successful execution of new facilities. In steel in India we expect growth in volumes as new capacity comes on stream, but for this to be offset by pressure on realisations (prices) as has been seen in Q4/Q1. In Oman we expect sales of steel to increase from the new facility, with a benefit on realisations. We have outlined our detailed power assumptions above. Debt ratios peak in FY16, but the group only gradually delevers towards 5x and would remain an issue for investors for a number of years. FCF improves but the company is only FCF positive in FY19.

Upside scenario

An upside scenario of faster growth and successful asset sales means much more rapid deleveraging

This would be consistent with strong macro conditions in India, improvement in the Middle East and resolution/clarity on some of the regulatory and fuel availability issues that have hit the Power business. In steel in India we anticipate still a difficult year in FY16, but a gradual recovery in realisations in FY17. Oman benefits from stronger top-line growth and mix from the switch from HBI to steel products. Power benefits from an improvement in utilisation rates as coal availability issues ease and the distribution issues and transmission blockages are resolved. We also assume Rs7bn of inflows from asset disposals across FY16/FY17; given this assumes the IPO/stake sales of certain assets it would need strong capital markets conditions. As a result, absolute net debt would fall in FY16 and the net debt:EBITDA ratio would hit c.4x by FY17.

Downside scenario

Downside scenario implies incremental pressure on debt and cash which the company might have to address via an equity raising

In short, this scenario implies further tepid market conditions in India and the Middle East and a worsening of the cash-flow/debt position. In India steel we assume muted volumes and ongoing pressure on prices with a muted recovery. We are still more favourable on volumes in Oman and Power in this scenario but assume higher costs weigh on margins. The weaker operational performance hits cash-flow and we assume the company has to take action to improve the position. So we still assume asset disposals and stake sales, but only realising half the value of our upside scenario (Rs3.5bn not Rs7bn). In addition we include a $500m equity raising (this is as high a number as we think is feasible as 50% of the market cap is held by the Jindal organisation that would need to at least partially fund this; it also represents over 1/3 of the current market cap). Equity shareholders are clearly diluted in this scenario and while leverage ratios start to improve the group only hits <6x net debt:EBITDA by FY20.

Figure 116: Forecast and assumptions summary

Base case	FY12	FY13	FY14	FY15	FY16E	FY17E	FY18E	FY19E	FY20E
Net sales									
India standalone	133,340	149,547	145,440	140,994	141,967	148,420	161,418	175,704	191,407
Oman	27,943	34,440	32,004	32,315	36,475	41,171	46,472	52,455	59,209
Power	30,404	25,097	25,129	32,280	41,505	59,372	63,296	71,541	72,972
Group	**182,086**	**198,068**	**200,040**	**201,592**	**217,197**	**245,850**	**267,795**	**295,952**	**319,541**
Growth	**0.0%**	**8.8%**	**1.0%**	**0.8%**	**7.7%**	**13.2%**	**8.9%**	**10.5%**	**8.0%**
EBITDA									
India standalone	40,625	39,385	37,589	39,427	35,492	35,621	37,126	42,169	47,852
Oman	4,543	5,316	5,393	7,497	8,645	9,963	11,479	13,219	15,217
Power	22,810	15,068	17,134	16,530	20,263	29,169	30,517	33,394	33,810
Group	**70,405**	**65,685**	**54,568**	**54,835**	**58,635**	**68,626**	**72,717**	**82,020**	**89,818**
FCF (Post capex)	**-28,518**	**-63,838**	**-105,920**	**-46,462**	**-15,742**	**-11,343**	**-1,896**	**8,557**	**15,006**
Dividends (common)	-1,925	-1,569	-1,488	0	0	0	0	0	0
FCF Post Divi	**-30,443**	**-65,407**	**-107,408**	**-46,462**	**-15,742**	**-11,343**	**-1,896**	**8,557**	**15,006**
Net debt	**169,416**	**244,180**	**353,529**	**429,290**	**445,032**	**456,374**	**458,270**	**449,713**	**434,707**
Net debt:EBITDA (x)	2.4	3.7	6.5	7.8	7.6	6.7	6.3	5.5	4.8
Upside	**FY12**	**FY13**	**FY14**	**FY15**	**FY16E**	**FY17E**	**FY18E**	**FY19E**	**FY20E**
Net sales									
India standalone	133,340	149,547	145,440	140,994	142,940	155,935	183,247	215,682	254,234
Oman	27,943	34,440	32,004	32,315	40,636	51,099	64,257	80,804	101,611
Power	30,404	25,097	25,129	32,280	50,731	94,406	106,886	134,732	140,121
Group	**182,086**	**198,068**	**200,040**	**201,592**	**232,931**	**299,884**	**352,695**	**429,344**	**493,942**
Growth	**0.0%**	**8.8%**	**1.0%**	**0.8%**	**15.5%**	**28.7%**	**17.6%**	**21.7%**	**15.0%**
EBITDA									
India standalone	40,625	39,385	37,589	39,427	39,308	41,167	46,362	56,940	69,914
Oman	4,543	5,316	5,393	7,497	9,310	9,433	12,818	16,423	23,308
Power	22,810	15,068	17,134	16,530	25,978	46,089	52,512	64,959	65,406
Group	**70,405**	**65,685**	**54,568**	**54,835**	**68,832**	**90,562**	**105,287**	**131,560**	**151,568**
FCF (Post capex)	**-28,518**	**-63,838**	**-105,920**	**-46,462**	**13,873**	**38,793**	**24,991**	**47,259**	**66,270**
Dividends (common)	-1,925	-1,569	-1,488	0	0	0	0	0	0
FCF Post Divi	**-30,443**	**-65,407**	**-107,408**	**-46,462**	**13,873**	**38,793**	**24,991**	**47,259**	**66,270**
Net debt	**169,416**	**244,180**	**353,529**	**429,290**	**415,418**	**376,625**	**351,633**	**304,374**	**238,104**
Net debt:EBITDA (x)	2.4	3.7	6.5	7.8	6.0	4.2	3.3	2.3	1.6
Downside	**FY12**	**FY13**	**FY14**	**FY15**	**FY16E**	**FY17E**	**FY18E**	**FY19E**	**FY20E**
Net sales									
India standalone	133,340	149,547	145,440	140,994	141,480	144,696	151,032	157,715	164,763
Oman	27,943	34,440	32,004	32,315	34,395	36,609	38,966	41,474	44,144
Power	30,404	25,097	25,129	32,280	36,893	44,833	46,315	49,331	49,825
Group	**182,086**	**198,068**	**200,040**	**201,592**	**210,017**	**223,025**	**232,921**	**244,773**	**254,685**
Growth	**0.0%**	**8.8%**	**1.0%**	**0.8%**	**4.2%**	**6.2%**	**4.4%**	**5.1%**	**4.0%**
EBITDA									
India standalone	40,625	39,385	37,589	39,427	33,955	33,280	33,227	33,120	32,953
Oman	4,543	5,316	5,393	7,497	6,879	6,956	7,014	7,051	7,063
Power	22,810	15,068	17,134	16,530	18,011	20,991	20,759	21,124	20,339
Group	**70,405**	**65,685**	**54,568**	**54,835**	**53,081**	**55,100**	**54,594**	**54,533**	**53,294**
FCF (Post capex)	**-28,518**	**-63,838**	**-105,920**	**-46,462**	**45,347**	**25,028**	**16,361**	**18,452**	**20,579**
Dividends (common)	-1,925	-1,569	-1,488	0	0	0	0	0	0
FCF Post Divi	**-30,443**	**-65,407**	**-107,408**	**-46,462**	**45,347**	**25,028**	**16,361**	**18,452**	**20,579**
Net debt	**169,416**	**244,180**	**353,529**	**429,290**	**383,944**	**358,916**	**342,554**	**324,103**	**303,524**
Net debt:EBITDA (x)	2.4	3.7	6.5	7.8	7.2	6.5	6.3	5.9	5.7

Source: Company data; UBS estimates

Valuation

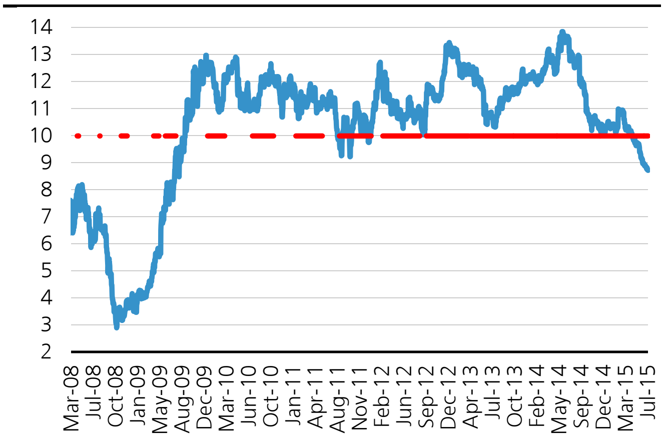
The share price has fallen c.70% from mid-2014 highs. This is due to a combination of factors, such as regulation and coal availability. However in our view it is also due to the elevated levels of debt. Given the uncertainty, a scenario-approach is the only realistic method of valuation, and we lay this out in the table below. We use: 1) an average of FY16 and FY17 to capture the mid-term earnings/debt prospects in the different scenarios (outlined above); 2) an EV/EBITDA ratio of 8x – consistent with current levels but below long-term averages; 3) an equity raising of US$500m as described above; at a share price of Rs80. Our PT is cautious assuming 66% weight to our base case (slow recovery in earnings and debt) and the balance evenly between our upside and downside scenarios. On this basis, the risk reward balance is even and drives our neutral recommendation. We expect the stock to remain volatile until prospects fundamentally improve or balance sheet and regulatory issues are resolved.

Figure 117: Valuation scenarios and PT derivation

	FORECAST	UPSIDE	DOWNSIDE	PT	Comment
EPS (INR)	8.4	20.0	1.6	8.4	Average of FY16 and FY17
Cons EPS (INR)	13.1	13.1	13.1		Reuters consensus
Delta vs cons	-36%	52%	-88%		
EBITDA (INRm)	63,631	79,697	54,090	63,631	Average of FY16 and FY17
Cons EBITDA (INRm)	71,250	71,250	71,250		Reuters consensus
Delta vs cons	-11%	12%	-24%		
Net debt (Rs.m)	450,703	396,021	371,430	450,703	Average of FY16 and FY17
Net debt:EBITDA (x)	7.1	5.0	6.9	7.1	
EV/EBITDA (x)	8.0	8.0	8.0	8.4	8x is current level
EV (Rs.m)	509,044	637,576	432,723	537,597	
Equity (Rs.m)	58,341	241,555	61,293	86,894	
Shares (m)	915	915	1,300	915	
Per share (Rs)	**64**	**264**	**47**	**95.0**	66% forecast; balance split upside/downside
Implied PER (x)	7.6	13.2	30.1	11.3	
Share price (Rs)	82	82	82	82	
Upside / (downside)	**-22%**	**222%**	**-42%**	**16%**	

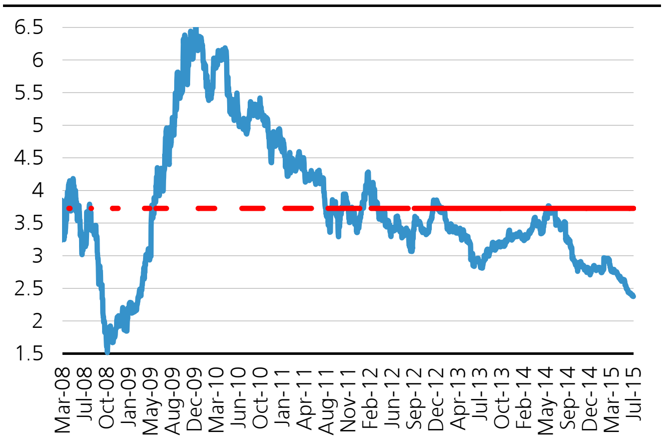
Source: UBS estimates

Figure 118: EV/EBITDA (x)



Source: Bloomberg, Company data, UBS estimates; Based on actual 12m fwd rolling numbers

Figure 119: EV/Sales (x)



Source: Bloomberg, Company data, UBS estimates; Based on actual 12m fwd rolling numbers

Jindal Steel & Power (JNSP.BO)

Income statement (Rsm)	03/13	03/14	03/15	03/16E	% ch	03/17E	% ch	03/18E	03/19E	03/20E
Revenues	**198,068**	**200,040**	**201,592**	**217,197**	*7.7*	**245,850**	*13.2*	**267,795**	**295,952**	**319,541**
Gross profit	67,723	53,880	45,246	48,380	*6.9*	56,268	*16.3*	59,436	67,807	74,608
EBITDA (UBS)	**65,685**	**54,568**	**54,835**	**58,635**	*6.9*	**68,626**	*17.0*	**72,717**	**82,020**	**89,818**
Depreciation & amortisation	(15,392)	(18,292)	(27,328)	(27,306)	*-0.1*	(30,017)	*9.9*	(30,802)	(31,512)	(32,220)
EBIT (UBS)	**50,293**	**36,276**	**27,506**	**31,329**	*13.9*	**38,609**	*23.2*	**41,915**	**50,508**	**57,597**
Associates & investment income	1,364	656	2,256	2,493	*10.5*	3,313	*32.9*	5,542	5,703	7,958
Other non-operating income	0	0	0	0	-	0	-	0	0	0
Net interest	(7,582)	(11,812)	(26,073)	(28,174)	*-8.1*	(29,092)	*-3.3*	(27,548)	(25,725)	(24,989)
Exceptionals (incl goodwill)	(5,741)	0	(19,116)	0	-	0	-	0	0	0
Profit before tax	**38,335**	**25,120**	**(15,428)**	**5,648**	-	**12,830**	*127.2*	**19,909**	**30,485**	**40,566**
Tax	(9,218)	(6,182)	882	(1,412)	-	(3,207)	*-127.2*	(4,977)	(7,621)	(10,141)
Profit after tax	**29,116**	**18,938**	**(14,546)**	**4,236**	-	**9,622**	*127.2*	**14,931**	**22,864**	**30,424**
Preference dividends	0	0	0	0	-	0	-	0	0	0
Minorities	(15)	166	1,765	1,026	*-41.8*	526	*-48.7*	26	(391)	(548)
Extraordinary items	0	0	0	0	-	0	-	0	0	0
Net earnings (local GAAP)	**29,101**	**19,104**	**(12,781)**	**5,262**	-	**10,149**	*92.9*	**14,958**	**22,473**	**29,877**
Net earnings (UBS)	**34,842**	**19,104**	**6,335**	**5,262**	*-16.9*	**10,149**	*92.9*	**14,958**	**22,473**	**29,877**
Tax rate (%)	24.0	24.6	0.0	25.0	-	25.0	*0.0*	25.0	25.0	25.0

Per share (Rs)	03/13	03/14	03/15	03/16E	% ch	03/17E	% ch	03/18E	03/19E	03/20E
EPS (UBS, diluted)	37.27	20.53	6.81	5.66	*-16.9*	10.91	*92.9*	16.08	24.16	32.11
EPS (local GAAP, diluted)	31.13	20.53	(13.74)	5.66	-	10.91	*92.9*	16.08	24.16	32.11
EPS (UBS, basic)	37.45	20.88	6.92	5.75	*-16.9*	11.09	*92.9*	16.35	24.56	32.66
Net DPS (Rs)	1.60	1.50	0.00	0.00	-	0.00	-	0.00	0.00	0.00
Cash EPS (UBS, diluted)[1]	53.74	40.20	36.18	35.01	*-3.3*	43.17	*23.3*	49.19	58.03	66.75
Book value per share	228.33	242.92	221.26	231.72	*4.7*	242.63	*4.7*	258.70	282.84	314.94
Average shares (diluted)	934.83	930.35	930.35	930.35	*0.0*	930.35	*0.0*	930.35	930.35	930.35

Balance sheet (Rsm)	03/13	03/14	03/15	03/16E	% ch	03/17E	% ch	03/18E	03/19E	03/20E
Cash and equivalents	2,001	10,153	25,715	50,253	*95.4*	32,206	*-35.9*	23,605	25,457	23,758
Other current assets	149,811	199,142	168,493	173,061	*2.7*	175,588	*1.5*	179,305	187,293	192,930
Total current assets	**151,812**	**209,295**	**194,207**	**223,314**	*15.0*	**207,794**	*-7.0*	**202,910**	**212,749**	**216,688**
Net tangible fixed assets	385,049	522,071	551,677	574,371	*4.1*	590,278	*2.8*	600,439	609,657	618,052
Net intangible fixed assets	1,543	5,930	5,485	5,485	*0.0*	5,485	*0.0*	5,485	5,485	5,485
Investments / other assets	32,322	3,425	3,998	3,998	*0.0*	4,024	*0.7*	4,050	4,077	4,103
Total assets	**570,726**	**740,721**	**755,366**	**807,167**	*6.9*	**807,581**	*0.1*	**812,884**	**831,968**	**844,328**
Trade payables & other ST liabilities	38,301	62,455	53,758	63,892	*18.8*	61,362	*-4.0*	58,412	61,311	59,925
Short term debt	92,165	104,679	105,486	109,951	*4.23*	108,463	*-1.35*	106,974	105,486	101,778
Total current liabilities	**130,466**	**167,134**	**159,244**	**173,843**	*9.2*	**169,825**	*-2.3*	**165,387**	**166,797**	**161,702**
Long term debt	154,016	259,003	353,996	385,334	*8.9*	380,117	*-1.4*	374,901	369,684	356,688
Other long term liabilities	68,148	77,677	27,610	24,735	*-10.4*	24,735	*0.0*	24,735	24,735	24,735
Preferred shares	0	0	0	0	-	0	-	0	0	0
Total liabilities (incl pref shares)	**352,631**	**503,813**	**540,849**	**583,911**	*8.0*	**574,676**	*-1.6*	**565,022**	**561,216**	**543,125**
Common s/h equity	212,523	226,105	205,944	215,683	*4.7*	225,832	*4.7*	240,789	263,263	293,140
Minority interests	5,573	10,802	8,573	7,573	*-11.7*	7,073	*-6.6*	7,073	7,490	8,064
Total liabilities & equity	**570,726**	**740,721**	**755,366**	**807,167**	*6.9*	**807,581**	*0.1*	**812,884**	**831,968**	**844,328**

Cash flow (Rsm)	03/13	03/14	03/15	03/16E	% ch	03/17E	% ch	03/18E	03/19E	03/20E
Net income (before pref divs)	29,101	19,104	(12,781)	5,262	-	10,149	*92.9*	14,958	22,473	29,877
Depreciation & amortisation	15,392	18,292	27,328	27,306	*-0.1*	30,017	*9.9*	30,802	31,512	32,220
Net change in working capital	(23,207)	12,816	(1,962)	5,565	-	(5,057)	-	(6,667)	(5,089)	(7,023)
Other operating	(708)	(10,395)	(1,724)	(3,875)	*-124.7*	(1,451)	*62.6*	(488)	160	432
Operating cash flow	**20,578**	**39,816**	**10,861**	**34,258**	*215.4*	**33,657**	*-1.8*	**38,604**	**49,057**	**55,506**
Tangible capital expenditure	(83,791)	(141,348)	(58,650)	(50,000)	*14.7*	(45,000)	*10.0*	(40,500)	(40,500)	(40,500)
Intangible capital expenditure	(625)	(4,388)	0	0	-	0	-	0	0	0
Net (acquisitions) / disposals	0	0	0	0	-	0	-	0	0	0
Other investing	(12,557)	3,000	(110)	0	-	0	-	0	0	0
Investing cash flow	**(96,973)**	**(142,736)**	**(58,760)**	**(50,000)**	*14.9*	**(45,000)**	*10.0*	**(40,500)**	**(40,500)**	**(40,500)**
Equity dividends paid	(1,569)	(1,488)	0	0	-	0	-	0	0	0
Share issues / (buybacks)	0	(5,006)	0	0	-	0	-	0	0	0
Other financing	3,120	1,232	0	0	-	0	-	0	0	0
Change in debt & pref shares	75,274	115,838	91,323	40,280	*-55.89*	(6,705)	-	(6,705)	(6,705)	(16,705)
Financing cash flow	**76,824**	**110,577**	**91,323**	**40,280**	*-55.9*	**(6,705)**	-	**(6,705)**	**(6,705)**	**(16,705)**
Cash flow inc/(dec) in cash	**429**	**7,657**	**43,424**	**24,538**	*-43.5*	**(18,048)**	-	**(8,601)**	**1,852**	**(1,699)**
FX / non cash items	80	495	(27,863)	0	-	0	*-100.0*	0	0	0
Balance sheet inc/(dec) in cash	**509**	**8,152**	**15,562**	**24,539**	*57.7*	**(18,048)**	-	**(8,601)**	**1,852**	**(1,699)**

Source: Company accounts, UBS estimates. (UBS) metrics use reported figures which have been adjusted by UBS analysts.[1]Cash EPS (UBS, diluted) is calculated using UBS net income adding back depreciation and amortization.

Jindal Steel & Power (JNSP.BO)

Valuation (x)	**03/13**	**03/14**	**03/15**	**03/16E**	**03/17E**	**03/18E**	**03/19E**	**03/20E**
P/E (local GAAP, diluted)	13.4	12.5	NM	14.5	7.5	5.1	3.4	2.6
P/E (UBS, diluted)	11.2	12.5	32.1	14.5	7.5	5.1	3.4	2.6
P/CEPS	7.7	6.3	5.9	2.3	1.9	1.6	1.4	1.2
Equity FCF (UBS) yield %	(16.4)	(44.5)	(23.5)	(20.6)	(14.8)	(2.5)	11.2	19.6
Net dividend yield (%)	0.4	0.6	0.0	0.0	0.0	0.0	0.0	0.0
P/BV x	1.8	1.1	1.0	0.4	0.3	0.3	0.3	0.3
EV/revenues (core)	3.0	2.7	3.0	2.4	2.2	2.0	1.8	1.6
EV/EBITDA (core)	9.1	10.0	11.1	8.9	7.8	7.4	6.6	5.9
EV/EBIT (core)	11.9	15.0	22.1	16.7	13.8	12.9	10.6	9.1
EV/OpFCF (core)	9.3	10.3	11.4	9.2	8.0	7.7	6.7	6.0
EV/op. invested capital	1.5	1.0	1.0	0.8	0.8	0.8	0.8	0.7

Enterprise value (Rsm)	**03/13**	**03/14**	**03/15**	**03/16E**	**03/17E**	**03/18E**	**03/19E**	**03/20E**
Market cap.	389,296	238,173	203,746	76,510	76,510	76,510	76,510	76,510
Net debt (cash)	206,798	298,855	393,648	439,399	450,703	457,322	453,992	442,210
Buy out of minorities	4,322	8,187	9,687	8,073	7,323	7,073	7,281	7,777
Pension provisions/other	0	0	0	0	0	0	0	0
Total enterprise value	**600,416**	**545,215**	**607,081**	**523,982**	**534,536**	**540,905**	**537,783**	**526,497**
Non core assets	0	0	0	0	0	0	0	0
Core enterprise value	**600,416**	**545,215**	**607,081**	**523,982**	**534,536**	**540,905**	**537,783**	**526,497**

Growth (%)	**03/13**	**03/14**	**03/15**	**03/16E**	**03/17E**	**03/18E**	**03/19E**	**03/20E**
Revenue	8.8	1.0	0.8	7.7	13.2	8.9	10.5	8.0
EBITDA (UBS)	-6.7	-16.9	0.5	6.9	17.0	6.0	12.8	9.5
EBIT (UBS)	-11.0	-27.9	-24.2	13.9	23.2	8.6	20.5	14.0
EPS (UBS, diluted)	-15.0	-44.9	-66.8	-16.9	92.9	47.4	50.2	32.9
Net DPS	0.0	-6.2	-	-	-	-	-	-

Margins & Profitability (%)	**03/13**	**03/14**	**03/15**	**03/16E**	**03/17E**	**03/18E**	**03/19E**	**03/20E**
Gross profit margin	34.2	26.9	22.4	22.3	22.9	22.2	22.9	23.3
EBITDA margin	33.2	27.3	27.2	27.0	27.9	27.2	27.7	28.1
EBIT margin	25.4	18.1	13.6	14.4	15.7	15.7	17.1	18.0
Net earnings (UBS) margin	17.6	9.5	3.1	2.4	4.1	5.6	7.6	9.3
ROIC (EBIT)	12.5	7.0	4.5	4.8	5.7	6.0	7.1	7.9
ROIC post tax	9.9	5.3	4.5	3.6	4.3	4.5	5.3	6.0
ROE (UBS)	17.7	8.7	2.9	2.5	4.6	6.4	8.9	10.7

Capital structure & Coverage (x)	**03/13**	**03/14**	**03/15**	**03/16E**	**03/17E**	**03/18E**	**03/19E**	**03/20E**
Net debt / EBITDA	3.7	6.5	7.9	7.6	6.7	6.3	5.5	4.8
Net debt / total equity %	112.0	149.2	202.2	199.3	195.9	184.9	166.1	144.3
Net debt / (net debt + total equity) %	52.8	59.9	66.9	66.6	66.2	64.9	62.4	59.1
Net debt/EV %	40.7	64.8	71.5	84.9	85.4	84.7	83.6	82.6
Capex / depreciation %	NM	NM	NM	183.1	149.9	131.5	128.5	125.7
Capex / revenue %	NM	NM	29.1	23.0	18.3	15.1	13.7	12.7
EBIT / net interest	6.6	3.1	1.1	1.1	1.3	1.5	2.0	2.3
Dividend cover (UBS)	23.4	13.9	-	-	-	-	-	-
Div. payout ratio (UBS) %	4.3	7.2	-	-	-	-	-	-

Revenues by division (Rsm)	**03/13**	**03/14**	**03/15**	**03/16E**	**03/17E**	**03/18E**	**03/19E**	**03/20E**
Standalone (Net)	149,547	145,440	140,994	141,967	148,420	161,418	175,704	191,407
Jindal Power (Net)	25,097	25,129	32,280	41,505	59,372	63,296	71,541	72,972
Shadeed (Net)	34,440	32,004	32,315	36,475	41,171	46,472	52,455	59,209
Other Businesses (Net)	(11,016)	(2,533)	(2,571)	(2,751)	(3,113)	(3,391)	(3,748)	(4,047)
Others	0	0	(1,425)	0	0	0	0	0
Total	**198,068**	**200,040**	**201,592**	**217,197**	**245,850**	**267,795**	**295,952**	**319,541**

EBIT (UBS) by division (Rsm)	**03/13**	**03/14**	**03/15**	**03/16E**	**03/17E**	**03/18E**	**03/19E**	**03/20E**
Others	50,293	36,276	27,506	31,329	38,609	41,915	50,508	57,597
Total	**50,293**	**36,276**	**27,506**	**31,329**	**38,609**	**41,915**	**50,508**	**57,597**

Source: Company accounts, UBS estimates. (UBS) metrics use reported figures which have been adjusted by UBS analysts.

Tata Steel Investment case

The debate around Tata Steel has focused on the progress of its Kalinganagar expansion, conditions in Europe (and the sale of its long products business), and the high levels of debt. We expect these issues to clear on a one- to two-year view. Kalinganagar adds capacity in attractive segments in India, although market conditions in the short term are to remain tough. UBS is relatively positive on Europe as a market and post the long products disposal, Tata Steel should have more profitable exposure. Union issues in the UK are also close to final resolution in our view. All this benefits cash flow and we believe the anticipated improvement in cash flow and debt represents an interesting turning point.

JSW Steel Investment case

We believe JSW presents a balanced way to play the favourable long-term prospects in the Indian steel market. It is focused on India with a successful programme of capacity expansion almost complete. It is a market leader in terms of efficiency and profitability which leaves it well positioned to drive earnings/cash if market conditions remain tepid. And while debt is high relative to history, this is set to reduce from FY16E. Risks remain over its relative lack of raw material security compared with some peers, although this has been an advantage in a period of low prices.

Steel Authority of India Investment case

As market leader and a pure-play on the Indian market and an SOE, SAIL is particularly geared to the infrastructure/urbanisation story which is a priority of the Modi BJP government. In a sustained growth environment, we also see operational and financial leverage. Yet in the short term, we expect residual capex from the capacity expansion programme to slow FCF improvement and weigh on the valuation / investor sentiment. We see safer ways to play many of the same themes in the short/medium term, such as JSW Steel.

Jindal Steel & Power Investment case

We like the asset base in both power and steel, so JSPL will be well placed into the long term for a demand recovery in India. But regulatory noise around fuel availability in coal in particular, high levels of debt and a CBI (Central Bureau of Investigation) investigation into the chairman are of greater current concern to investors, in our view. From an equity perspective, this means the risk reward bands are very wide. A weaker growth environment than we anticipate or an equity raising to repair the balance sheet suggest >50% downside. Yet an option remains on these issues being resolved and deleveraging driving material equity upside. We do not think the risk reward is compelling in either direction, which drives our Neutral rating.

Statement of Risk

We believe the major risks for the steel sector are: 1) Steel prices—earnings are highly sensitive to steel prices, which are in turn significantly influenced by the international markets. A significant slowdown/recession in China can have an adverse impact on steel prices and hence on the company's financials. 2) Regulatory issues—To execute its day-to-day business, a steel company has to deal with several government agencies and statutory bodies in various states, as well as at the centre. Regime changes and retrospective amendments to laws/rules can have a significant impact on a company's business. 3) Demand environment—A slowdown in India in general and more specifically a slowdown in steel consumption could pose a significant problem to the company's business. 4) Raw materials—Steel companies source raw materials domestically as well as internationally, which form a large portion of the company's cost structure. There could be several incidents, including adverse weather, which can cause a significant spike in the prices of such raw materials, and could potentially derail a company's profitability.

Tata Steel—is exposed to a variety of residual risks relating to its acquisition of Corus in 2007. These include weak performance in long products and the ongoing sales process of this unit, a pension deficit in the UK and associated industrial action, patchy economic recovery across the Eurozone, and currency.

JSW Steel—has almost no captive raw material supply, which limits its control over its operations and reduces operational gearing into any recovery in global raw material / steel prices.

JSPL—continues to work through a number of residual regulatory issues. These mainly relate to raw material supply in both steel and power, and include Indian FBI charges against its chairman, Mr Naveen Jindal, and de-allocation of coal blocks won in the recent coal auction process.

SAIL—remains majority-owned by the government. While implicit state support is positive there is a risk of direct intervention in operations or financial policy which could be detrimental to minority shareholders.

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12-Month Rating	Definition	Coverage[1]	IB Services[2]
Buy	FSR is > 6% above the MRA.	45%	36%
Neutral	FSR is between -6% and 6% of the MRA.	42%	32%
Sell	FSR is > 6% below the MRA.	13%	20%
Short-Term Rating	**Definition**	**Coverage[3]**	**IB Services[4]**
Buy	Stock price expected to rise within three months from the time the rating was assigned because of a specific catalyst or event.	less than 1%	less than 1%
Sell	Stock price expected to fall within three months from the time the rating was assigned because of a specific catalyst or event.	less than 1%	less than 1%

Source: UBS. Rating allocations are as of 30 June 2015.
1:Percentage of companies under coverage globally within the 12-month rating category. 2:Percentage of companies within the 12-month rating category for which investment banking (IB) services were provided within the past 12 months.
3:Percentage of companies under coverage globally within the Short-Term rating category. 4:Percentage of companies within the Short-Term rating category for which investment banking (IB) services were provided within the past 12 months.

KEY DEFINITIONS: Forecast Stock Return (FSR) is defined as expected percentage price appreciation plus gross dividend yield over the next 12 months. **Market Return Assumption (MRA)** is defined as the one-year local market interest rate plus 5% (a proxy for, and not a forecast of, the equity risk premium). **Under Review (UR)** Stocks may be flagged as UR by the analyst, indicating that the stock's price target and/or rating are subject to possible change in the near term, usually in response to an event that may affect the investment case or valuation. **Short-Term Ratings** reflect the expected near-term (up to three months) performance of the stock and do not reflect any change in the fundamental view or investment case. **Equity Price Targets** have an investment horizon of 12 months.

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UBS Securities India Private Ltd: William Vanderpump.

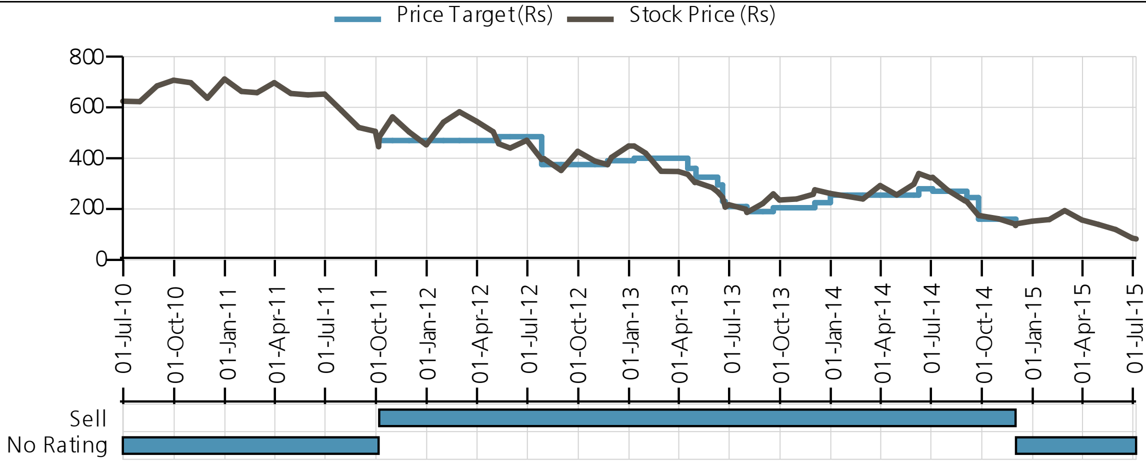
Company Disclosures

Company Name	Reuters	12-month rating	Short-term rating	Price	Price date
Jindal Steel & Power	JNSP.BO	Not Rated	N/A	Rs82.20	07 Jul 2015
JSW Steel	JSTL.BO	Not Rated	N/A	Rs876.50	07 Jul 2015
Steel Authority of India	SAIL.BO	Not Rated	N/A	Rs63.25	07 Jul 2015
Tata Steel	TISC.BO	Not Rated	N/A	Rs297.45	07 Jul 2015

Source: UBS. All prices as of local market close.
Ratings in this table are the most current published ratings prior to this report. They may be more recent than the stock pricing date

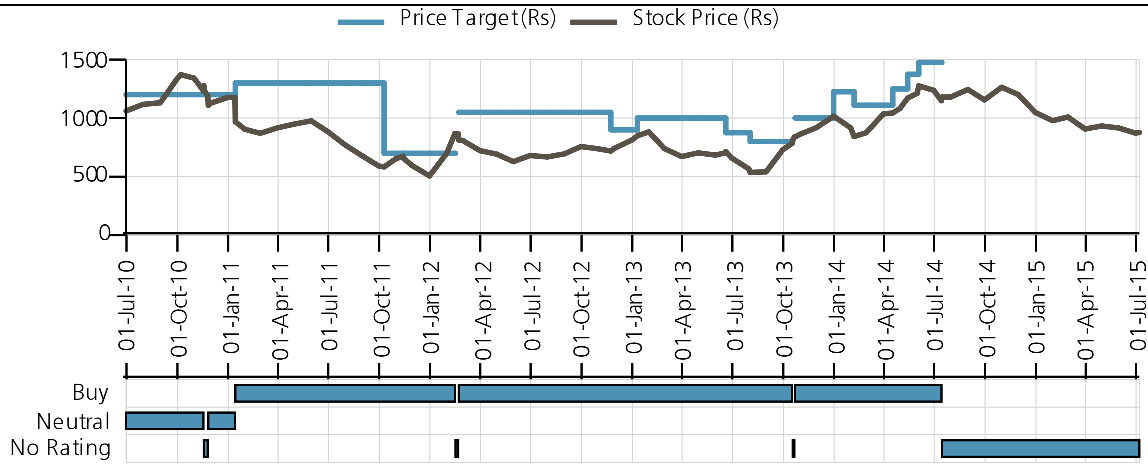
Unless otherwise indicated, please refer to the Valuation and Risk sections within the body of this report.

Jindal Steel & Power (Rs)



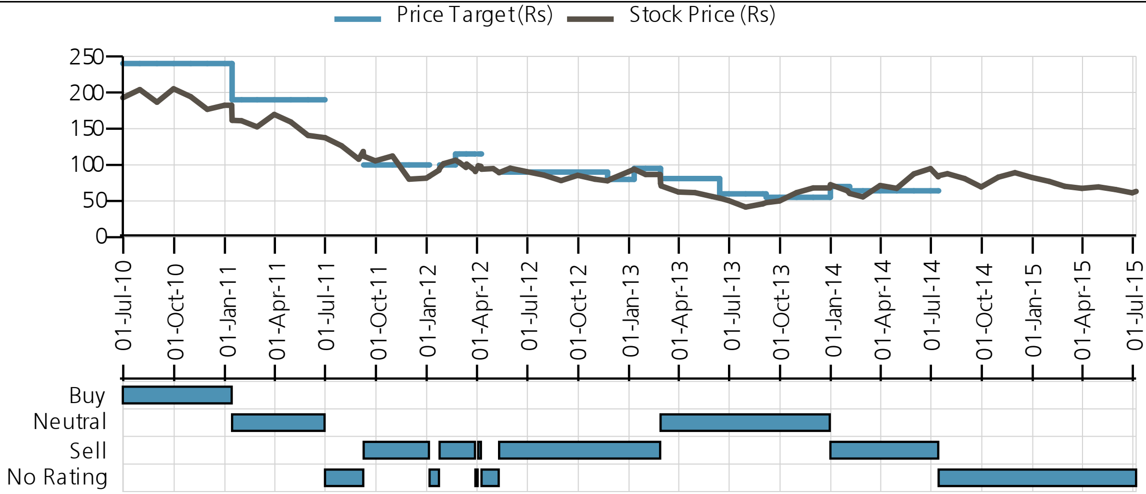
Source: UBS; as of 07 Jul 2015

JSW Steel (Rs)



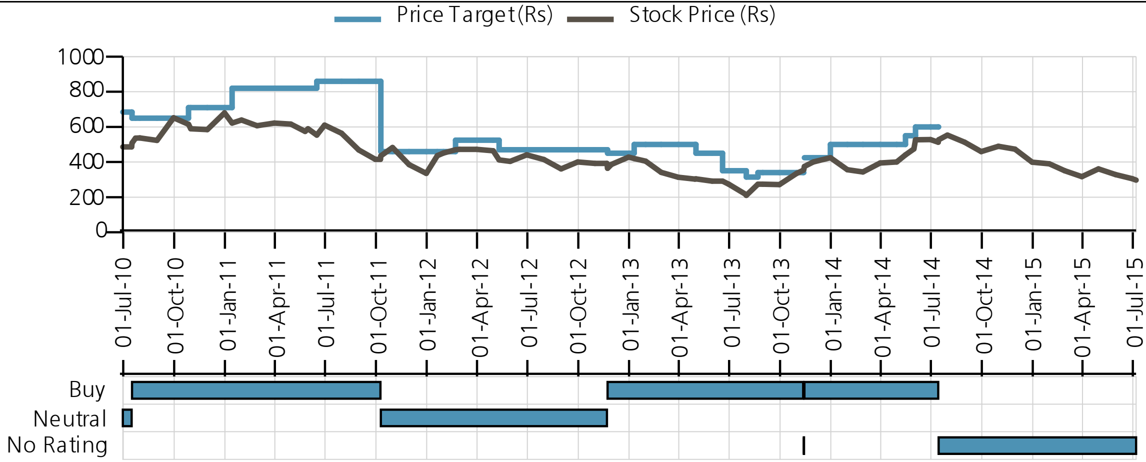
Source: UBS; as of 07 Jul 2015

Steel Authority of India (Rs)



Source: UBS; as of 07 Jul 2015

Tata Steel (Rs)



Source: UBS; as of 07 Jul 2015

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