Sector Note

Commodities | India | January 26, 2021

India

Underweight *(previously Overweight)*

Highlighted Companies

Jindal Steel and Power

ADD, TP Rs476, 279.65

We expect the company to fare well based on its value-added offerings but expect its profitability to fall, leading to 6% EBITDA CAGR over FY21F-23F.

JSW Steel

REDUCE, TP Rs330, 382.45

Coal block allocation is positive for the company, but higher plant load factor (PLF), which is key for its power business, is still elusive. We value JSPL on a sum-of-parts valuation to arrive at a TP of Rs476

Tata Steel

REDUCE, TP Rs575, 651.95

The company looks overvalued on all parameters, in our view. European asset sales is factored into its price. Downgrade to Reduce.

Summary Valuation Metrics

P/E (x)	Mar21-F	Mar22-F	Mar23-F
Jindal Steel and Power	21.2	23.02	21.99
JSW Steel	28.2	23.8	23.2
Tata Steel	15.2	26.2	32.0

P/BV (x)	Mar21-F	Mar22-F	Mar23-F
Jindal Steel and Power	1.1	1.1	1.0
JSW Steel	2.0	1.9	1.7
Tata Steel	0.7	0.7	0.7

Dividend Yield	Mar21-F	Mar22-F	Mar23-F
Jindal Steel and Power	0%	0%	0%
JSW Steel	1.1%	1.1%	1.1%
Tata Steel	0.7%	0.7%	0.7%

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Commodities - Overall

Last leg of steel rally; Underweight

- Pandemic led destocking of steel a V-shaped recovery in global PMI (mid 2020), made supply chains run for cover, resulting in higher steel prices.
- Though this inventory cycle happens every year, the pandemic accentuated it. The decade-high steel spreads will raise production and end this rally.
- We downgrade Tata Steel, JSW Steel and SAIL to Reduce from Add. JSPL remains the Add idea in our coverage universe.

Steel showing classic inventory cycle; Reduce

Steel is showing a classic inventory cycle, accentuated by pandemic-driven pessimism. Normally the perception by steel users of poor demand leads to destocking. Globally 45% of steel produced remains in the supply chain (Source: Steel Industry), hence, a wrong perception among users could create a severe shortage. This happened in Jun/ Jul 2020 when the global Purchasing Managers' Index (PMI) rose sharply leading to a rush for the metal. The shortage is feeding on itself and will likely lead to overstocked supply chains, fall in steel spreads and prices in the near term. This sequence has occurred many times in the past and 2021F will be no different, in our view.

Indian steel makers coking coal advantage may not last long

Barring China (because of its import ban on coking coal from Australia), steel spread over raw material (spreads = price - raw material cost) is at a decade high in all other markets. We believe steel is in overcapacity and high gross margins will lead to much higher production. Despite current favorable global liquidity conditions, we do not think it can lead to a sustained manufacturing cycle. Indian steel makers are enjoying low coking coal costs now. High prices and shortages in China could push China to reverse its policies, potentially raising production costs for Indian steel companies in near term, in our view.

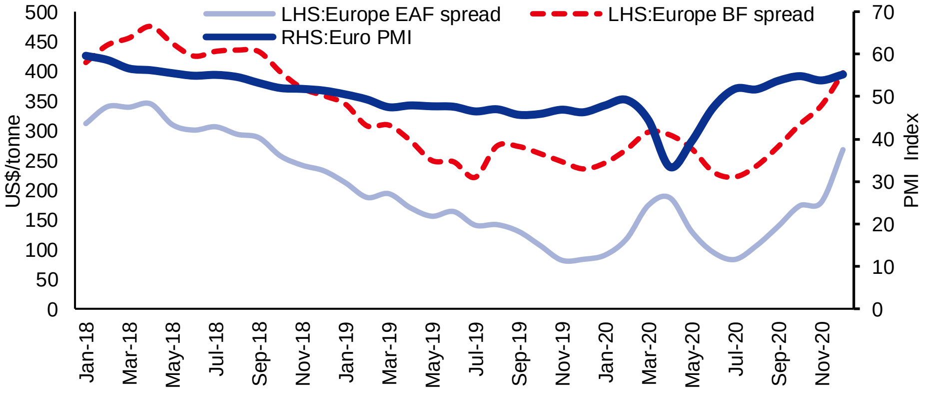
India will face iron ore shortages if exports continue unabated

India will face iron ore shortages (Figure 22) as pellet exports remain lucrative, in our view. The high cost of production in Odisha is another push factor for Indian iron ore. This iron ore shortage is a good opportunity for SAIL to unload its unused iron ore inventory. However, it is possible that we may see some policy action by Government of India on pellet exports in the coming months – we could see an export ban or high duty on exports.

Stocks valuations at high, downgrade sector rating to Underweight

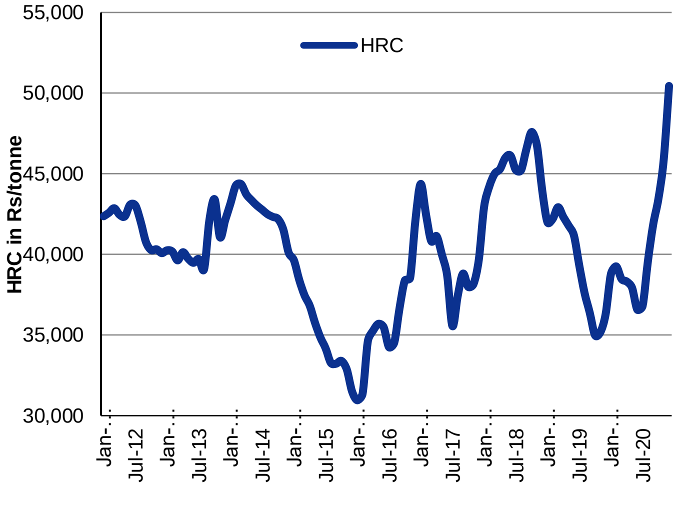
Tata Steel and JSW Steel are trading near all-time high EV/EBITDA valuations. This becomes even more stark if we account for steel prices likely falling in coming months. Thus, we downgrade our rating on the sector to Underweight (from Overweight) and to Reduce on Tata Steel and JSW Steel (from Add). We retain our Add rating on Jindal Steel and Power Limited (JSPL). We believe investors will do well to sell SAIL, JSW Steel and Tata Steel. Upside risk to our call: If steel prices remain strong earnings will be higher than estimated, hence stocks will see higher levels.

Figure 1: PMI fall led to despondency in European steel supply chain and destocking.



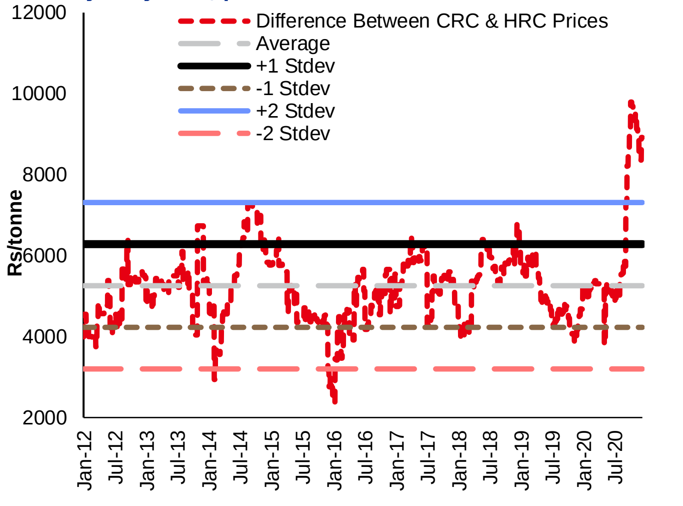
SOURCES: EIP RESEARCH, STEELMINT

Figure 2: Indian HRC price is well over the last 10-year high



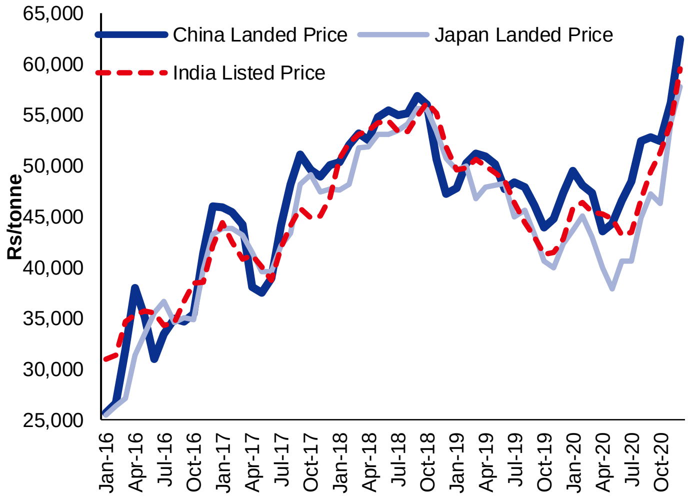
HRC IS HOT ROLLED COIL SOURCES: EIP RESEARCH, STEELMINT

Figure 3: All-time high CRC spread over HRC indicates low inventory in system; price can hold for some time



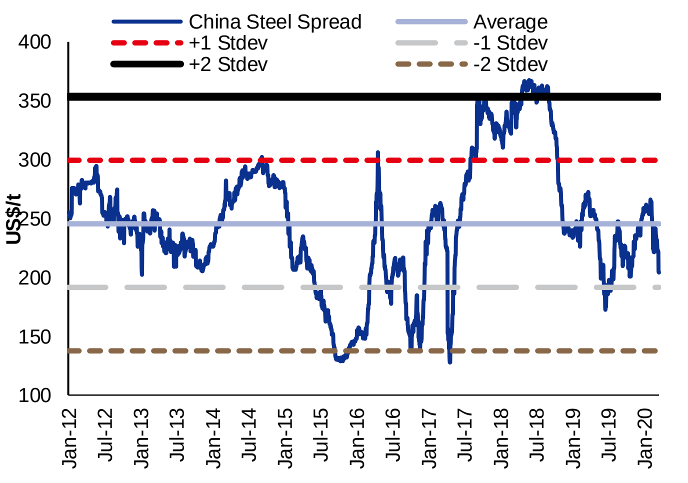
CRC IS COLD-ROLLED COIL. SOURCES: EIP RESEARCH, STEELMINT

Figure 4: Listed price in India is moving in sync with landed price from China and Japan



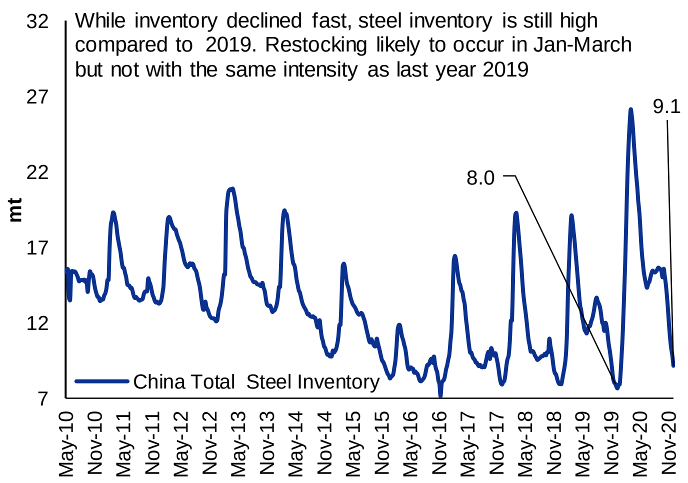
SOURCES: STEELMINT, EIP RESEARCH

Figure 5: Chinese policies vis-à-vis HCC leading to high cost of production in China and low spreads



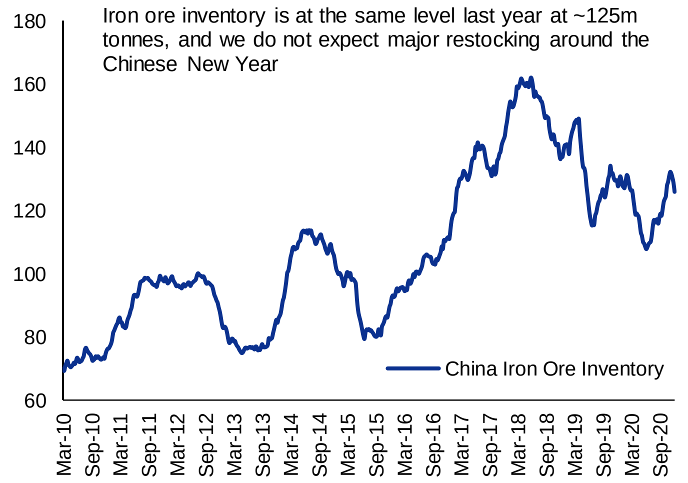
HCC IS HARD COKING COAL SOURCES: STEELMINT, EIP RESEARCH

Figure 6: Positive surprise for all on steel demand resilience, hence inventory depleted quickly in last 6 months



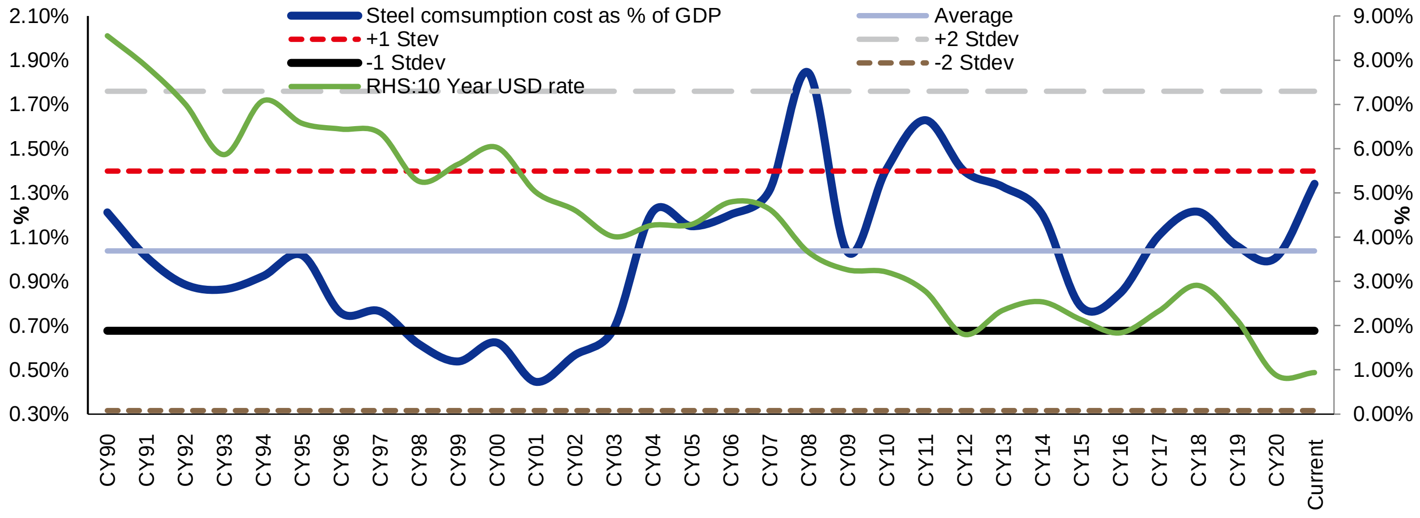
SOURCES: STEELMINT, EIP RESEARCH

Figure 7: We don't expect a major restocking-driven iron ore rally



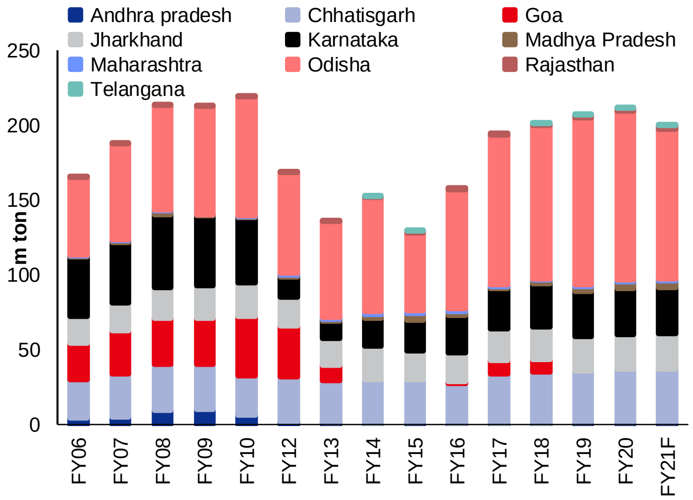
SOURCES: STEELMINT, EIP RESEARCH

Figure 8: Cost of capital (reducing bond yield) has no correlation with steel prices. However, the world can sustain only some % of steel costs as % of GDP. The 30-year average is 1.03% and all-time peak is 1.8% (2008). It peaked recently to around 1.3-1.4% of the global GDP



SOURCES: EIP RESEARCH, BLOOMBERG, WORLDBANK

Figure 9: Indian iron ore production to decline in FY21F. FY22F volumes to depend on export possibilities



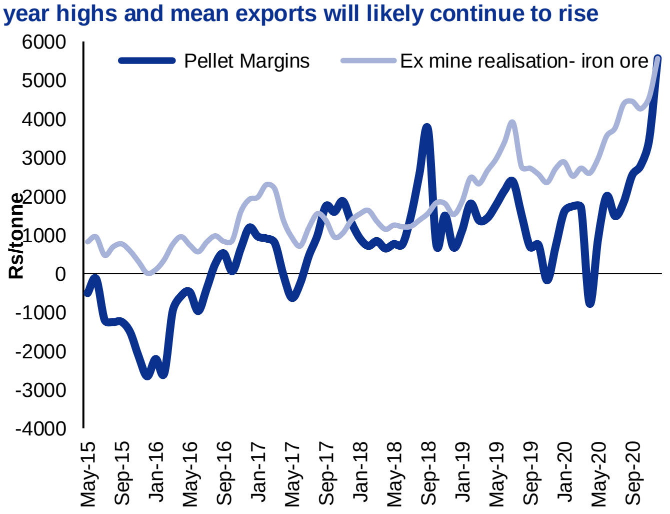
SOURCES: STEELMINT, INDIAN BUREAU OF MINES, EIP RESEARCH

Figure 10: At current prices in China, even new mines (won through auctions) can export iron ore. Export from Odisha is not viable below US$130

Profitability of new miner in Odisha	Unit	Amount
China Iron Ore 62% Fe	US$/t	160
Wastage & Moisture	%	10
China Iron Ore 62% Fe DMT Price	US$/t	144
Sea Freight	US$/t	8
FOB Cost	US$/t	136
Export Duty @ 30%	US$/t	40.8
Value at Port	US$/t	95.2
Exchange Rate	US$/Rs	75
Value at Port	Rs/t	7,140
Internal Freight & Port Charges	Rs/t	1,500
Ex-mine Realisation	Rs/t	5,640
Mining + Royalty	Rs/t	996
Premium	Rs/t	2,200
Cash Margin	**Rs/t**	**2,444**

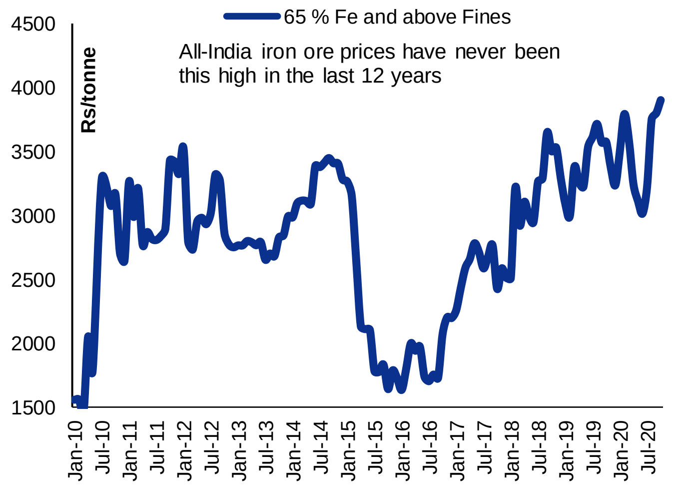
SOURCES: STEELMINT, EIP RESEARCH

Figure 11: Pellet/ iron ore export margins from India are at 6-year highs and mean exports will likely continue to rise



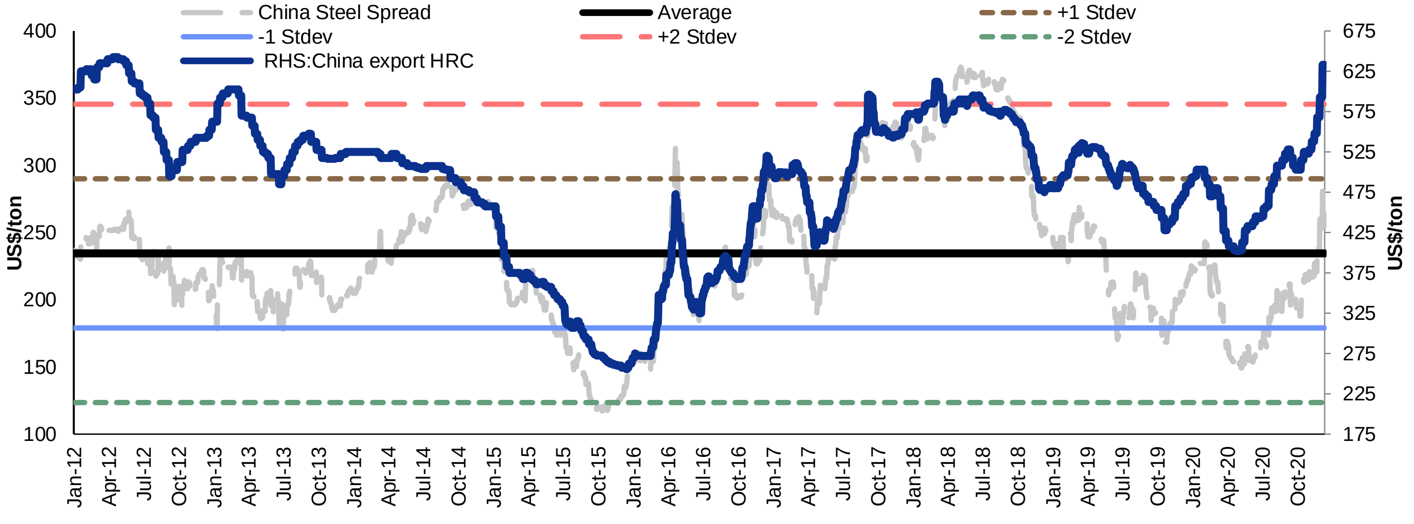
SOURCES: STEELMINT, EIP RESEARCH

Figure 12: Iron ore production is declining. Hence, Indian domestic iron ore is rising and squeezing small steel players



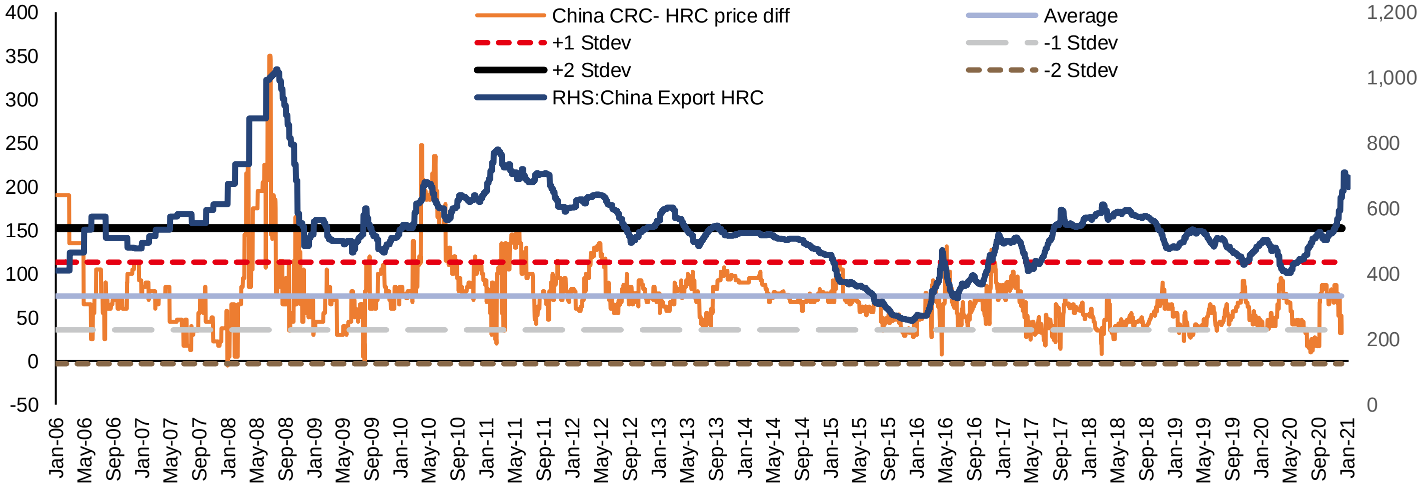
SOURCES: STEELMINT, EIP RESEARCH

Figure 13: Rise in China's steel export prices was not led by costs but by "bull whip" effect driving steel price rise in global economy



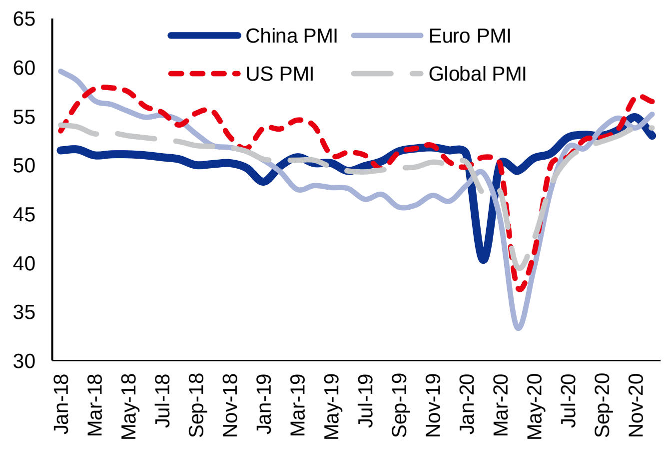
SOURCES: STEELMINT, EIP RESEARCH, BLOOMBERG

Figure 14: Higher HRC and CRC spreads lead to rise in HRC prices and extremely low spreads lead to fall in HRC prices. In the last three months CRC was just US$70 above HRC export prices, meaning a re-roller will just remain operationally viable. This graph, coupled with Figure 13, indicates HRC could fall



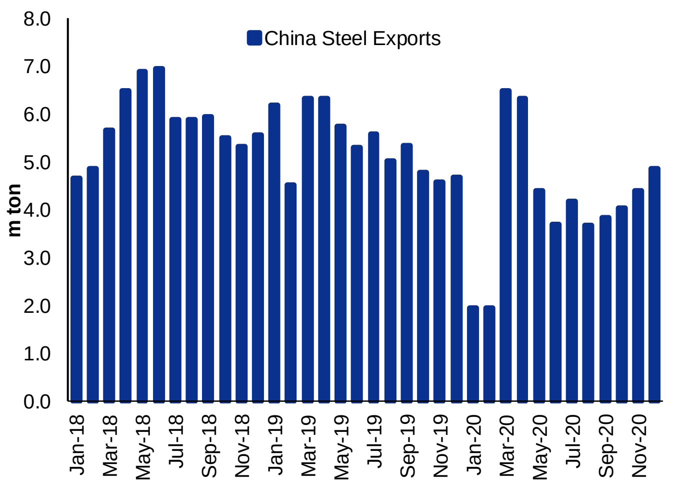
SOURCES: STEELMINT, EIP RESEARCH, BLOOMBERG

Figure 15: Global PMI had a V-shaped recovery. It is at the average level now, indicating supply chains may normalize in near future



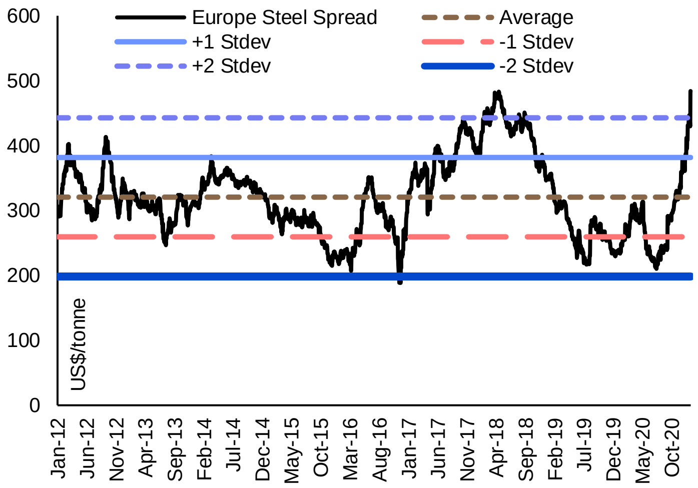
SOURCES: STEELMINT, EIP RESEARCH

Figure 16: Impact of pessimism on supply chain is visible in exports from China, which are picking up again



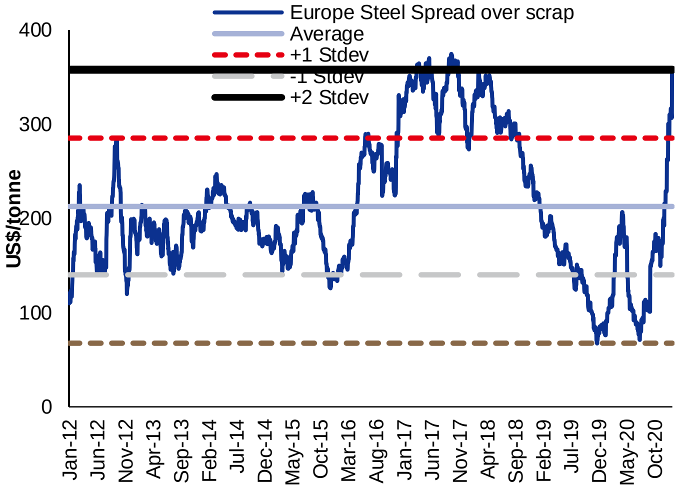
SOURCES: STEELMINT, EIP RESEARCH, BLOOMBERG

Figure 17: European steel spreads for blast furnaces at multi-year highs and driving up production



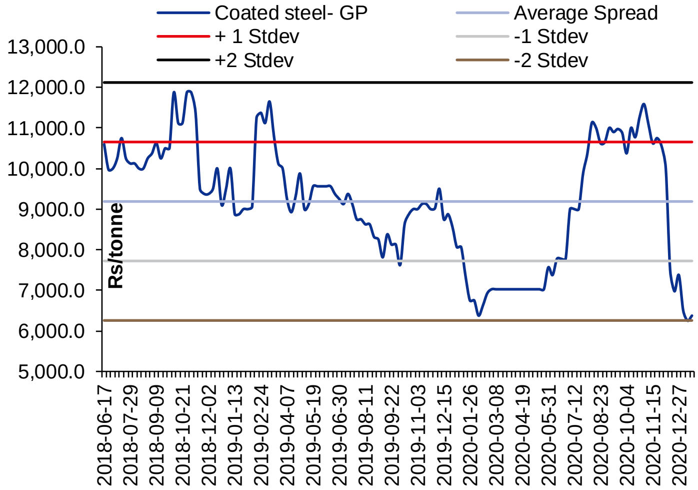
SOURCES: STEELMINT, EIP RESEARCH, BLOOMBERG

Figure 18: EAF made its highest margins last decade in Europe



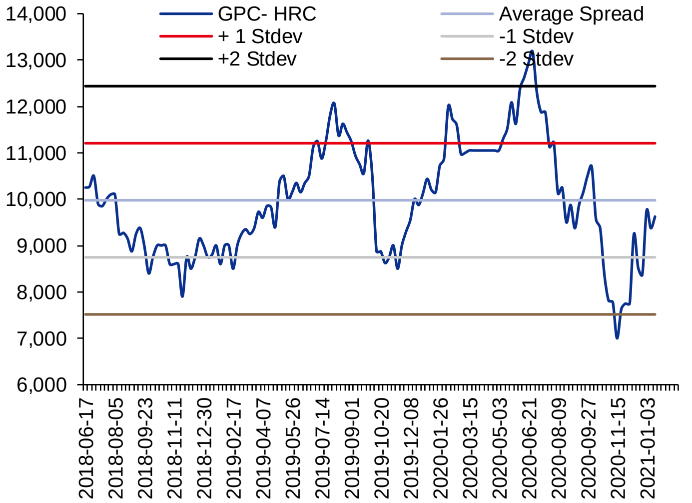
EAF IS ELECTRIC ARC FURNACE SOURCES: STEELMINT, EIP RESEARCH, BLOOMBERG

Figure 19: Hard for Indian users to pass on steel price rise in colour-coated price differential with galvanized sheet



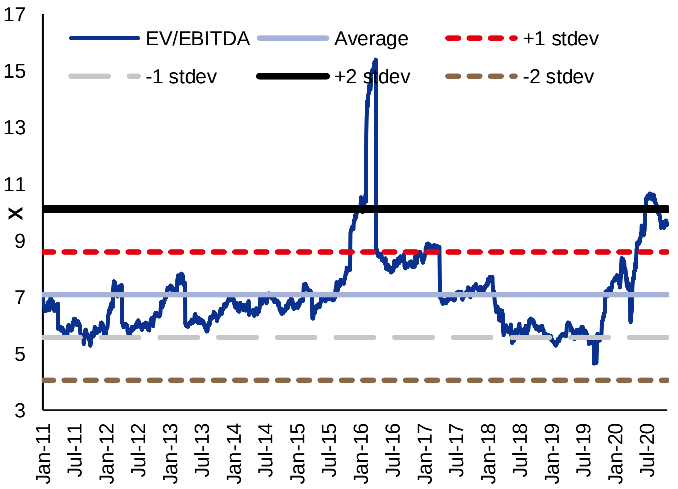
SOURCES: STEELMINT, EIP RESEARCH, BLOOMBERG

Figure 20: Galvanisers are finding it tough to pass on high steel prices, even though they supply to OEMs as their spreads are well below the historical average



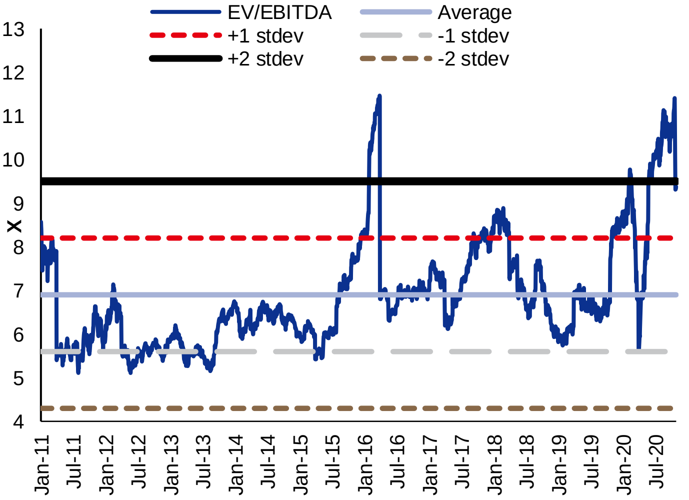
SOURCES: STEELMINT, EIP RESEARCH, BLOOMBERG

Figure 21: Equity market assuming current steel price spike will sustain for long as visible in Tata Steel's valuation



SOURCES: STEELMINT, EIP RESEARCH, BLOOMBERG

Figure 22: Equity market assuming the same scenario for JSW Steel



SOURCES: STEELMINT, EIP RESEARCH, BLOOMBERG

Figure 23: If iron ore/ pellet exports are not curbed there may be serious shortages. We expect duty on pellets exports to be imposed by government of India in the coming months/ quarters

	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21E	FY22E	FY23E
Crude Steel Production	81.7	89.0	89.8	97.9	103.1	110.9	109.1	98.2	115.0	122.0
Scrap used	20.0	36.8	11.4	18.5	11.0	7.7	24.7	22.4	21.6	22.5
Overall Iron ore production	**152.2**	**129.3**	**158.1**	**194.6**	**201.0**	**206.8**	**207.8**	**200.0**	**220.0**	**230.0**
Iron ore import	**0.4**	**12.1**	**7.1**	**4.6**	**8.7**	**12.8**	**1.2**	**2.0**	**5.0**	**5.0**
iron ore export	16.3	7.3	5.4	30.7	24.2	31.9	25.2	20.0	15.0	15.0
Pellet export	1.7	0.8	0.7	9.7	9.3	9.4	12.6	14.0	10.0	8.0
- Iron ore in pellet	2.1	0.9	0.8	11.6	11.2	11.2	15.1	16.8	12.0	9.6
Total Iron ore exported	16.3	7.3	5.4	30.7	24.2	16.2	25.2	36.8	27.0	24.6
Iron ore used for domestic consumption	136.3	134.1	159.8	168.5	185.5	203.4	183.8	165.2	198.0	210.4

SOURCES: STEELMINT, EIP RESEARCH

Good for too long; brace for the fall

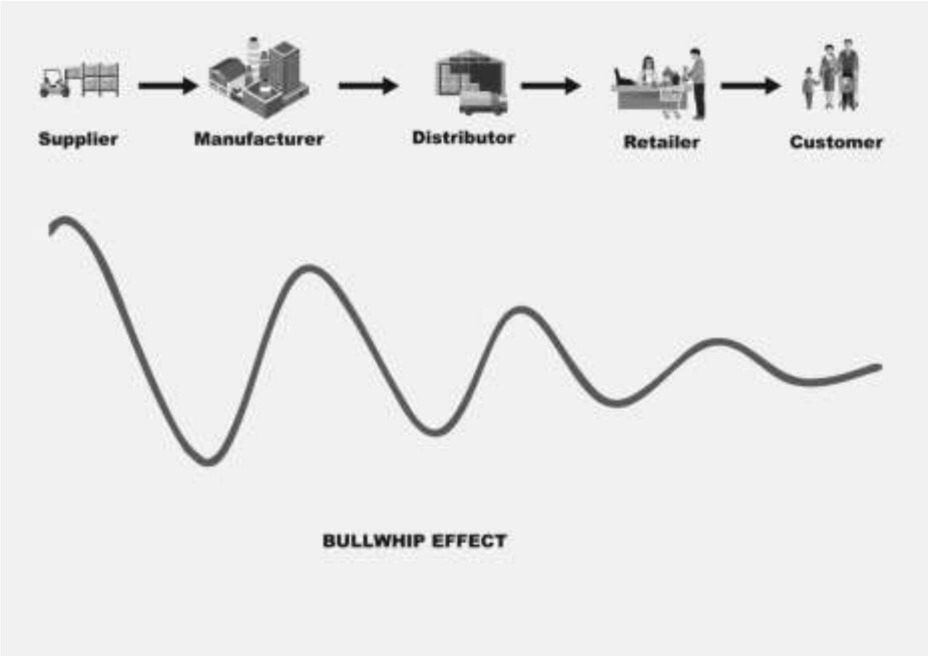
The global COVID-19 pandemic and consequent bearishness squeezed global supply chains and resulted in a strong steel price rally across the world. Such indicators as 1) steel consumption as a percentage of global GDP, and 2) cold-(CRC) and hot-rolled coil (HRC) spreads point to the end of this rally. While we cannot predict when the rally will end, we believe the risk reward of equities is unfavourable. We recommend selling all steel names, except for JSPL.

"Bull whip" effect to drive global steel rally

A "bull whip" effect is common in supply chains and occurs when supply chains read demand wrong, leading to disproportionate reactions by other supply chain players. This leads to inventory shortages and prices falling or rising. At any point 45% of steel remains in the supply chain, and any mild change in perception by steel users can drive big shortages. This happened during the COVID-19 pandemic and was felt globally. With things changing rapidly, our primary indicators like inventor at ports (Source: Bloomberg) show that the supply chain shortage is over and we believe it is now time for prices to correct.

Global caution in Mar-Apr led to steel supply chain shortage ➤

Figure 24: The mechanics of bull whip

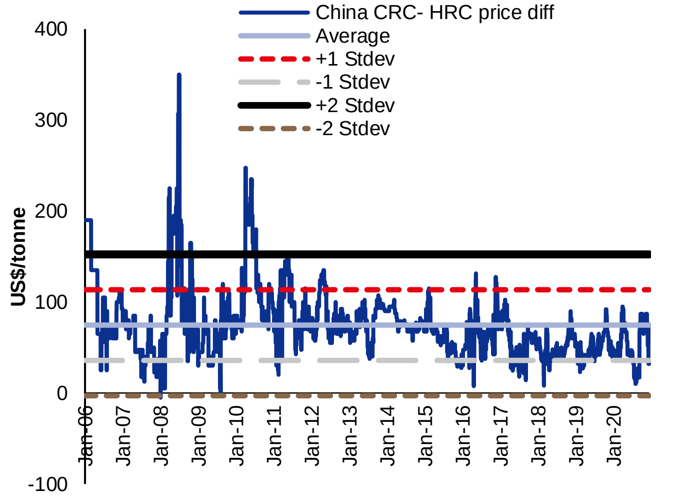


SOURCE: DEMAND CONSIDERATIONS: BULLWHIP EFFECT (DIGITALISTMAG.COM)

Worldwide CRC spreads widened vs HRC; spreads contracting now

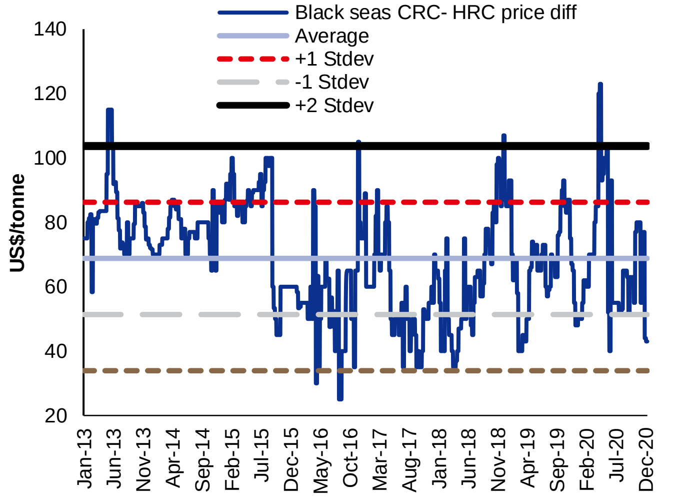
This spread is important because it determines the extent of the end of demand. Note that end consumers buy CRC, not HRC. There is huge global capacity for re-rollers who survive on CRC and HRC spreads. The cost of re-rolling HRC to CRC is normally US$35-40/ton, hence, a lower spread would make them unviable and lead to a correction in HRC prices.

Figure 25: China's CRC-HRC exports spread is at -1SD



SOURCES: EIP RESEARCH, STEELMINT

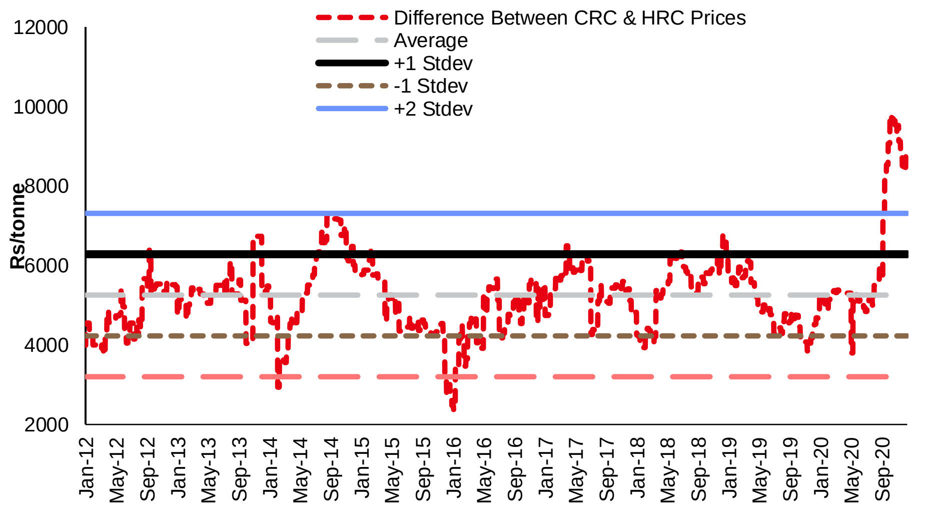
Figure 26: Black Sea CRC-HRC spread is also near -1SD



SOURCES: EIP RESEARCH, STEELMINT

Indian CRC and HRC spreads were quite high, but are falling now

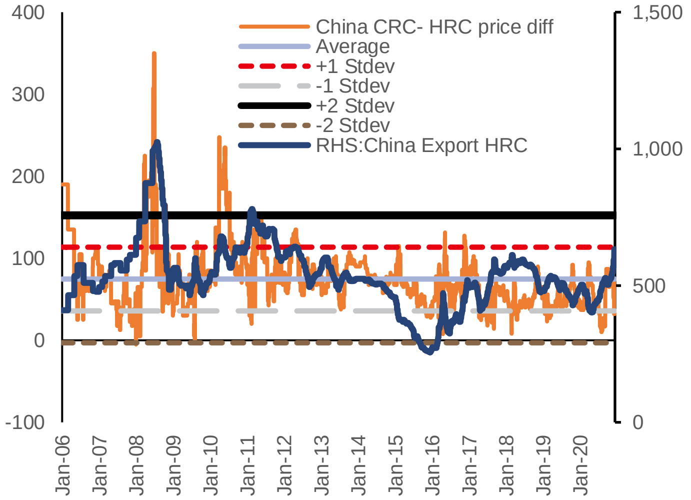
Figure 27: CRC spreads over HRC prices have started coming down, which is a precursor to a correction in base HRC prices



SOURCES: EIP RESEARCH, STEELMINT

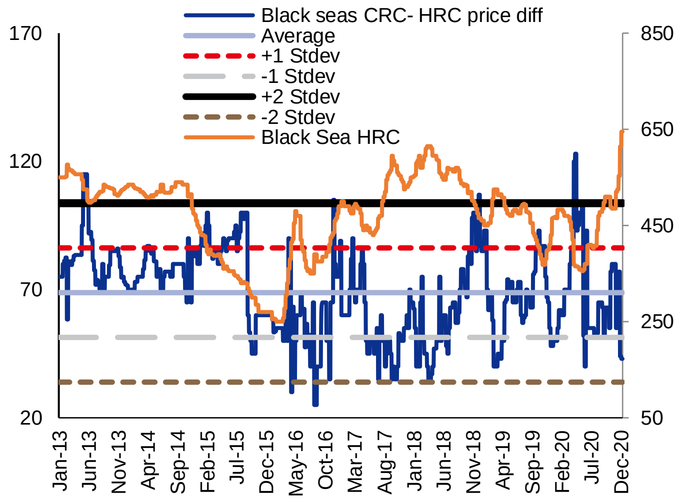
Historical Black Sea & China behaviour imply likely price correction

Figure 28: When CRC spreads fall more steeply than HRC's, HRC prices usually fall



SOURCES: EIP RESEARCH, STEELMINT

Figure 29: HRC spreads also fall as a result of falling Black Sea CRC spreads



SOURCES: EIP RESEARCH, STEELMINT

High global steel prices unlikely to sustain for long as global consumption has been at 1.3% of GDP since 2008

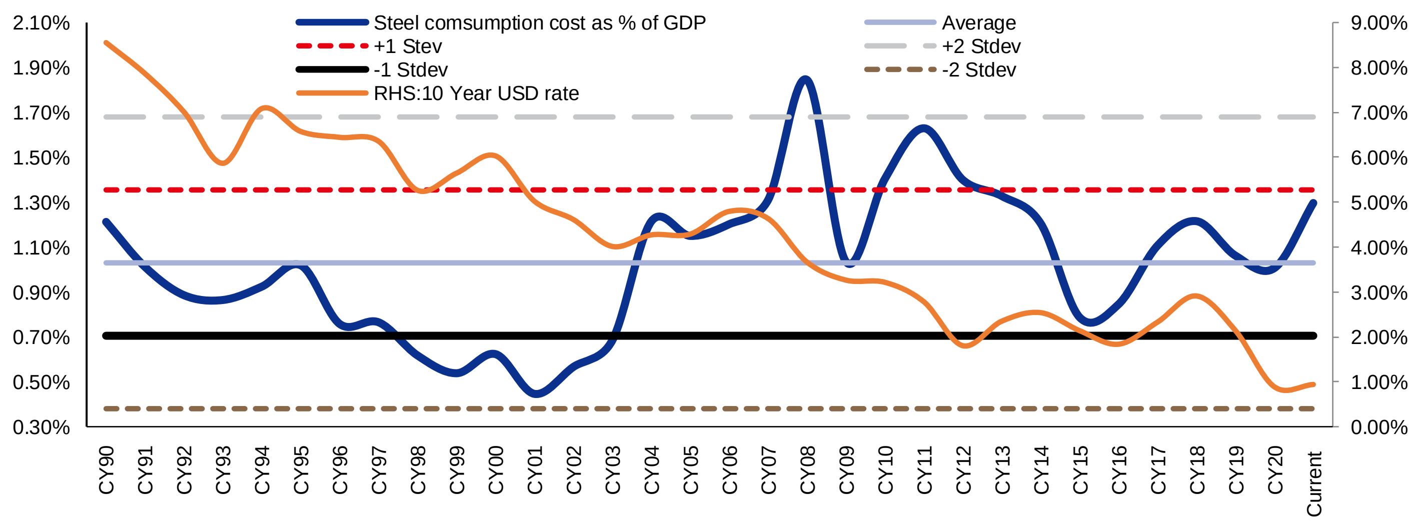
So, why are HRC prices likely to fall? Why can't CRC prices rise? The answer lies in the global ability to pay for steel. The world paid 1.8% of the global GDP for steel in 2008 (in terms of 2010 US$) and since then the world has never paid more than 1.3-1.4% of the global GDP. As of now, we are exceeding 1.3%. Hence, for all practical purposes we are near the peak.

World can pay not more than 1.3-1.4% of GDP for steel

We have adjusted historical steel prices at 2010 US$ for this analysis and at which GDP is based.

World steel consumption value in terms of 2010 US$ is currently at 1.35%, the highest level in the last eight years. A slowing global economy has not spent this much money on steel in the past eight years, making us believe this price is too high. Also, falling capital costs appear to have no correlation with what is spent on steel, in our view.

Figure 30: Falling capital costs vs steel consumption as a % of GDP



SOURCES: EIP RESEARCH, STEELMINT

World economy is slowing, as is China ➤

In 2008 the world was very different from what it is now. We were in a bullish zone, with the market expecting 10% Indian GDP growth for 10 years. India has never touched 10%GDP growth, even in a quarter. It will be interesting to compare the International Monetary Fund's (IMF) global growth predictions at the beginning of 2008 and now. In 2008 IMF forecast global growth of 4% for 2008 and 2009 (http://econbrowser.com/archives/2008/04/revisions_the_g). Now it forecasts -5% growth in 2020 and 6% growth 2021 (https://www.imf.org/en/Publications/WEO/Issues/2020/06/24/WEOUpdateJune2020).

Besides, we have not seen any evidence of a global rally in manufacturing activities in the last 10 years. There are good research papers on the subject, like *Long-term investment, the cost of capital and the dividend and buyback puzzle*, by Adrian Blundell-Wignall and Caroline Roulet, published in the OECD Journal: Financial Market Trends. It can be found here *https://www.oecd.org/finance/long-term-investment_capitalcost-dividend-buyback.pdf*.

Steel prices need to fall at least 20% over next 6-9 months ➤

At the outset we admit our predictions are based on historical data and reversion to mean. Reversion to mean has always happened in this series (Steel consumption as a % of global GDP). A 20% correction in steel prices from current levels will result in world's steel consumption in value terms reaching its 30-year historical mean of 1.03%.

In addition, US$ inflation could lead to a lower steel price correction than we predicted and is a risk to our call.

Indian steel prices may likely fall, but not below Rs40,000/tonne

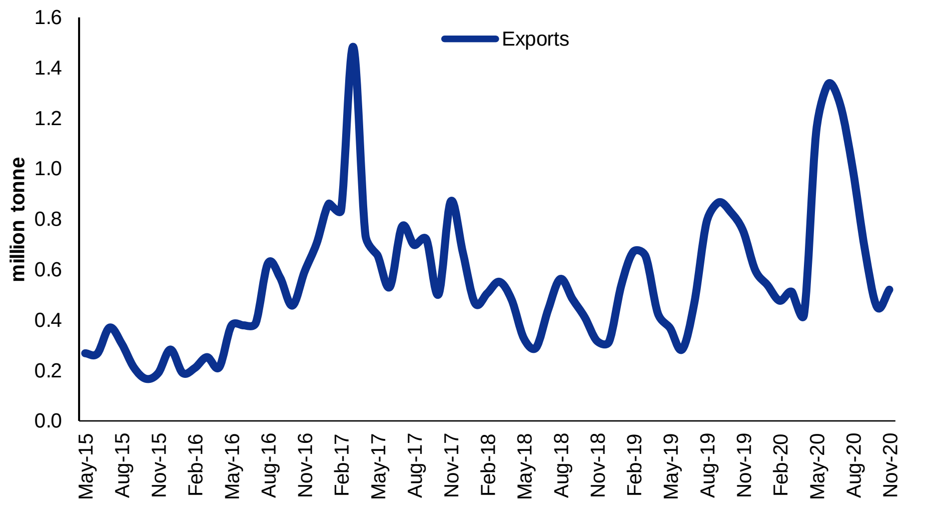
Indian steel prices have been supported by the minimum import price (MIP) and it is unlikely to be done away with soon given the global rise in protectionism. So, while global prices can fall, the Indian steel industry remains protected. The key problem for the Indian steel industry can stem from the likely fall in exports which can create competition in the domestic market for steel market share, and, hence, there will likely be price competition.

Oversupplied Indian flat steel depends on exports to balance the market ➤

The Indian flat steel market is oversupplied and depends on exports to balance the market. For the first three months of FY21 many Indian steel companies survived by pushing volumes through the exports business. Domestic demand was dry in this period.

India mainly exported flat steel in the first few months of this financial year (FY21) JSW Steel, JSPL and, to some extent, Tata Steel are the Indian market's main exporters, in our view.

Figure 31: India's flat steel exports

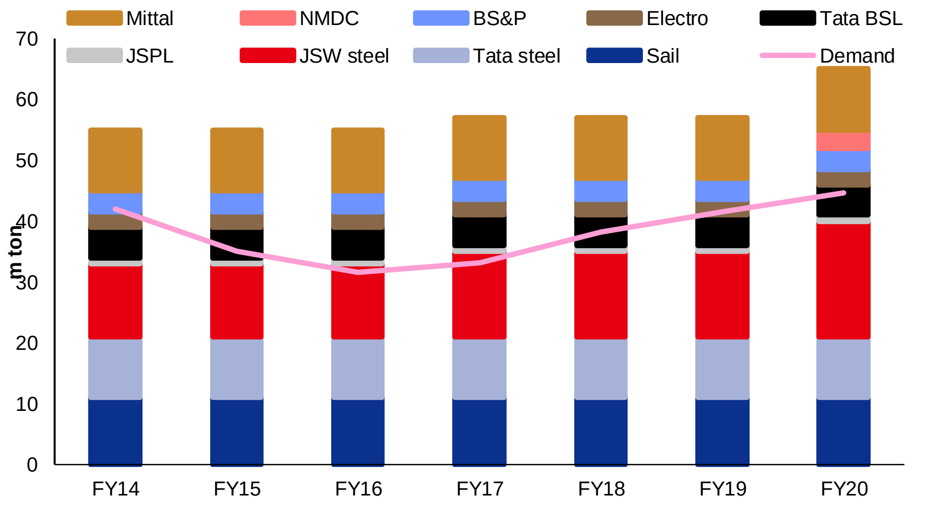


SOURCES: EIP RESEARCH, STEELMINT

Producers' rational behaviour is a mainstay of their profitablity

We believe the overall demand and capacity of Indian flat steel indicates the extent of overcapacity in market. If producers do not maintain the market balance, flat prices to export parity could fall.

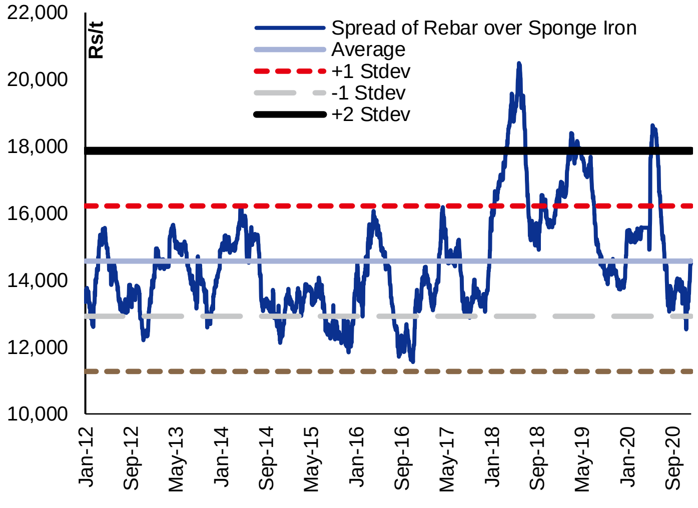
Figure 32: Indian flat steel demand & capacity indicates extent of market overcapacity



SOURCES: EIP RESEARCH, STEELMINT

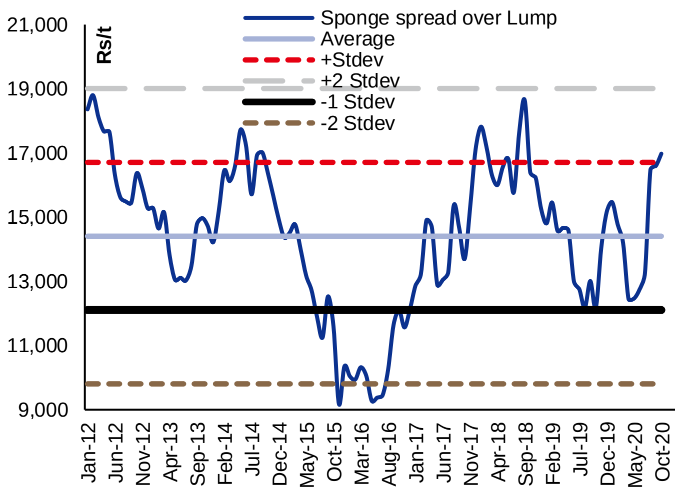
Long steel producers alright for now, but may feel the squeeze ➤

Figure 33: Rebar spreads over sponge iron is only near long-term mean



SOURCES: EIP RESEARCH, STEELMINT

Figure 34: However, sponge iron makers are enjoying multi-year high margins



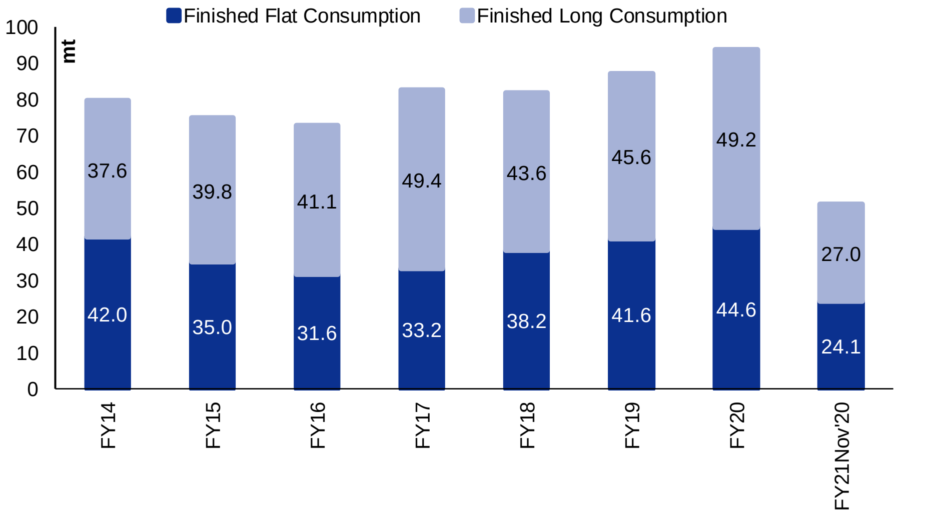
SOURCES: EIP RESEARCH, STEELMINT

Irrespective of global prices, Indian raw material suppliers will likely have the upper hand ➤

Indian iron ore dynamics have changed after the new auctions. Many of the big mines have been won by miners at steep premiums to the Indian Bureau of Mines-notified prices, raising the cost curve significantly for iron, sponge iron and pellet producers.

India's long steel consumption pattern more robust than flat steel

Figure 35: Over the last 6 years Indian long steel demand has grown @4.6% CAGR, but flat has grown only 1% CAGR



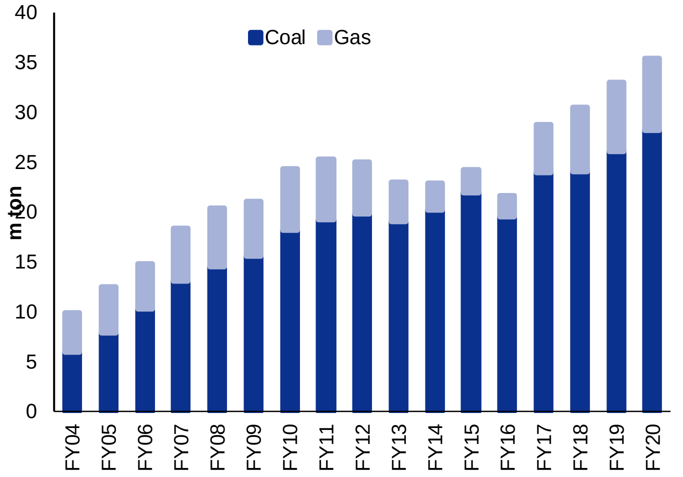
SOURCES: EIP RESEARCH, STEELMINT

High Indian sponge iron utilisation rates mean costs can be passed on

Rising demand for long steel in India has led to higher production of sponge iron as long steel is mostly manufactured by small plants using EAF/IF (EAF = electric arc furnace, IF= Induction furnace).

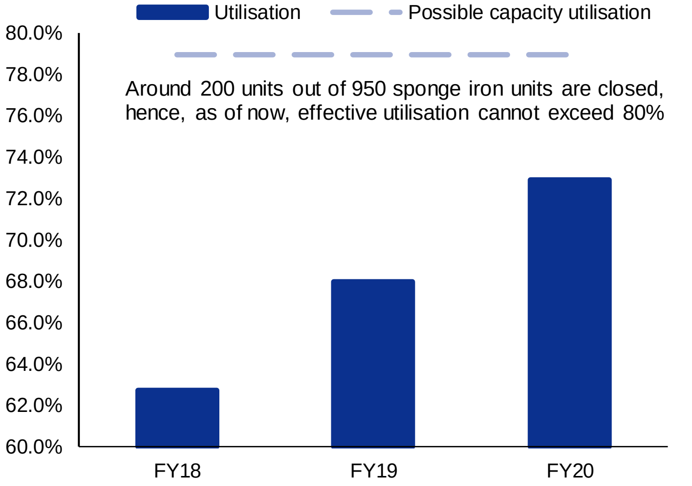
Capacity utilisation has touched 72% for the sponge iron industry in FY20, whereas maximum possible utilisation cannot be more than 80% as 200 units out of 950 have been closed down in India.

Figure 36: Rising demand for long steel in India has led to higher production of sponge iron



SOURCES: EIP RESEARCH, STEELMINT

Figure 37: Capacity utilisation for the sponge iron industry in India touched 72% in FY20



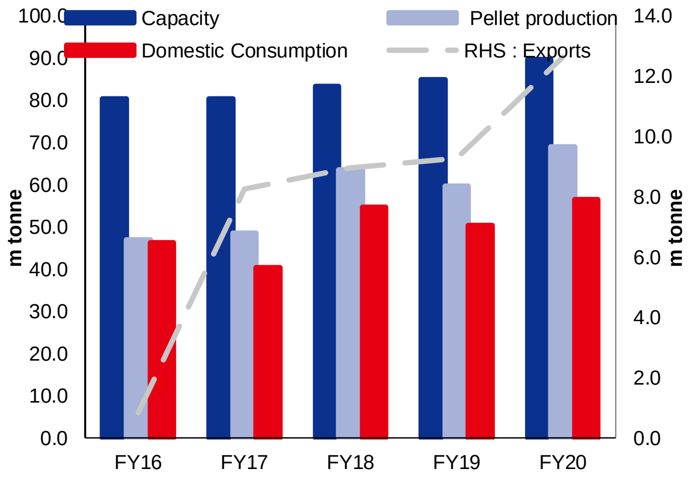
SOURCES: EIP RESEARCH, STEELMINT

India has limited pellet capacity and exports are rising – putting pellet makers in a sweet spot

Indian pellets capacity is running at more than 80% capacity utilisation in FY21. Most of the old plant will find it difficult to run at sustained higher utilisation.

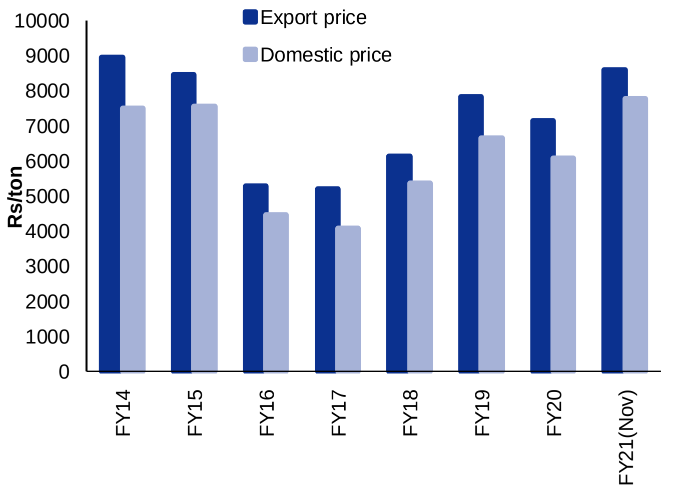
Export realisations are 8-10% higher than domestic sales as of now, making pellet manufacturers favour exports. This poses problems for domestic users, in our view.

Figure 38: Indian pellet capacity is running at more than 80% capacity utilisation



SOURCES: EIP RESEARCH, STEELMINT

Figure 39: Export realisations are 8-10% higher than domestic, sales, making pellet manufacturers favour exports



SOURCES: EIP RESEARCH, STEELMINT

Odisha iron ore production cost is rising – if recently-won merchant mines don't start production there likely will be ore shortages

In recent auctions, nearly 60mt of merchant iron ore production capacity changed hands at a weighted average premium of 117%. All of them are producing mines in Odisha. It is important to note that 70% of this merchant capacity is with JSW, Serajuddin, Formento and Shyam Group, which are companies with significant balance sheet strength and can withstand the lure of cutting prices to generate cash flows.

Figure 40: Close to 60mt of Indian merchant mining production capacity changed hands

Mine	Existing Lessee	Highest Bidder	Premium (%)
Nuagoan	KJS Ahluwalia	JSW Steel	95.20
Balda	Serajuddin	Serajuddin	118.05
Jiling Langalota	Essel Mining	Shyam	135.00
Jajang	Rungta	JSW Steel	110.00
Mahulsukha	Aryan Mining & Trading	Patnaik Minerals	92.70
Nadidih	Bonai Industrial Company	Formento	141.25
Gorumahisani	Ghanshyam Mishra & Sons	Ghanshyam Mishra & Sons	115.00
Nadidih Feegrade Mines	Feegrade Co.Pvt Ltd	Vishal LPG	142.35
Kolmong	Rungta	Yazdani Steel	100.00
Teherai	Bonai Industrial Company	Tarama	93.06
Siljora- Kalimati	Rungta	Debabrata Behera	154.00

SOURCES: EIP RESEARCH, STEELMINT

Figure 41: Seasoned players like JSW, Serajuddin, Shyam Group and Formento own 70% of the merchant category

Captive		Merchant			
Miner	Premium (%)	Premium (%)	Miner	Premium (%)	EC Limit (mt)
JSW Steel	98.55	98.55	JSW Steel	95.2	5.62
ArcelorMittal	107.55	107.55	Serajuddin	118.05	15.15
JSW Steel	132	132	Shyam	135	6.28
Narbheram Power & Ste	90.9	90.9	JSW Steel	110	16.5
Kashvi International	150	150	Patnaik Minerals	92.7	0.04
			Formento	141.25	5.3
			Ghanshyam Mishra & Sons	115	0.75
			Vishal LPG	142.35	7.45
			Yazdani Steel	100	0.04
			Tarama	93.06	2.5
			Debabrata Behera	154	0.14

SOURCES: EIP RESEARCH, STEELMINT

Figure 42: Peer comparison

Company	Bloomberg Ticker	Closing Price (LC)	Target Price* (LC)	% Upside	Rating	Market cap (US$ m)	EV/EBITDA (x) CY21F	EV/EBITDA (x) CY22F	P/BV (x) CY21F	P/BV (x) CY22F	RoE (%) CY21F	RoE (%) CY22F	P/E (x) CY21F	P/E (x) CY22F
India														
JSW Steel Ltd	JSTL IN	382	330	-14%	REDUCE	12,770	8.7	7.8	2.0	1.9	8.7	9.7	28.2	23.8
Tata Steel Ltd	TATA IN	652	575	-12%	REDUCE	10,407	5.2	6.3	0.7	0.7	13.3	7.1	15.2	26.2
Jindal Steel & Power Ltd	JSP IN	280	476	70%	ADD	4,016	4.2	4.4	1.1	1.1	9.5	8.0	21.2	23.0
Steel Authority of India Ltd	SAIL IN	58	54	-7%	REDUCE	3,336	10.4	8.9	0.5	0.5	0.0	0.4	(22.8)	452.2
Evraz PLC	EVR LN	515	NR	NR	NR	10,293	5.2	5.5	4.3	4.2	68.33	68.33	8.0	8.5
Severstal PJSC	CHMF RM	1,325	NR	NR	NR	14,849	5.7	5.7	3.7	3.6	35.27	35.27	8.5	8.1
Novolipetsk Steel PJSC	NLMK RM	222	NR	NR	NR	17,770	6.7	6.5	3.4	3.9	17.87	17.87	8.8	9.3
Magnitogorsk Iron & Steel Works PJSC	MAGN RM	56	NR	NR	NR	8,299	4.1	3.7	1.6	1.7	8.73	8.73	7.4	6.2
United States Steel Corp	X US	19	NR	NR	NR	4,168	7.7	5.8	1.2	1.0	-25.15	-25.15	(37.7)	34.1
Steel Dynamics Inc	STLD US	39	NR	NR	NR	8,141	7.5	7.0	1.6	1.4	11.73	11.73	13.2	12.2
Nucor Corp	NUE US	55	NR	NR	NR	16,540	8.0	7.0	1.4	1.3	7.67	7.67	16.4	14.6
Gerdau SA	GGBR4 BZ	25	NR	NR	NR	7,539	6.4	6.6	1.2	NA	5.19	5.19	11.9	11.6
Cia Siderurgica Nacional SA	CSNA3 BZ	34	NR	NR	NR	8,624	6.3	6.8	3.2	NA	29.62	29.62	9.7	9.6
JFE Holdings Inc	5411 JT	1,003	NR	NR	NR	5,942	8.6	7.0	0.4	0.3	-8.65	-8.65	22.1	7.6
Nippon Steel Corp	5401 JT	1,306	NR	NR	NR	11,963	9.2	7.3	0.5	0.4	-10.81	-10.81	26.9	8.7
Baoshan Iron & Steel Co Ltd	600019 CH	7	NR	NR	NR	23,484	4.6	NA	0.8	NA	5.95	5.95	9.2	8.5
Fangda Special Steel Technology Co Ltd	600507 CH	7	NR	NR	NR	2,350	3.4	NA	1.4	NA	26.57	26.57	7.3	NA
Maanshan Iron & Steel Co Ltd	600808 CH	3	NR	NR	NR	2,890	5.2	NA	0.7	NA	7.22	7.22	7.8	NA
POSCO	005490 KS	2,64,500	NR	NR	NR	20,918	4.3	3.5	0.5	0.5	2.84	2.84	9.1	8.3
China Steel Corp	2002 TT	24	NR	NR	NR	13,460	9.4	NA	1.2	NA	-1.71	-1.71	19.4	NA
Hyundai Steel Co	004020 KP	45,000	NR	NR	NR	5,447	7.1	4.2	0.3	0.4	-1.63	-1.63	18.0	21.8
thyssenkrupp AG	TKA GY	10	NR	NR	NR	7,245	1.3	1.0	0.6	0.6	-233.15	-233.15	(76.1)	26.8
ArcelorMittal	MT NA	19	NR	NR	NR	25,032	4.6	4.7	0.6	0.6	-5.81	-5.81	7.9	8.5
voestalpine AG	VOE EU	32	NR	NR	NR	6,959	7.0	6.1	1.0	1.0	-10.55	-10.55	28.1	14.2
Salzgitter AG	SZG EU	22	NR	NR	NR	1,623	3.5	2.9	0.4	0.4	-11.07	-11.07	8.6	5.9

SOURCES: EIP RESEARCH ESTIMATES, COMPANY REPORTS, BLOOMBERG
NOTE: ALL FORECASTS FOR NOT RATED COMPANIES ARE BLOOMBERG CONSENSUS ESTIMATES
DATA AS AT 24 JAN 2021
NR COMPANIES: NOT COVERED BY EIP RESEARCH:

JSW Steel

Time to Reduce as steel cycle changes

- Unsustainable Indian steel prices are visible in end-user segment (colour-coated steel) supplier spread. Base steel price needs to fall, in our view.
- We expect JSW Steel to fare well based on its value-added offerings but expect its profitability to fall, leading to 6% EBITDA CAGR over FY21F-23F.
- We value JSTL at +2SD the last 10 years' average, leaving little room for disappointment, in our view. RoCE and RoE remain well below double digits.

India

REDUCE *(previously ADD)*

Consensus ratings*:	Buy 9	Hold 14	Sell 7

Current price:	Rs382
Target price: ▼	Rs330
Previous target:	Rs590
Up/downside:	-13.6%
EIP Research / Consensus:	-14.7%
Reuters:	JSTL.NS
Bloomberg:	JSTL IN
Market cap:	US$12,673m
	Rs9,24,466m
Average daily turnover:	US$36.8m
	Rs2684.4m
Current shares o/s:	2,417.3m
Free float:	42.6%

*Source: Bloomberg

Source: Bloomberg

Price performance	1M	3M	12M
Absolute (%)	4.4	19.1	40.7
Relative (%)	1.5	0.2	21.1

Major shareholders	% held
Promoter & Promoter Group	42.4
JFE Steel International Europe BV	15.0
APMS Investment Fund Ltd	1.3

High valuations, risk of commodity price fall, downgrade to Reduce

JSW Steel is trading at a 10-year high valuation, but EBITDA growth at 6% CAGR over FY21F-23F is anemic, in our view. These earnings could have a downside risk if the steel price fall is faster than we have modelled. Already squeezed spreads of end consumer-facing steel products (like colour-coated steel) indicate steel prices are peaking out. The next few weeks till the Chinese New Year are crucial for steel prices. If inventory restocking does not start in China, we are likely to witness this inventory cycle's collapse. Valuations are at a 10-year high and risk reward is unfavorable. Hence, we downgrade JSW Steel to Reduce (from Add) and lower our EV/EBITDA-based target price to Rs330 from Rs560. We have valued JSW steel at 8X EV/ EBITDA (+1 SD of historical valuation) to arrive at TP of Rs330.

JSW has done well on iron ore security, but ore cost will likely rise

In the iron ore mine auctions of 2018-20, JSW Steel won ~30mt p.a. of iron ore production capacity in Odisha. While this provides the company much-needed iron ore security, high premiums paid in auctions will keep iron ore costs elevated, in our view. We expect iron ore costs to rise by ~20% over FY21F-FY23F. The start of coking coal production in the Jharkhand captive mine cannot offset rising iron ore costs as production is about 1mt (in next 2-3 years) against a requirement of ~18mt.

Bhushan Steel and Power acquisition can raise already high net debt

JSW Steel bought Bhushan Steel and Power from the National Company Law Tribunal (NCLT) for Rs197bn in Sep 2019. If JSTL goes alone for the asset, it will raise debt on the books, in our view. In a falling commodity price scenario, this will be negative for the company. Recent capacity expansion raised its net debt to Rs487bn (end FY21F). As argued earlier in the report, the steel price rise has been led by supply chain shortages. This kind of price rise reverses quickly. We have built into our valuations a sequential steel price correction, which could exceed our expectations. Hence net debt/ EBITDA, which is now 3.4x (FY21F), can easily worsen. Risk to our rating is from continued strength in steel prices.

Analyst(s)

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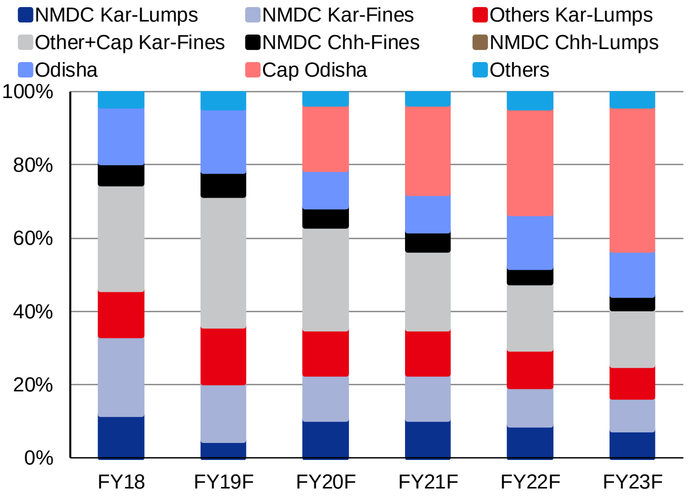
Financial Summary	Mar-19A	Mar-20A	Mar-21F	Mar-22F	Mar-23F
Revenue (Rsm)	8,24,990	7,11,160	7,18,008	9,34,470	10,85,495
Operating EBITDA (Rsm)	1,89,520	1,18,730	1,44,706	1,60,048	1,63,359
Net Profit (Rsm)	76,669	40,579	32,808	38,873	39,784
Core EPS (Rs)	31.7	20.1	13.6	16.1	16.5
Core EPS Growth	18.7%	(36.5%)	(32.5%)	18.5%	2.3%
FD Core P/E (x)	12.06	22.80	28.18	23.78	23.24
DPS (Rs)	4.1	4.1	4.1	4.1	4.1
Dividend Yield	1.07%	1.07%	1.07%	1.07%	1.07%
EV/EBITDA (x)	6.24	10.50	8.70	7.82	7.56
P/FCFE (x)	9.40	19.81	20.43	14.39	12.36
Net Gearing	119.7%	131.5%	127.5%	117.4%	105.9%
P/BV (x)	2.2	2.1	2.0	1.9	1.7
ROE	24.4%	13.6%	8.7%	9.7%	9.2%
% Change In Core EPS Estimates			(0.64%)	(0.71%)	
EIP Research/Consensus EPS (x)			1.95	2.18	2.36

SOURCES: EIP RESEARCH ESTIMATES, COMPANY REPORTS. PRICED AS AT 25 JAN 2021

Figure 43: JSW Steel will source more iron ore from captive sources in future



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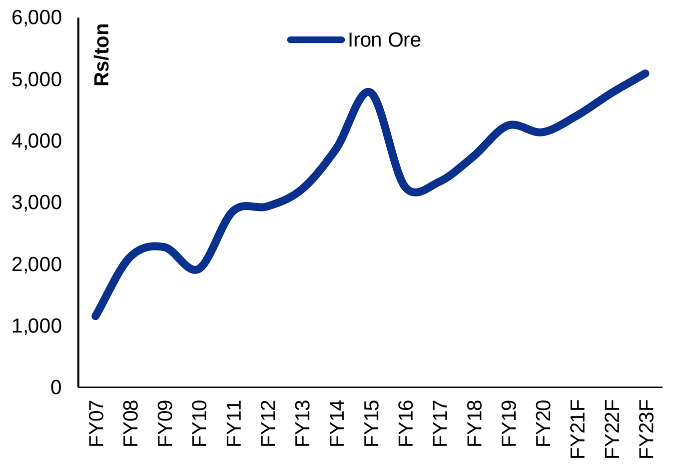
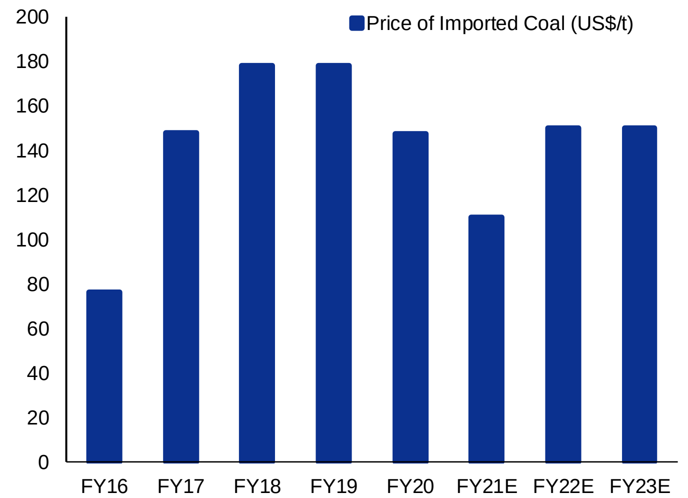
SOURCES: EIP RESEARCH ESTIMATES, COMPANY REPORTS

Figure 44: Captive iron ore will help JSW Steel control costs, though iron ore costs will likely continue to rise



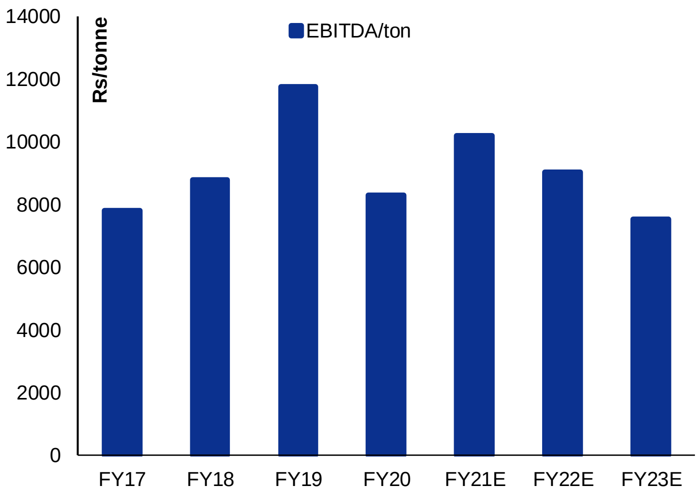
SOURCES: EIP RESEARCH ESTIMATES, COMPANY REPORTS

Figure 45: FY21F has been a windfall for JSW in terms of coking coal costs, but we do not expect it to last



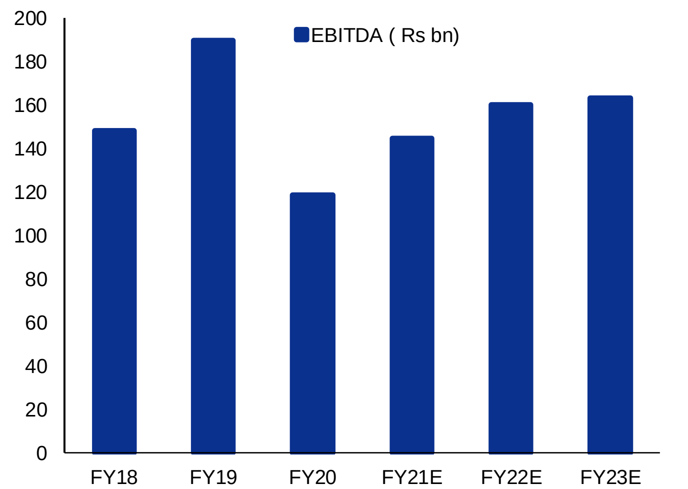
SOURCES: EIP RESEARCH ESTIMATES, COMPANY REPORTS

Figure 46: Standalone EBITDA/tonne will likely peak in FY21F and should taper going forward



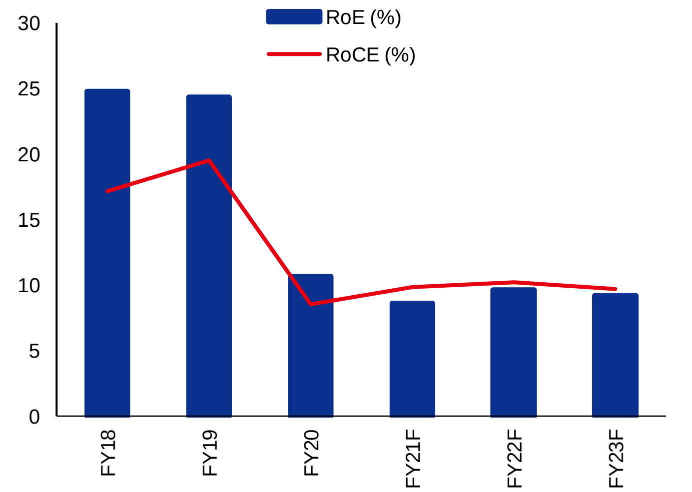
SOURCES: EIP RESEARCH ESTIMATES, COMPANY REPORTS

Figure 47: We expect EBITDA growth of 6% CAGR in next 2 years



SOURCES: EIP RESEARCH ESTIMATES, COMPANY REPORTS

Figure 48: We do not expect significant changes in RoE, RoCE over the next few years



SOURCES: EIP RESEARCH ESTIMATES, COMPANY REPORTS

Volume growth unlikely to compensate for drop in realisation; downgrade to Reduce

We believe JSW Steel has many things going for it now: 1) captive iron ore reserves and the unlikelihood of a repeat of FY11 and FY12 when iron ore was scarce because of a mining ban; 2) significant advantage of size and low capital intensity; and 3) a well-diversified customer base which helped it to export big quantities in Apr-May 2020. However, like any other steel player, JSW Steel cannot escape the steel cycle and a fall in realisations will lead to suboptimal RoCE/RoE. In our view, the current valuation is high and there is significant scope for a fall in Bloomberg consensus earnings. Thus, we downgrade the stock to Reduce, from Add and lower our EV/EBITDA-based target price to Rs330 from Rs560.

JSW Steel has done well on raw material security front

Due to the issues it had with the raw material scarcity in FY11/12, we believe JSW Steel's acquisition (via auction) of a ~30mt iron ore mine in Odisha will help ensure the company raw material availability in future. We expect the company to participate in future coal mine block auctions as well.

JSW acquired sizeable iron ore mining capacity in Odisha ›

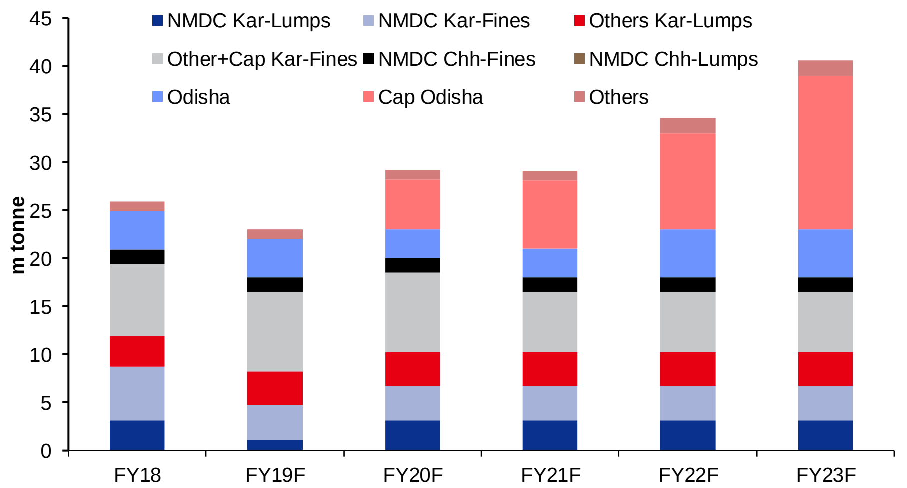
Figure 49: JSW has sufficient access to iron ore through its 30mt mine in Odisha

Captive			Merchant		
Name	Premium (%)	EC Limit (mt)	Name	Premium (%)	EC Limit (mt)
JSW Steel	98.55	6.00	JSW Steel	95.20	5.62
ArcelorMittal	107.55	5.50	Serajuddin	118.05	15.15
JSW Steel	132.00	1.20	Shyam	135.00	6.28
Narbheram Power & Steel	90.90	3.50	JSW Steel	110.00	16.50
Kashvi International	150.00	1.00	Patnaik Minerals	92.70	0.04
			Formento	141.25	5.30
			Ghanshyam Mishra & Sons	115.00	0.75
			Vishal LPG	142.35	7.45
			Yazdani Steel	100.00	0.04
			Tarama	93.06	2.50
			Debabrata Behera	154.00	0.14

EC REFERS TO ENVIRONMENTAL CLEARANCE, SOURCES: EIP RESEARCH, COMPANY REPORTS

JSW likely to depend less on merchant ore in coming years ›

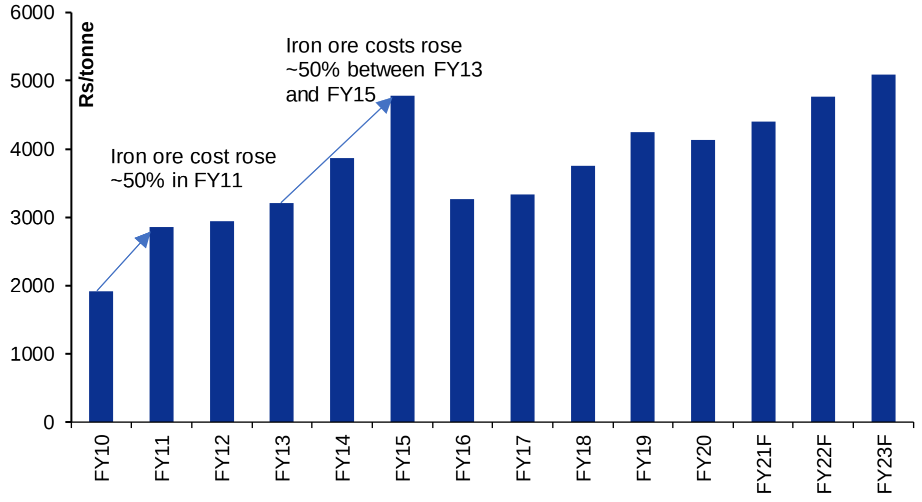
Figure 50: JSW has access to 30mt of iron ore from Odisha, but with transportation costs high NMDC will remain JSW Steel's principal supplier



SOURCES: EIP RESEARCH ESTIMATES, COMPANY REPORTS

Iron ore costs could rise, but don't expect cost shocks ›

Figure 51: Iron ore costs could rise, but cost shocks like in FY11 or FY13-15 are unlikely



SOURCES: EIP RESEARCH ESTIMATES, COMPANY REPORTS

Acquiring coal mines in commerical mining auctions will be another positive ›

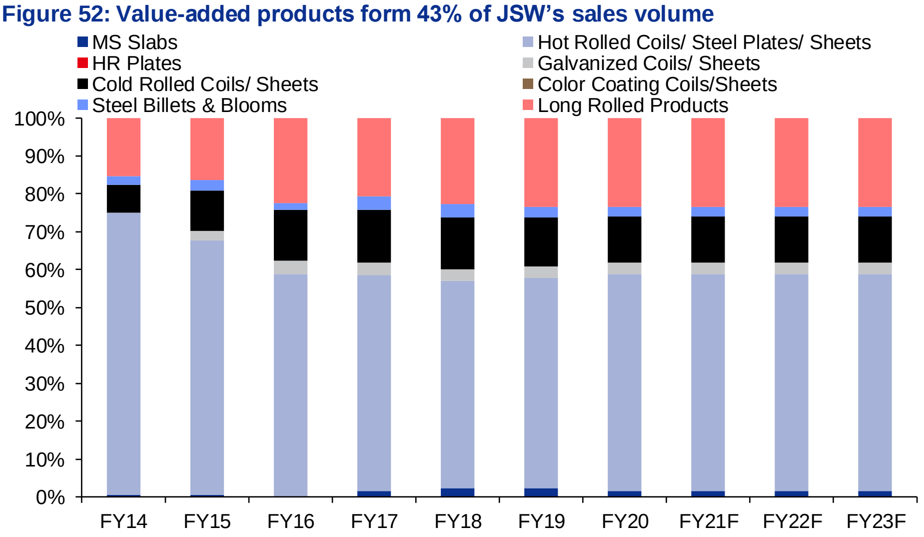
Some steel-grade coal blocks are available in the commercial coal block auction. Bidding and getting coal blocks in this auction will be a shot in the arm for JSW Steel, in our view, as it only has a small coking coal mine of 1mt capacity – the Moitra coking coal mine in Jharkhand.

Value-added products – positive for JSW Steel

The company's singular focus on value-added products has been positive for its realisations and EBITDA/tonne. Its value-added products' portfolio increased to 43% from 25% of the sales volume, in FY14, but we believe it still has a long way to go.

Value-added products in the portfolio are increasing but it has a long way to go ›

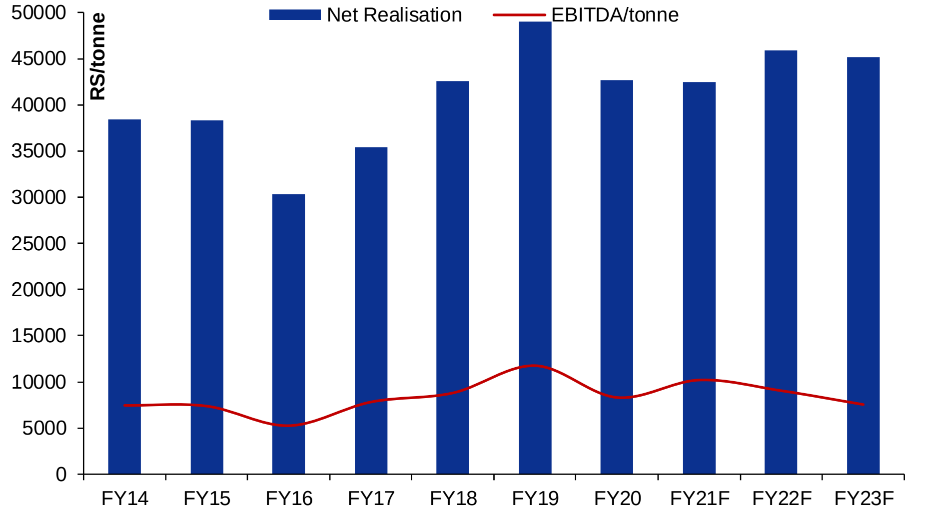
Figure 52: Value-added products form 43% of JSW's sales volume



SOURCES: EIP RESEARCH ESTIMATES, COMPANY REPORTS

JSW Steel's efforts to add value to its product offerings has helped stabilise EBITDA/tonne to some extent, but realisations are still driven by base HRC prices.

Figure 53: Net realisations have been volatile as they depend on HRC prices, but EBITDA/tonne has been relatively stable

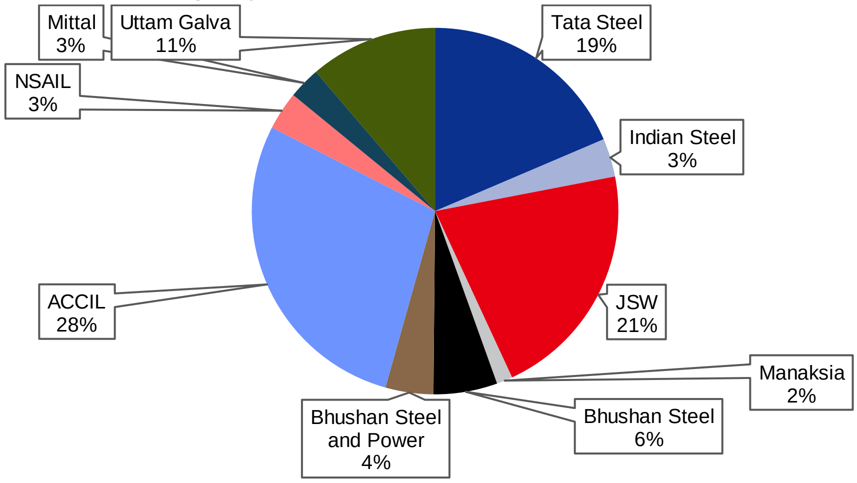


SOURCES: EIP RESEARCH ESTIMATES, COMPANY REPORTS

JSW venturing into colour-coated steel will be positive ›

JSW Steel plans to triple its colour-coated steel capacity from the current 0.75mt to 2.1mt in the next two years (this includes the acquisition of Asian colour-coated steel company Asian Colour Coated Ispat Ltd [ACCIL]). India's colour-coated steel capacity is 3.5mt and demand 2.5mt. However, growing demand for consumer durable products will increase its requirement, in our view.

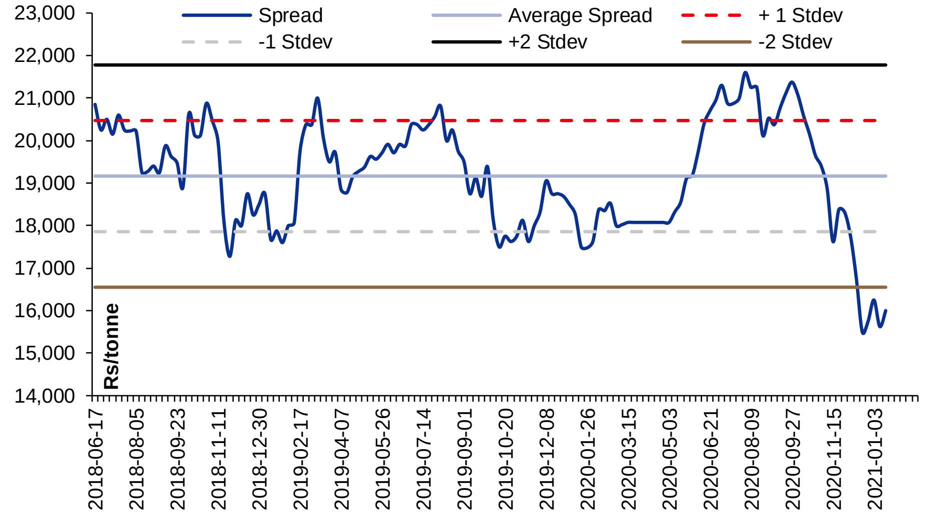
Figure 54: Current capacity of colour-coated steel is 3.5mt and demand ~2.5mt



NSAIL REFERS TO NATIONAL STEEL AND AGRO INDUSTRIES, ACCIL REFERS TO ASIAN COLOUR COATED ISPAT
SOURCES: EIP RESEARCH, COMPANY REPORTS

Normally colour-coated steel spreads are less volatile than HRC, but current supply chain shortages of HRC are leading to much lower spreads of pre-painted galvanised iron (PGPI) steel (colour-coated steel). We believe as HRC prices fall in the coming months, spreads will be restored. The current colour-coated steel spread vs HRC is at a three-year low as manufacturers are unable to pass on higher HRC costs. We expect HRC prices to fall and spreads to be restored.

Figure 55: Colour-coated steel spread over HRC is at a 3-year low



SOURCES: EIP RESEARCH, STEELMINT

Earnings and valuations

We expect EBITDA growth of 6% CAGR over FY21-23F. Steel prices are near their peaks and we expect them to fall in the coming quarters as soon as China opens after the Chinese New Year. With valuations and earnings at peak levels, we expect a price fall hence we downgrade the stock to Reduce.

Figure 56: Realisation and cost estimates

Per Tonne Calculation (Rs/t)	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21F	FY22F	FY23F
Sales Realisation	37,735	37,686	29,853	34,940	41,592	47,735	41,334	41,578	45,078	44,411
Net Realisation	38,386	38,297	30,269	35,393	42,545	48,990	42,626	42,413	45,890	45,173
Raw Material Consumed	23,050	23,044	15,598	19,862	23,722	25,183	22,216	19,606	24,262	24,869
Cost of Goods Consumed	22,843	21,659	16,492	18,922	23,985	25,069	22,198	19,606	24,262	24,869
Employee Cost	678	787	786	791	807	911	992	1,012	1,032	1,053
Other Expenditure	7,423	8,480	7,739	7,867	8,957	11,261	11,132	11,601	11,557	11,710
Total Costs	30,943	30,925	25,017	27,579	33,749	37,240	34,323	32,219	36,851	37,633
EBITDA/tonne	7,442	7,372	5,252	7,814	8,796	11,749	8,303	10,194	9,039	7,540

SOURCES: EIP RESEARCH ESTIMATES, COMPANY REPORTS

Figure 57: With 5mt capex in pipeline, JSW Steel has sufficient volume growth potential

Volume	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21F	FY22F	FY23F
Crude Steel Production	12.17	12.63	12.56	15.80	16.27	16.69	16.06	16.00	19.00	22.50
Total Sales	11.80	12.03	12.13	14.77	15.62	15.76	15.08	15.02	17.84	21.12

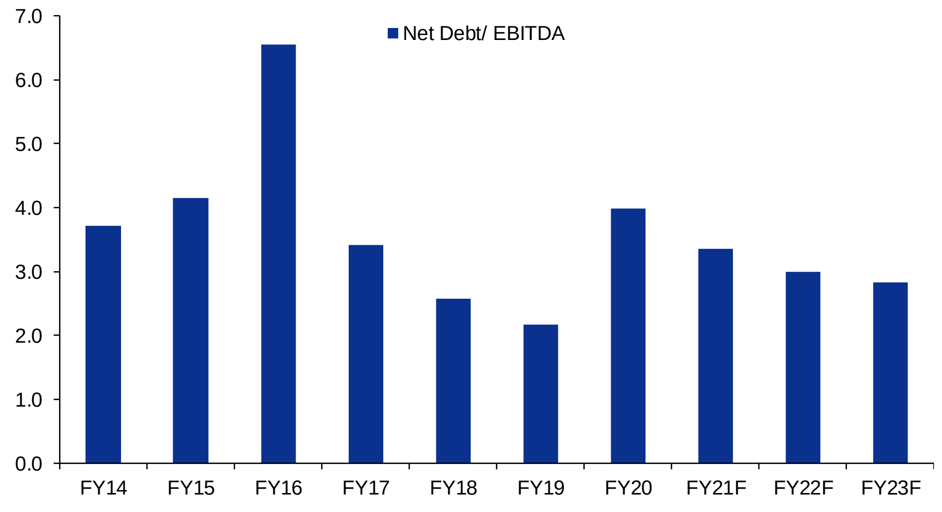
SOURCES: EIP RESEARCH ESTIMATES, COMPANY REPORTS

Our projections do not factor in JSW-Bhushan integration ›

While JSW Steel is NCLT's preferred bidder (Source: National Company Law Tribunal [NCLT]), JSW Steel's funding and holding structure is still not clear. The media has reported different versions and in one version JSW Steel holds only a 49% stake in Bhushan Steel and Power (Source: Business Standard). Consequently, we have not assumed any leveraging on the balance sheet or gains in revenue based on the Bhushan Steel and Power integration.

Consolidated Debt/ EBITDA will not fall much ›

Figure 58: There will be slow deleveraging on a consolidated basis, but Bhushan Steel and Power funding can change it either way

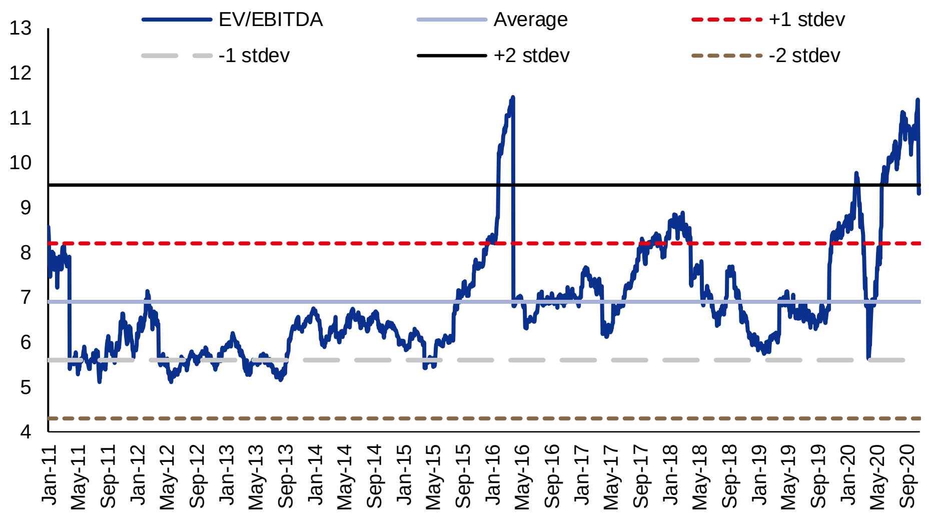


SOURCES: EIP RESEARCH ESTIMATES, COMPANY REPORTS,

EV/EBITDA seems high on likely weak earnings growth ›

JSTL is trading at 10x the one-year forward EV/EBITDA. The average of the last 10 years is 7x. We value JSW Steel at +1SD 8x FY22F to arrive at a TP of Rs330. We have valued the stock at +1SD of long-term mean as balance sheet is deleveraging and value added product is increasing in portfolio.

Figure 59: EV/EBITDA valuations higher despite likely future weak earnings



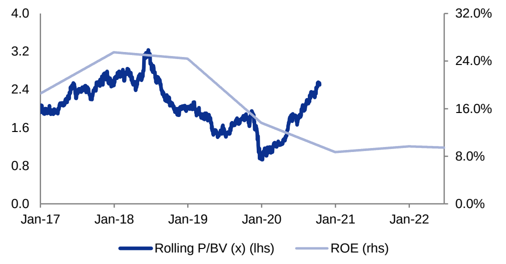
SOURCES: EIP RESEARCH, BLOOMBERG, COMPANY REPORTS

Potential Risk

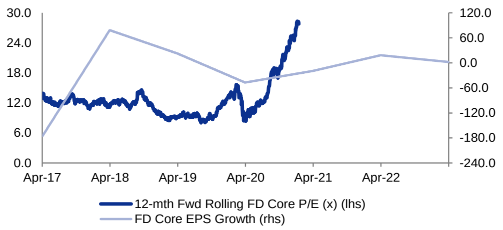
- Higher-than-expected steel price will lead to higher EBITDA which will result in higher profitability, hence, higher share price.
- Debt has remained a concern for investors however if JSW curtails its capex plan then it will be a positive for the share price.

BY THE NUMBERS

P/BV vs ROE



12-mth Fwd FD Core P/E vs FD Core EPS Growth



Profit & Loss

(Rs mn)	Mar-19A	Mar-20A	Mar-21F	Mar-22F	Mar-23F
Total Net Revenues	**8,47,570**	**7,33,260**	**7,18,008**	**9,34,470**	**10,85,495**
Gross Profit	**8,47,570**	**7,33,260**	**7,18,008**	**9,34,470**	**10,85,495**
Operating EBITDA	**1,89,520**	**1,18,730**	**1,44,706**	**1,60,048**	**1,63,359**
Depreciation And Amortisation	(40,410)	(42,460)	(50,786)	(59,752)	(64,811)
Operating EBIT	**1,49,110**	**76,270**	**93,920**	**1,00,296**	**98,548**
Financial Income/(Expense)	(39,170)	(42,650)	(47,434)	(47,434)	(47,434)
Pretax Income/(Loss) from Assoc.	(300)	(900)	(900)	(900)	(900)
Non-Operating Income/(Expense)	2,040	5,460	5,144	4,357	5,591
Profit Before Tax (pre-EI)	**1,11,680**	**38,180**	**50,729**	**56,319**	**55,804**
Exceptional Items		(8,050)			
Pre-tax Profit	**1,11,680**	**30,130**	**50,729**	**56,319**	**55,804**
Taxation	(36,440)	9,060	(19,310)	(18,835)	(17,409)
Exceptional Income - post-tax					
Profit After Tax	**75,240**	**39,190**	**31,419**	**37,484**	**38,395**
Minority Interests	1,150	1,110	1,110	1,110	1,110
Preferred Dividends	279	279	279	279	279
FX Gain/(Loss) - post tax					
Other Adjustments - post-tax					
Net Profit	**76,669**	**40,579**	**32,808**	**38,873**	**39,784**
Recurring Net Profit	76,669	48,629	32,808	38,873	39,784
Fully Diluted Recurring Net Profit	**76,669**	**48,629**	**32,808**	**38,873**	**39,784**

Cash Flow

(Rs mn)	Mar-19A	Mar-20A	Mar-21F	Mar-22F	Mar-23F
EBITDA	1,89,520	1,18,730	1,44,706	1,60,048	1,63,359
Cash Flow from Invt. & Assoc.					
Change In Working Capital	(15,810)	16,390	9,189	1,038	(1,045)
(Incr)/Decr in Total Provisions					
Other Non-Cash (Income)/Expense	(23,140)	11,180	(723)	7,468	5,772
Other Operating Cashflow	34,210	32,340	52,578	51,791	53,025
Net Interest (Paid)/Received	(35,820)	(39,240)	(47,434)	(47,434)	(47,434)
Tax Paid	(2,630)	(11,550)	(19,310)	(18,835)	(17,409)
Cashflow From Operations	**1,46,330**	**1,27,850**	**1,39,006**	**1,54,076**	**1,56,267**
Capex	(1,01,620)	(1,27,670)	(93,750)	(89,813)	(81,500)
Disposals Of FAs/subsidiaries					
Acq. Of Subsidiaries/investments					
Other Investing Cashflow	(12,860)	(68,190)			
Cash Flow From Investing	**(1,14,480)**	**(1,95,860)**	**(93,750)**	**(89,813)**	**(81,500)**
Debt Raised/(repaid)	66,540	1,14,700			
Proceeds From Issue Of Shares	(1,530)	(5,660)			
Shares Repurchased					
Dividends Paid	(9,330)	(11,950)	(10,145)	(10,145)	(10,145)
Preferred Dividends					
Other Financing Cashflow	(38,150)	(45,200)	(47,434)	(47,434)	(47,434)
Cash Flow From Financing	**17,530**	**51,890**	**(57,579)**	**(57,579)**	**(57,579)**
Total Cash Generated	49,380	(16,120)	(12,323)	6,685	17,188
Free Cashflow To Equity	**98,390**	**46,690**	**45,256**	**64,264**	**74,767**
Free Cashflow To Firm	**67,670**	**(28,770)**	**92,690**	**1,11,698**	**1,22,201**

SOURCES: EIP RESEARCH ESTIMATES, COMPANY REPORTS

BY THE NUMBERS…cont'd

Balance Sheet

(Rs mn)	Mar-19A	Mar-20A	Mar-21F	Mar-22F	Mar-23F
Total Cash And Equivalents	62,690	1,20,050	1,07,727	1,14,412	1,31,600
Total Debtors	71,600	45,050	45,755	54,974	61,865
Inventories	1,45,480	1,38,640	1,40,782	1,68,805	1,89,749
Total Other Current Assets	55,780	61,950	45,491	49,642	52,835
Total Current Assets	**3,35,550**	**3,65,690**	**3,39,755**	**3,87,834**	**4,36,049**
Fixed Assets	7,36,930	8,87,700	9,30,664	9,60,725	9,77,414
Total Investments	18,120	12,570	12,570	12,570	12,570
Intangible Assets	8,400	4,150	4,150	4,150	4,150
Total Other Non-Current Assets	50,140	48,090	46,712	47,244	47,271
Total Non-current Assets	**8,13,590**	**9,52,510**	**9,94,096**	**10,24,689**	**10,41,405**
Short-term Debt	63,330	83,250	83,250	83,250	83,250
Current Portion of Long-Term Debt					
Total Creditors	1,61,590	1,79,180	1,82,153	2,21,040	2,50,104
Other Current Liabilities	81,090	1,10,700	1,03,305	1,06,848	1,07,767
Total Current Liabilities	**3,06,010**	**3,73,130**	**3,68,707**	**4,11,139**	**4,41,121**
Total Long-term Debt	4,10,630	5,10,480	5,10,480	5,10,480	5,10,480
Hybrid Debt - Debt Component					
Total Other Non-Current Liabilities	47,530	54,100	53,182	61,665	67,827
Total Non-current Liabilities	**4,58,160**	**5,64,580**	**5,63,662**	**5,72,145**	**5,78,307**
Total Provisions	41,520	20,250	20,177	20,804	21,551
Total Liabilities	**8,05,690**	**9,57,960**	**9,52,547**	**10,04,088**	**10,40,979**
Shareholders Equity	3,47,950	3,65,990	3,88,165	4,16,404	4,45,554
Minority Interests	(4,500)	(5,750)	(6,860)	(7,970)	(9,080)
Total Equity	**3,43,450**	**3,60,240**	**3,81,305**	**4,08,434**	**4,36,474**

Key Ratios

	Mar-19A	Mar-20A	Mar-21F	Mar-22F	Mar-23F
Revenue Growth	17.7%	(13.8%)	1.0%	30.1%	16.2%
Operating EBITDA Growth	28.1%	(37.4%)	21.9%	10.6%	2.1%
Operating EBITDA Margin	23.0%	16.7%	20.2%	17.1%	15.0%
Net Cash Per Share (Rs)	(169.95)	(195.96)	(201.06)	(198.29)	(191.18)
BVPS (Rs)	143.78	151.41	160.58	172.26	184.32
Gross Interest Cover	3.81	1.79	1.98	2.11	2.08
Effective Tax Rate	32.6%		38.1%	33.4%	31.2%
Net Dividend Payout Ratio	12.9%	20.3%	30.1%	25.4%	24.8%
Accounts Receivables Days	25.55	29.03	23.08	19.67	19.64
Inventory Days	nm	nm	nm	nm	nm
Accounts Payables Days	nm	nm	nm	nm	nm
ROIC (%)	18.1%	8.5%	10.1%	10.5%	10.1%
ROCE (%)	19.2%	8.3%	9.6%	10.0%	9.5%
Return On Average Assets	11.1%	7.3%	5.9%	6.2%	5.9%

SOURCES: EIP RESEARCH ESTIMATES, COMPANY REPORTS

India

REDUCE *(previously ADD)*

Consensus ratings*:	Buy 11	Hold 5	Sell 3

Current price:	Rs58
Target price:	Rs54
Previous target:	Rs150
Up/downside:	-6.9%
EIP Research / Consensus:	-23.2%
Reuters:	SAIL.NS
Bloomberg:	SAIL IN
Market cap:	US$3,298m
	Rs2,40,578m
Average daily turnover:	US$32.0m
	Rs2333.1m
Current shares o/s:	4,130.5m
Free float:	25.0%

Source: Bloomberg

Source: Bloomberg

Price performance	1M	3M	12M
Absolute (%)	(3.3)	59.4	14.1
Relative (%)	(6.1)	34.1	(1.8)

Major shareholders	% held
Government of India	75.0
Life Ins. Corp. of India	9.6
Reliance Capital Trustee Co Ltd	2.5

Steel Authority of India

Steel cycle worsening; Reduce

- SAIL did Rs630bn (last 10 years) capex but capacity remains uncommissioned (4-5mt); efficiency didn't increase, leading to FY21F net debt/ EBITDA 7.33x.
- Despite having captive iron ore capacities, SAIL's operational cost/t is the highest among its steel peers. Its mining cost is rising, negating advantages.
- We expect steel prices to fall and believe P/B, EV/ EBITDA valuations are too high for 0% RoE and 3.6% RoCE in FY23F. Downgrade to Reduce.

SAIL has no cost cushion; steel price to fall. Downgrade to Reduce

Despite having captive iron ore capacities and some coking coal, SAIL's overall steel making cost is the highest among large steel players in India. Captive iron ore has ceased to be an advantage as SAIL's production costs have often been higher than Indian Bureau of Mines-notified prices. Therefore, SAIL's performance is linked to steel prices. As highlighted earlier in our report, we believe steel prices have reached their peaks and are likely to fall. With EBITDA CAGR for FY21-23F at 8.6%, SAIL will barely make any profits. At the same time, valuations are demanding. Downgrade to Reduce (previously Add).

Delayed projects and stagnant product mix are not helping SAIL

One would have assumed that after a capex of Rs630bn (last decade), SAIL would have stopped selling semis steel. Over the years semis sales have stagnated at ~2mt. Despite the higher capex, there has not been material improvement in the performance of SAIL's product mix and in its operational and cost efficiencies. Its expansion programmes have not shown any positive impact on the company.

We value SAIL at 8x EV/EBITDA to arrive at Rs54 TP

We expect EBITDA CAGR of 8.6% for FY21-23F. Steel prices are near their peak and we expect them to fall from coming quarters. High debt on the books will lead to miniscule EPS for the company. High debt and net debt/EBITDA will likely make the stock price volatile, in our view. We have not built rapid price correction into our estimate. However, note that when the inventory cycle (like the current one) turns for the worse the price collapse is faster, putting our lower-than-Bloomberg estimates at risk. We downgrade the stock to Reduce with a target price of Rs54 from Rs150 based on EV/EBITDA of 8x (as it currently trades at that valuation, earnings are highly volatile, hence we don't value it at historical average). Stability in steel prices can be the upside risk to our target price.

Analyst(s)

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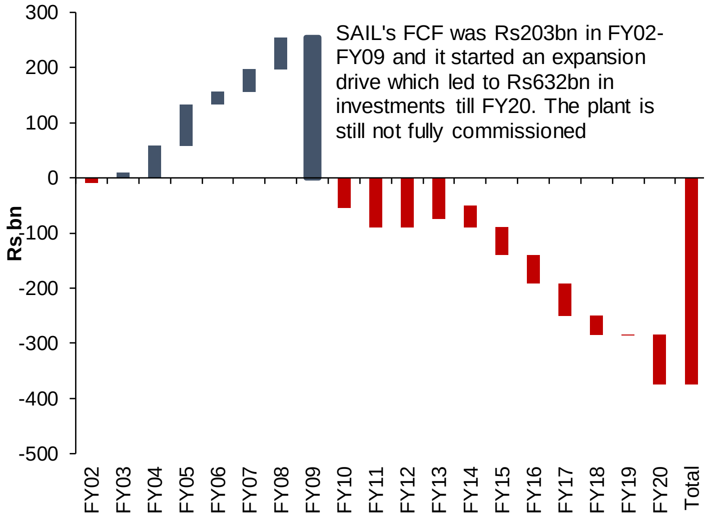
Financial Summary	Mar-19A	Mar-20A	Mar-21F	Mar-22F	Mar-23F
Revenue (Rsm)	6,62,958	5,96,364	6,10,503	6,84,228	7,28,406
Operating EBITDA (Rsm)	97,341	42,625	65,897	73,410	77,764
Net Profit (Rsm)	10,898	(32,526)	(3,852)	195	1,478
Core EPS (Rs)	7.5	(13.0)	(1.6)	0.1	0.6
Core EPS Growth	(455.1%)	(274.2%)	(87.7%)	(105.1%)	659.5%
FD Core P/E (x)	12.93	(4.33)	(36.55)	723.67	95.29
DPS (Rs)	4.1	4.1	4.1	4.1	4.1
Dividend Yield	0.00%	0.00%	0.00%	0.00%	0.00%
EV/EBITDA (x)	6.70	17.36	10.41	8.90	8.24
P/FCFE (x)	4.26	3.50	1.52	2.00	2.80
Net Gearing	117.8%	135.2%	122.7%	114.4%	110.8%
P/BV (x)	0.5	0.5	0.5	0.5	0.5
ROE	4.9%	(8.1%)	(1.0%)	0.0%	0.4%
% Change In Core EPS Estimates					
EIP Research/Consensus EPS (x)			(6.31)	107.96	13.53

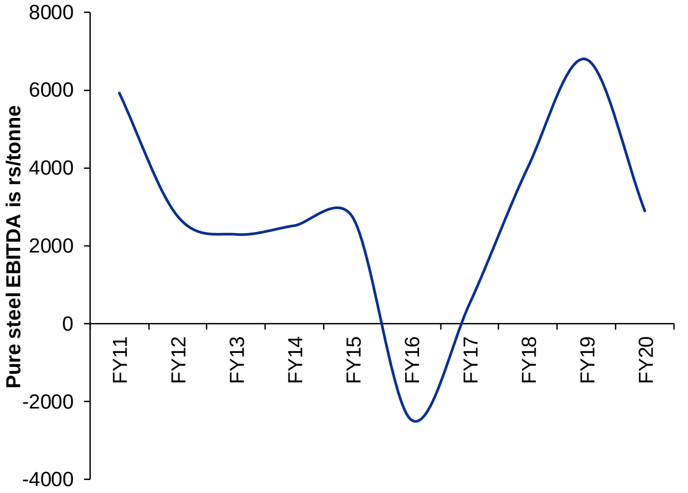
SOURCES: EIP RESEARCH ESTIMATES, COMPANY REPORTS, PRICED AS AT 25 JAN 2021

Figure 60: Net FCF over last 19 years has been negative Rs375bn



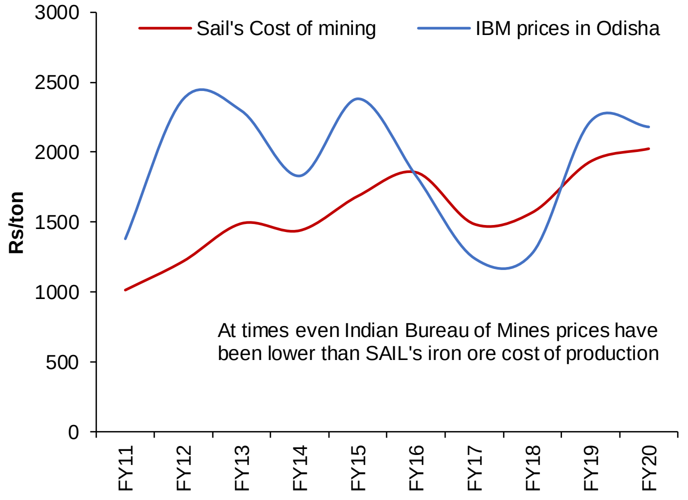
FCF REFERS TO FREE CASH FLOW SOURCES: EIP RESEARCH, COMPANY REPORTS

Figure 61: Adjusted for iron ore benefit, SAIL's pure conversion EBITDA/t has been on average Rs2,797/t (Rs)



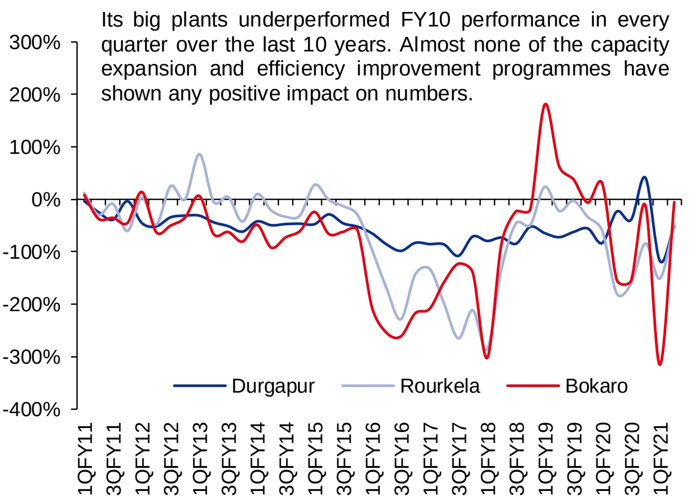
SOURCES: EIP RESEARCH, COMPANY REPORTS

Figure 62: SAIL's iron ore mining cost has been rising for years.



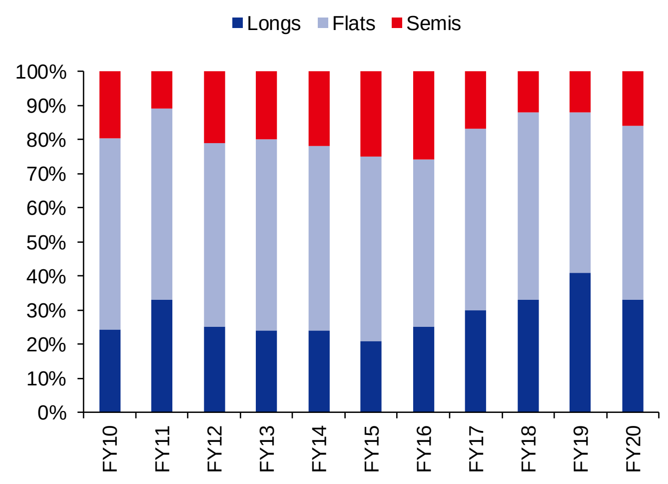
SOURCES: EIP RESEARCH, COMPANY REPORTS

Figure 63: SAIL began capex to improve efficiencies, but even after increasing production none of its plants have beaten FY10 performance.



SOURCES: EIP RESEARCH, COMPANY REPORTS

Figure 64: % of semis sales is roughly same as FY10, raising questions over capex efficiency

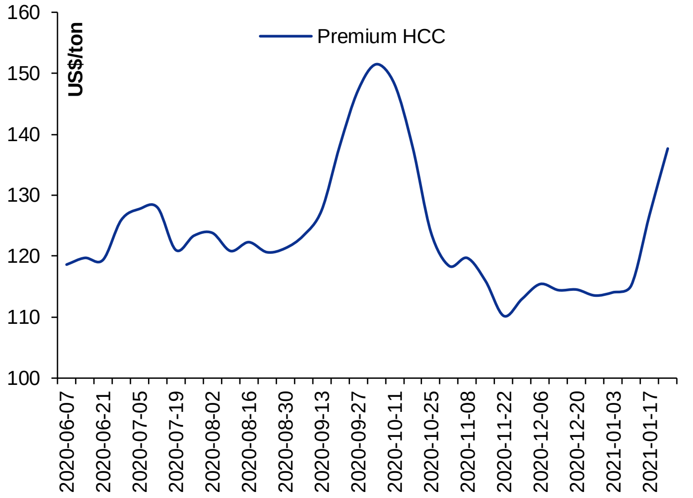


SOURCES: EIP RESEARCH, COMPANY REPORTS

Figure 65: FY20 performance is an anomaly as SAIL destocked and gave huge credit to its customers

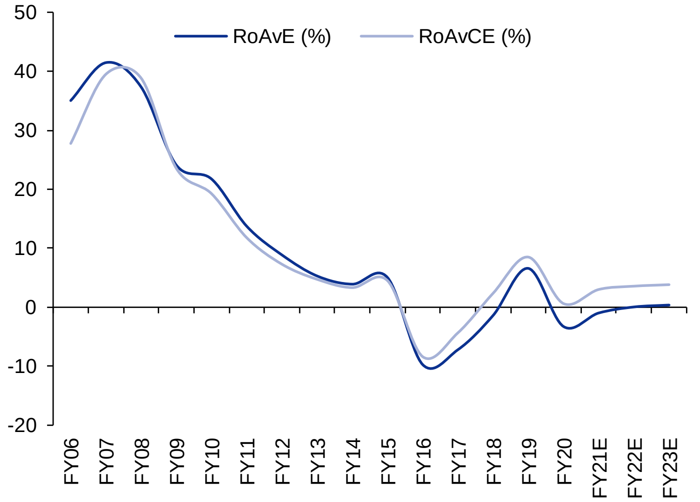
SOURCES: EIP RESEARCH ESTIMATES, COMPANY REPORTS

Figure 66: SAIL still enjoyed benefit of low HCC price in 3Q21, but that is likely to vanish soon



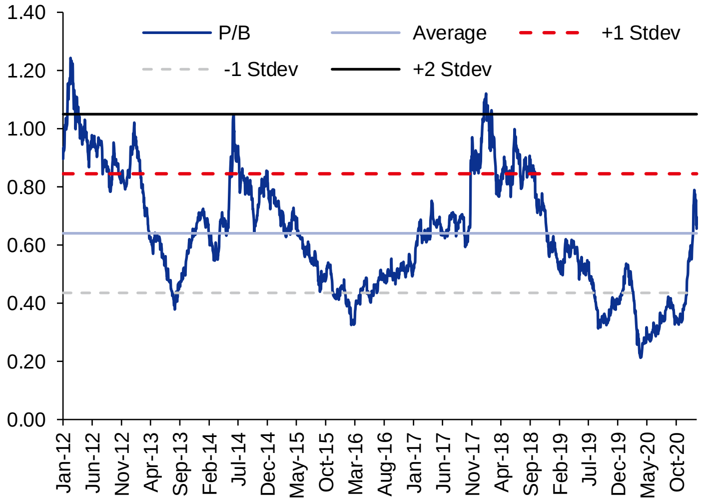
SOURCES: EIP RESEARCH, STEELMINT

Figure 67: RoE and RoCE are likely to remain below investment grade



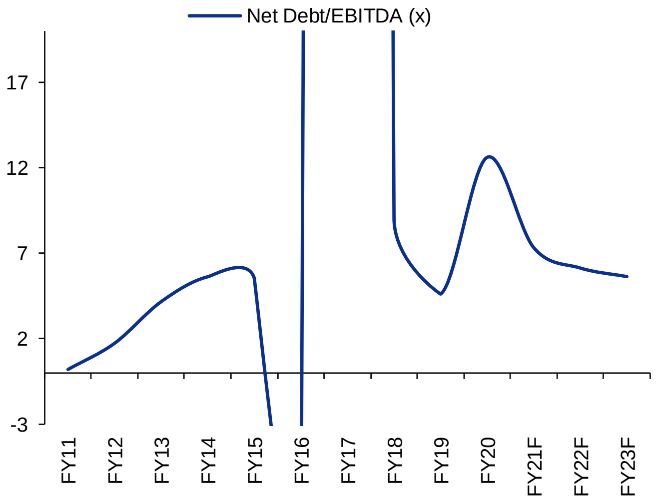
SOURCES: EIP RESEARCH ESTIMATES, COMPANY REPORTS

Figure 68: Given the kind of RoE expectation and destruction of equity in capex (it has not resulted in anything material) SAIL doesn't deserve even 0.5x P/B (on current year), in our view



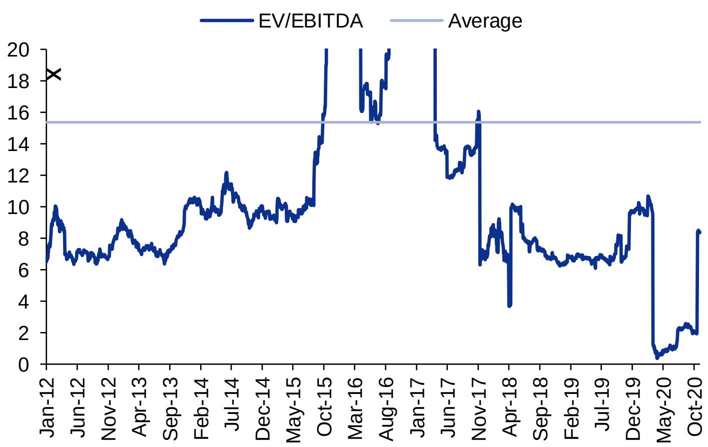
SOURCES: EIP RESEARCH, COMPANY REPORTS

Figure 69: Net debt/ EBITDA will likely trend lower but remain high at 5.6x in FY23F



SOURCES: EIP RESEARCH ESTIMATES, COMPANY REPORTS

Figure 70: High debt and net debt/ EBITDA make SAIL's stock volatile on EV/EBITDA



SOURCES: EIP RESEARCH, COMPANY REPORTS

Figure 71: We value SAIL at 8x FY23F EBITDA to arrive at TP of Rs54

SAIL Valuation (Rs billion)	
FY23F EBITDA	85
Multiple (x)	8.0
FY23F EV	677
FY22F Net Debt	452
FY22F Equity Value	224
Target Price	54

SOURCES: EIP RESEARCH ESTIMATES, COMPANY REPORTS

Steel prices nearing peak; Reduce

High debt on its books, hardly any improvement in operational performance despite Rs630bn capex makes SAIL an ideal punting stock on commodity cycles. It is a good buy when one believes commodity prices are near the bottom and a classic short when steel prices are peaking. We reckon steel prices have peaked and, hence, downgrade it to Reduce from Add.

Large capex failed to achieve positive results

SAIL invested Rs630bn over the last 10 years in its capital expenditure programme, but we have not seen any material improvement in the performance of 1) its product mix, 2) plants, and 3) operational costs at mines. These are the reasons why the stock price collapsed during the recent downcycle.

Almost all its plants performed worse than in FY10 ›

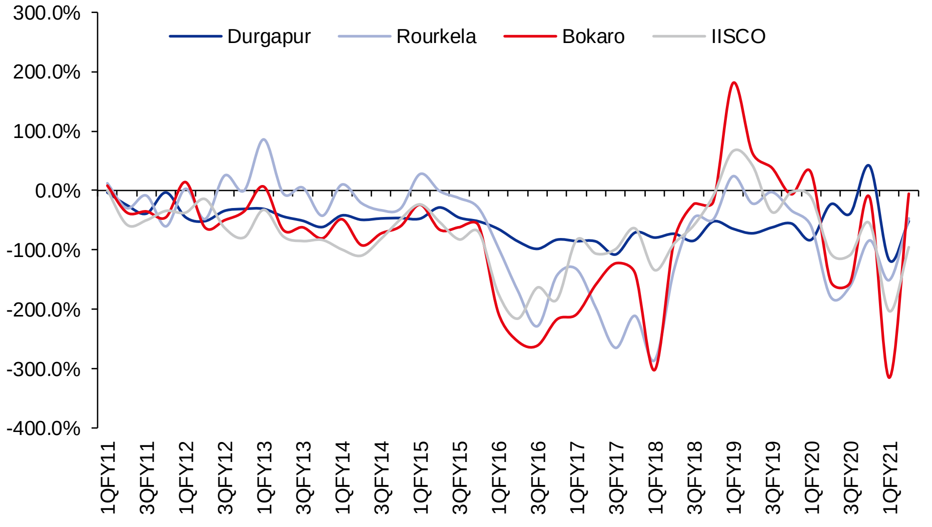
SAIL started its capex programme with much fanfare in FY10. However, it failed to achieve anything in the last 10 years. The performance of its plants has been worse than in FY10 (we are analysing in terms of EBIT as it accounts for capex implemented).

SAIL's FCF over last 19 years was -Rs375bn

SAIL's Rs630bn capex over the 10 years has made it a net debt company from a net cash in FY10. Overall free cash flow generation in the last 19 years has been -Rs375bn.

Despite large capex, operational performance has not improved

Figure 72: Change in EBIT of different plants with FY10 as base year – weak performance evident



SOURCES: EIP RESEARCH, COMPANY REPORTS

Capex did not improve efficiencies

Figure 73: SAIL's company presentation mentions benefits accrued, but that has not shown up in earnings yet

Million Tonne	Actual Production 2019-20	Capacity After On-going Expansion
Crude Steel	16.155	21.4
Saleable Steel	15.083	20.2

Technological Shift

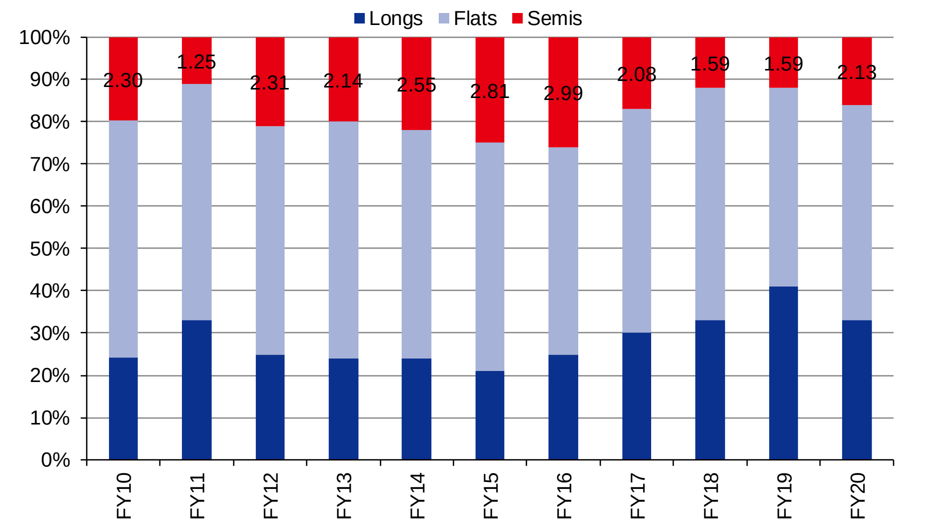
Technology	Before Expansion	After Expansion
BOF Steel Making	79%	100%
CC Route	71%	94%
Pelletisation Plant	No	Yes
Coke Dry Quenching	Partial	Yes
Top Pressure Recovery Turbine	No	Yes
Auxiliary Fuel Injection in BF	Partial Coverage	Full Coverage
Desulphurization of Hot Metal	Partly	100 %
Beam Blank Casting	No	Yes
Coupled Pickling & Tandem Mill	No	Yes
Beneficiation Plant	Partial	Full

SOURCES: SAIL COMPANY PRESENTATION, EIP RESEARCH, COMPANY REPORTS

Semis were not eliminated in last 10 years, they are still sold ›

We understand the quarterly variations and need to be flexible as per market demand. However, year after year the same percentage of semis is either retained or increased.

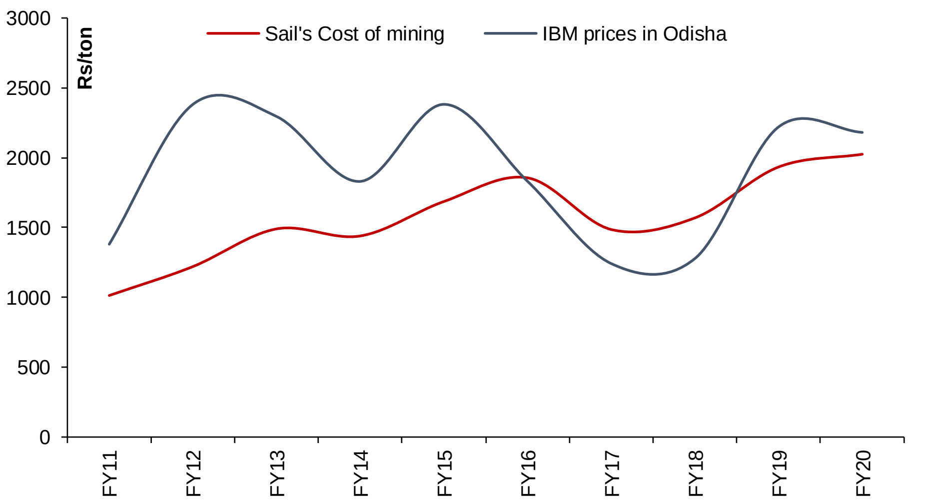
Figure 74: Even after 10 years, SAIL sells 2mt of steel p.a. – the level stagnant since FY10 – while all its competitors have increased their value-added offerings



SOURCES: EIP RESEARCH, COMPANY REPORTS

SAIL has invested a lot in mines, but its cost of production is rising and sometimes exceeds IBM prices ›

Figure 75: If SAIL were to sell iron ore, it would still not earn more than NMDC



SOURCES: EIP RESEARCH, COMPANY REPORTS, INDIAN BUREAU OF MINES

We still can't say when SAIL's total capacity will be commissioned ›

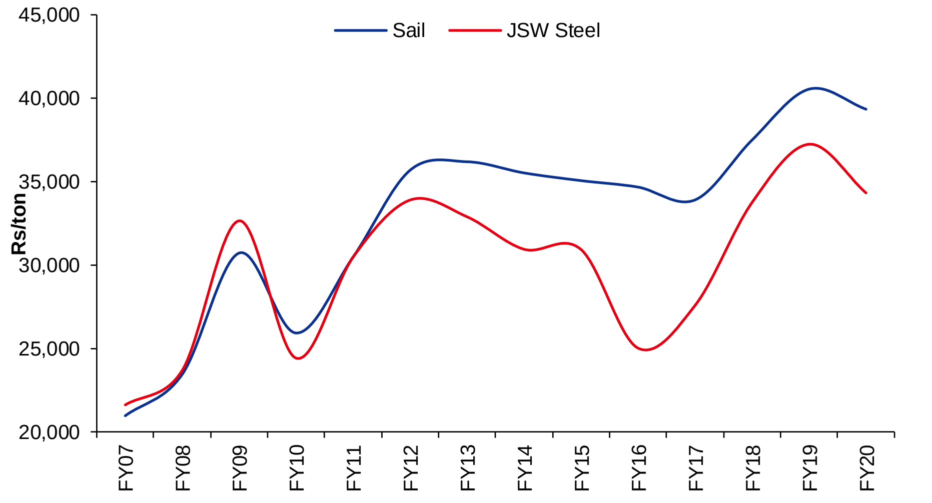
While there has been a big delay, we still do not have clarity on the overall plant's commissioning. The date has been extended for long now. Hopefully, in the near future all its capacity will be commissioned.

SAIL's performance depends on steel price, which is likely to fall

Despite captive iron ore reserves and at least some coking coal, SAIL has no cushion on the cost front. The mining cost of iron ore is often close to the market price, while captive coking coal is too small in quantity to make a substantial difference. So, SAIL's performance is totally dependent on steel prices. We are not positive on the prospects of steel prices.

SAIL's iron ore mines are the best, but steel's cost is higher than competition

Figure 76: Despite its raw material cost advantage, SAIL's cost of production is higher than JSW Steel's

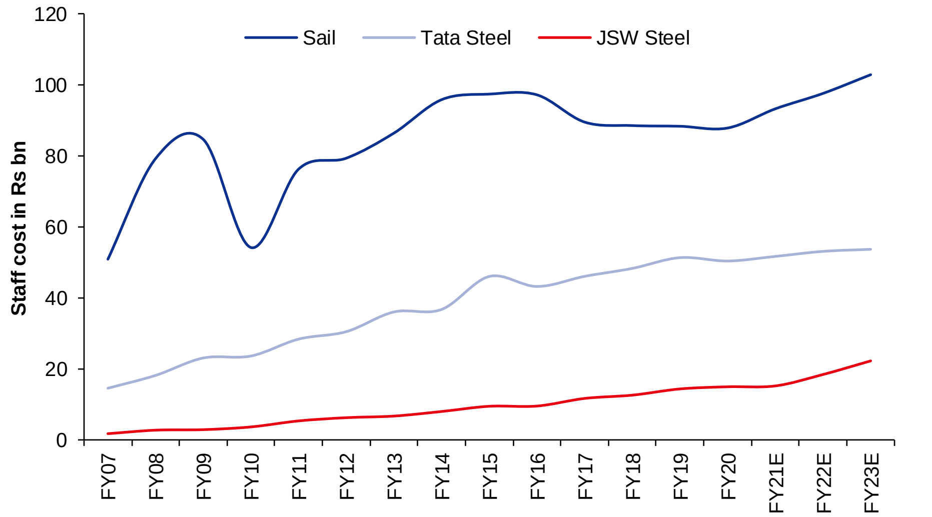


SOURCES: EIP RESEARCH, COMPANY REPORTS

SAIL's high fixed cost is not going to go away easily

SAIL's fixed costs are among the highest in the industry and this problem is not going to go away easily.

Figure 77: SAIL's employee costs are among the highest in the industry



SOURCES: EIP RESEARCH ESTIMATES, COMPANY REPORTS

Earnings and Valuations

We expect EBITDA CAGR of 8.6% over FY21F-23F. Steel prices are near their peak and we expect them to fall soon after China opens up after the Chinese New Year. High debt on the books will lead to miniscule EPS for the company.

Figure 78: Our realisations and cost parameters

Per Tonne Calculation (Rs/t)	FY15	FY16	FY17	FY18	FY19	FY20	FY21F	FY22F	FY23F	FY24F	FY25F
Sales Realisation	38,623	31,822	33,509	40,309	46,963	41,906	42,463	43,833	44,330	44,451	44,451
Net Realisation	39,049	32,274	33,933	40,764	47,439	42,337	43,176	44,503	44,979	45,081	45,094
Raw Material Consumed	15,817	14,178	16,126	18,894	22,874	20,528	20,352	21,570	21,721	21,574	21,381
Cost of Goods Consumed	14,615	14,625	16,219	19,699	20,950	19,803	19,635	20,910	21,093	20,977	20,784
Employee Cost	8,314	8,029	6,830	6,268	6,255	6,171	6,483	6,249	6,257	6,221	6,493
Other Expenditure	12,130	12,017	10,855	11,527	13,338	13,367	12,474	12,641	12,895	13,166	13,561
Total Costs	35,058	34,671	33,904	37,493	40,543	39,341	38,592	39,800	40,246	40,364	40,838
EBITDA	3,991	-2,396	29	3,270	6,896	2,995	4,583	4,703	4,733	4,717	4,256

SOURCES: EIP RESEARCH ESTIMATES, COMPANY REPORTS

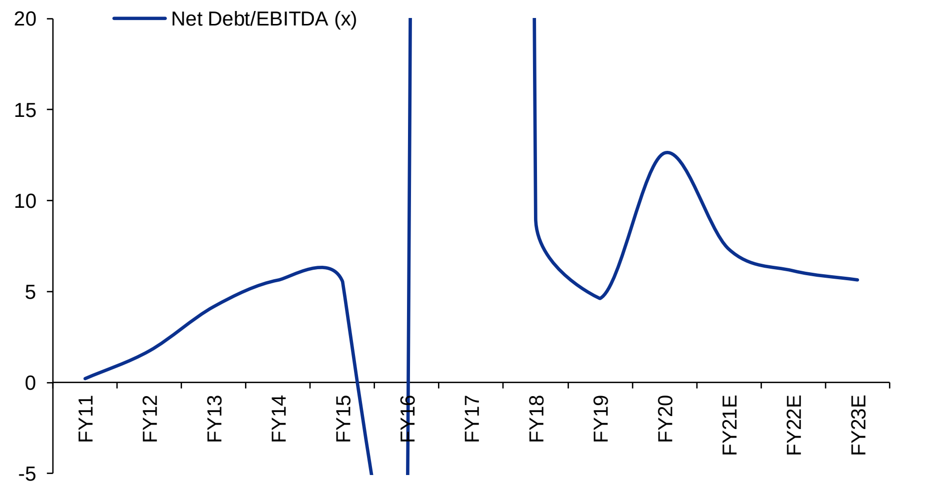
Figure 79: Volume growth will depend on capacity stabilisation at the new plants

Volume [units?]	FY16	FY17	FY18	FY19	FY20	FY21F	FY22F	FY23F
Hot Metal Production	15.72	15.73	15.98	17.51	17.44	16.80	18.42	19.50
Crude Steel Production	14.28	14.50	15.02	16.27	16.16	15.57	17.07	18.07
Saleable Steel Production	11.88	13.12	13.51	14.33	15.08	14.44	15.76	16.64

SOURCES: EIP RESEARCH ESTIMATES, COMPANY REPORTS

Debt/ EBITDA on consolidated basis will not fall much ›

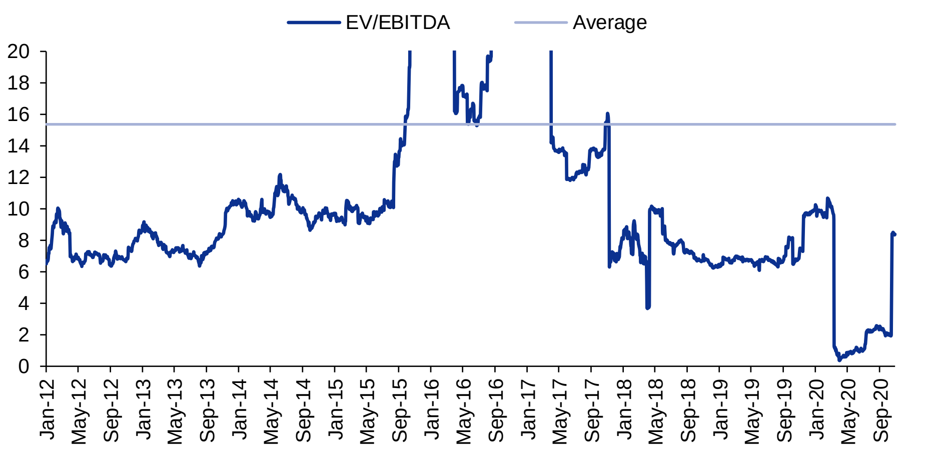
Figure 80: We are assuming a slow correction. But note that turn of inventory cycles could lead to rapid price falls



SOURCES: EIP RESEARCH ESTIMATES, COMPANY REPORTS

EV/EBITDA valuations appear high, even though future earnings growth is likely to be anaemic ›

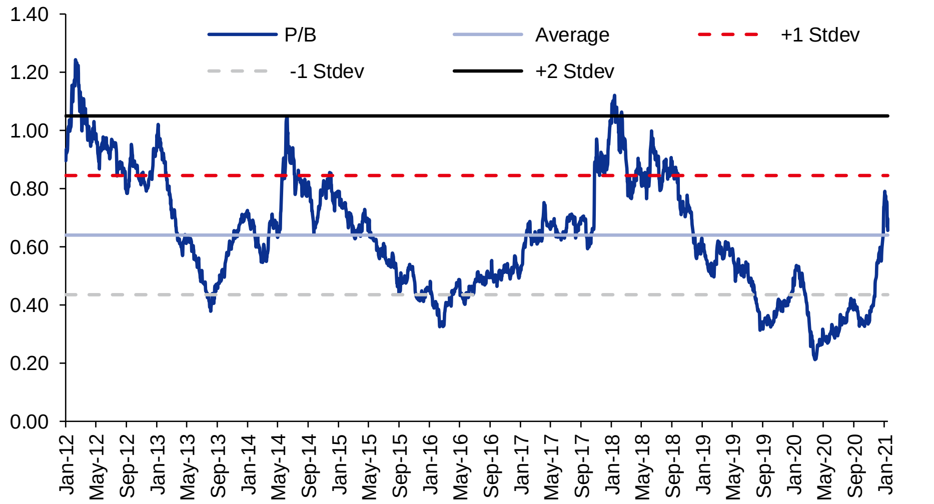
Figure 81: SAIL currently trades at 8x one-year forward EV/EBITDA



SOURCES: EIP RESEARCH, COMPANY REPORTS

P/B trading near 10-year average

Figure 82: P/B is trading lower than its historical mean



SOURCES: EIP RESEARCH, COMPANY REPORTS

We value SAIL at 8x EV/EBITDA to arrive at TP of Rs54 ›

Because of extremely volatile earnings SAIL's stock average trading EV/EBITDA in 15x however at present it trades at 8x. We expect SAIL to show some stability earnings (although it will be lower than consensus), hence we value at current trading EV/EBITDA.

Figure 83: Our fair value of SAIL is Rs54

SAIL Valuation (Rs billion)	
FY23F EBITDA	85
Multiple	8.0
FY23F EV	677
FY22F Net Debt	452
FY22F Equity Value	224
Target Price	**54**

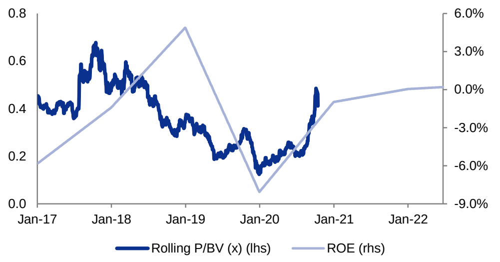
SOURCES: EIP RESEARCH ESTIMATES, COMPANY REPORTS

Potential Risk ›

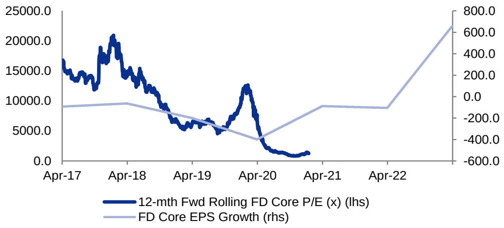
- Higher-than-expected steel price will lead to expansion in RoE and RoCE. This will lead to expansion in EV/EBITDA multiples hence higher stock prices.

BY THE NUMBERS

P/BV vs ROE



12-mth Fwd FD Core P/E vs FD Core EPS Growth



Profit & Loss

(Rs mn)	Mar-19A	Mar-20A	Mar-21F	Mar-22F	Mar-23F
Total Net Revenues	**6,69,673**	**6,02,492**	**6,20,753**	**6,94,683**	**7,39,071**
Gross Profit	**6,69,673**	**6,02,492**	**6,20,753**	**6,94,683**	**7,39,071**
Operating EBITDA	**97,341**	**42,625**	**65,897**	**73,410**	**77,764**
Depreciation And Amortisation	(33,847)	(37,551)	(40,926)	(43,732)	(45,836)
Operating EBIT	**63,494**	**5,075**	**24,970**	**29,678**	**31,928**
Financial Income/(Expense)	(31,549)	(34,868)	(38,013)	(38,013)	(38,013)
Pretax Income/(Loss) from Assoc.					
Non-Operating Income/(Expense)	5,328	9,852	9,191	8,595	8,059
Profit Before Tax (pre-EI)	**37,273**	**(19,941)**	**(3,852)**	**260**	**1,975**
Exceptional Items	(14,784)	(1,094)			
Pre-tax Profit	**22,489**	**(21,034)**	**(3,852)**	**260**	**1,975**
Taxation	(11,591)	(11,491)		(65)	(497)
Exceptional Income - post-tax					
Profit After Tax	**10,898**	**(32,526)**	**(3,852)**	**195**	**1,478**
Minority Interests					
Preferred Dividends					
FX Gain/(Loss) - post tax					
Other Adjustments - post-tax					
Net Profit	**10,898**	**(32,526)**	**(3,852)**	**195**	**1,478**
Recurring Net Profit	18,063	(31,432)	(3,852)	195	1,478
Fully Diluted Recurring Net Profit	**18,063**	**(31,432)**	**(3,852)**	**195**	**1,478**

Cash Flow

(Rs mn)	Mar-19A	Mar-20A	Mar-21F	Mar-22F	Mar-23F
EBITDA	97,341	42,625	65,897	73,410	77,764
Cash Flow from Invt. & Assoc.					
Change In Working Capital	(26,258)	(1,06,806)	53,583	26,671	2,544
(Incr)/Decr in Total Provisions					
Other Non-Cash (Income)/Expense	142	(1,956)	3,710	1,959	2,402
Other Operating Cashflow	33,698	92,631	47,203	46,477	45,078
Net Interest (Paid)/Received	(31,549)	(33,870)	(38,013)	(38,013)	(38,013)
Tax Paid	(357)	871		65	497
Cashflow From Operations	**73,016**	**(6,506)**	**1,32,380**	**1,10,570**	**90,272**
Capex	(38,783)	(44,491)	(40,000)	(40,000)	(40,000)
Disposals Of FAs/subsidiaries					
Acq. Of Subsidiaries/investments					
Other Investing Cashflow	1,227	2,130			
Cash Flow From Investing	**(37,557)**	**(42,361)**	**(40,000)**	**(40,000)**	**(40,000)**
Debt Raised/(repaid)	(2,387)	89,074			
Proceeds From Issue Of Shares					
Shares Repurchased					
Dividends Paid		(2,481)			
Preferred Dividends					
Other Financing Cashflow	(33,521)	(36,538)	(38,013)	(38,013)	(38,013)
Cash Flow From Financing	**(35,908)**	**50,055**	**(38,013)**	**(38,013)**	**(38,013)**
Total Cash Generated	(449)	1,188	54,368	32,557	12,259
Free Cashflow To Equity	**33,072**	**40,207**	**92,380**	**70,570**	**50,272**
Free Cashflow To Firm	**67,008**	**(14,997)**	**1,30,393**	**1,08,583**	**88,285**

SOURCES: EIP RESEARCH ESTIMATES, COMPANY REPORTS

BY THE NUMBERS…cont'd

Balance Sheet

(Rs mn)	Mar-19A	Mar-20A	Mar-21F	Mar-22F	Mar-23F
Total Cash And Equivalents	2,194	3,633	58,000	90,557	1,02,817
Total Debtors	44,951	88,124	80,000	75,000	70,000
Inventories	1,94,418	2,37,472	1,95,580	1,90,324	2,02,485
Total Other Current Assets	80,930	79,956	77,839	77,939	78,763
Total Current Assets	**3,22,493**	**4,09,185**	**4,11,419**	**4,33,821**	**4,54,065**
Fixed Assets	7,73,727	7,77,706	7,76,780	7,73,048	7,67,212
Total Investments	15,848	15,850	15,850	15,850	15,850
Intangible Assets					
Total Other Non-Current Assets	52,310	48,238	47,089	47,186	47,282
Total Non-current Assets	**8,41,885**	**8,41,794**	**8,39,718**	**8,36,084**	**8,30,344**
Short-term Debt	1,06,312	1,66,408	1,66,408	1,66,408	1,66,408
Current Portion of Long-Term Debt					
Total Creditors	72,648	63,270	65,858	73,701	78,410
Other Current Liabilities	1,99,721	1,90,644	1,89,507	1,98,180	2,03,999
Total Current Liabilities	**3,78,681**	**4,20,322**	**4,21,772**	**4,38,289**	**4,48,817**
Total Long-term Debt	3,45,388	3,74,863	3,74,863	3,74,863	3,74,863
Hybrid Debt - Debt Component					
Total Other Non-Current Liabilities	15,838	16,931	17,244	17,496	17,801
Total Non-current Liabilities	**3,61,226**	**3,91,794**	**3,92,107**	**3,92,358**	**3,92,664**
Total Provisions	42,954	41,088	43,336	45,141	47,334
Total Liabilities	**7,82,862**	**8,53,204**	**8,57,215**	**8,75,788**	**8,88,815**
Shareholders Equity	3,81,516	3,97,774	3,93,922	3,94,116	3,95,594
Minority Interests					
Total Equity	**3,81,516**	**3,97,774**	**3,93,922**	**3,94,116**	**3,95,594**

Key Ratios

	Mar-19A	Mar-20A	Mar-21F	Mar-22F	Mar-23F
Revenue Growth	16.5%	(10.0%)	2.4%	12.1%	6.5%
Operating EBITDA Growth	110.8%	(56.2%)	54.6%	11.4%	5.9%
Operating EBITDA Margin	14.7%	7.1%	10.8%	10.7%	10.7%
Net Cash Per Share (Rs)	(185.75)	(222.42)	(199.92)	(186.46)	(181.38)
BVPS (Rs)	157.65	164.56	162.96	163.04	163.65
Gross Interest Cover	2.01	0.15	0.66	0.78	0.84
Effective Tax Rate	51.5%			25.2%	25.2%
Net Dividend Payout Ratio					
Accounts Receivables Days	22.80	40.31	49.43	40.72	35.81
Inventory Days	nm	nm	nm	nm	nm
Accounts Payables Days	nm	nm	nm	nm	nm
ROIC (%)	7.3%	0.5%	2.7%	3.3%	3.6%
ROCE (%)	7.9%	0.6%	2.7%	3.2%	3.4%
Return On Average Assets	5.0%	0.3%	2.7%	3.0%	3.1%

SOURCES: EIP RESEARCH ESTIMATES, COMPANY REPORTS

India

REDUCE *(no change)*

Consensus ratings*:	Buy 23	Hold 6	Sell 0

Current price:	Rs652
Target price: ▼	Rs575
Previous target:	Rs1,020
Up/downside:	-11.8%
EIP Research / Consensus:	-36.8%
Reuters:	TISC.NS
Bloomberg:	TATA IN
Market cap:	US$10,301m
	Rs7,51,444m
Average daily turnover:	US$126.5m
	Rs9224.8m
Current shares o/s:	1,145.0m
Free float:	66.9%

Source: Bloomberg

Source: Bloomberg

Price performance	1M	3M	12M
Absolute (%)	4.8	54.0	34.9
Relative (%)	1.8	29.6	16.1

Major shareholders	% held
Promoter & Promoter Group	33.1
LIC India	9.0
HDFC Trustee Company	4.6

Tata Steel

Steel cycle worsens, Europe asset sales key

- Steel prices have been propped by inventory scarcity in the supply chain. We think current steel margins will lead to a deluge of steel and, consequently, fall.
- BF and EAF price spreads over raw materials is near all-time high in Europe and will likely lead to the start-up of spare EAF capacities and fall in prices.
- Tata Steel looks overvalued on all parameters. European asset sales is factored into its price. Downgrade to Reduce.

Current high prices likely to prop up steel supply; but prices may fall

The early stages of the pandemic saw much bearishness in the market, leading to massive destocking in the supply chain. However, with central banks pumping in liquidity the economy recovered faster. It has skewed all calculations about adequate levels of inventory in the supply chain. With 45% of steel in the supply chain (producer+ distributor+ user) at any point, any miscalculation on perception of demand by the users of steel could spiral into a big deficit/ surplus. We suggest not paying for these earnings as we think this steel price will fall in the coming months. Valuations look frothy with earnings fall in sight. Consequently, we downgrade our rating to Reduce (from Add) and lower our TP to Rs575 from Rs1020.

European asset sale holds key, positive equity value a plus

European asset sales hold the key at the current level. We expect the European carbon emission law to become tougher (rulings to come in June 2021), which can add at least US$20/tonne to the production cost (25-30% of the peak EBITDA/tonne). Europe EBITDA can fall below US$100m in FY22F. While our valuation assigns negative equity value of Rs105/share, a generous buyer paying a positive equity value could prop up the stock price.

Chinese ban on HCC imports unlikely to continue

Indian steel makers benefitted when HCC (hard coking coal) price dived when China imposed a ban on Australian coal imports. Chinese domestic coal prices are high, and the state has stopped publishing the daily coal index. Coal shortages are leading to power cuts (Please see link here). These politics-driven policies can reverse in a single day. As of now, Chinese domestic coking coal prices are 60% higher than Australian prices and lifting the ban will likely lead to fast convergence of prices and result in a rise in production cost for Indian mills.

Market offering best steel price and cost best multiple; Reduce

In our view, the best earnings get the best multiples. Inventory cycles will create a mirage of commodity super cycles. Currently Tata Steel trades at 10x FY22F EV/ EBITDA. On average [over last 10 years], Tata Steel trades at 7x EV/EBITDA (on current year). We add Tata Steel's equity value NPV to the benefits of iron ore for the next 10 years. We assign 7x EV/EBITDA to the base business, in line with historical average. We downgrade Tata Steel to Reduce, with lower TP at Rs575.

Financial Summary	Mar-19A	Mar-20A	Mar-21F	Mar-22F	Mar-23F
Revenue (Rsm)	15,46,918	13,69,768	14,77,832	15,46,511	15,65,896
Operating EBITDA (Rsm)	2,93,833	1,74,631	2,92,489	2,36,710	2,25,452
Net Profit (Rsm)	1,02,835	27,196	1,03,900	60,104	49,280
Core EPS (Rs)	42.8	26.8	43.0	24.9	20.4
Core EPS Growth	98.5%	(37.4%)	60.5%	(42.2%)	(18.0%)
FD Core P/E (x)	15.33	57.98	15.17	26.22	31.98
DPS (Rs)	4.1	4.1	4.1	4.1	4.1
Dividend Yield	0.73%	0.73%	0.73%	0.73%	0.73%
EV/EBITDA (x)	5.13	9.20	5.15	6.34	6.78
P/FCFE (x)	42.90	11.90	8.24	15.93	24.64
Net Gearing	133.2%	137.7%	111.1%	104.4%	103.2%
P/BV (x)	0.8	0.8	0.7	0.7	0.7
ROE	16.0%	9.1%	13.3%	7.1%	5.5%
% Change In Core EPS Estimates			(0.28%)	(0.62%)	(0.80%)
EIP Research/Consensus EPS (x)			0.85	3.20	4.14

SOURCES: EIP RESEARCH ESTIMATES, COMPANY REPORTS. PRICED AS AT 25 JAN 2021

Analyst(s)

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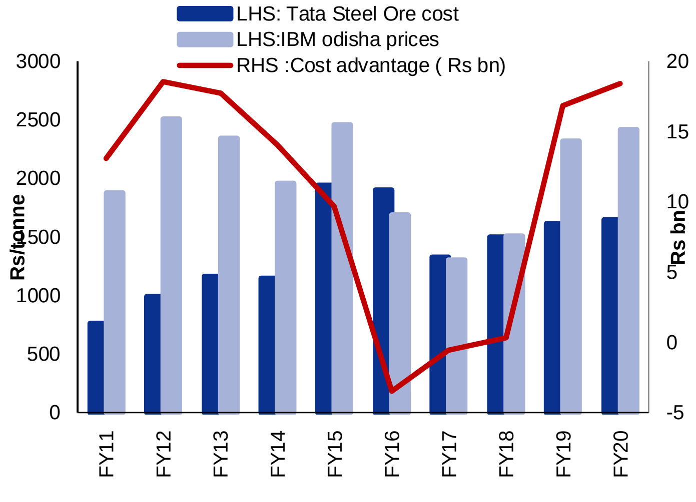
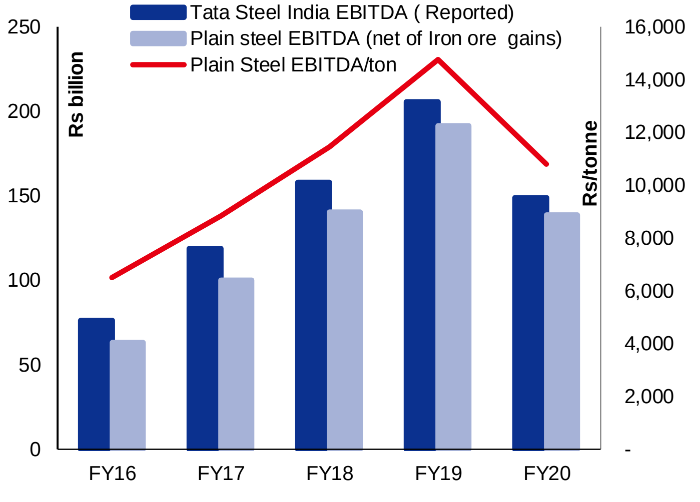
Figure 84: Tata Steel India enjoys the benefit of low-cost iron ore; saved Rs20bn in FY20



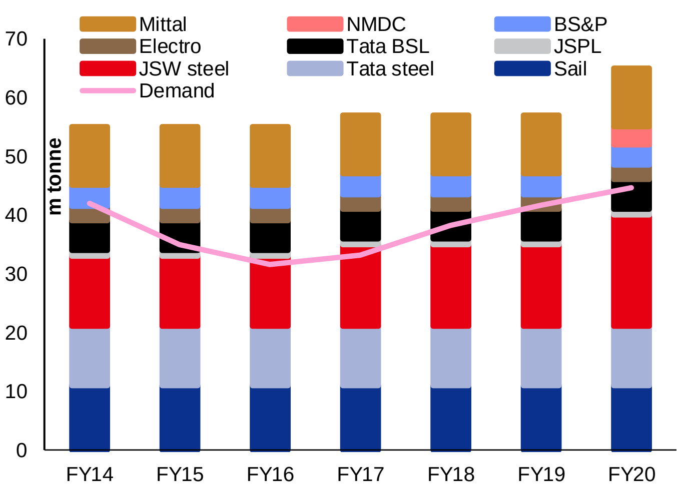
SOURCES: EIP RESEARCH, COMPANY REPORTS

Figure 85: Plain steel EBITDA, net of iron ore, has been ~Rs10,500/tonne



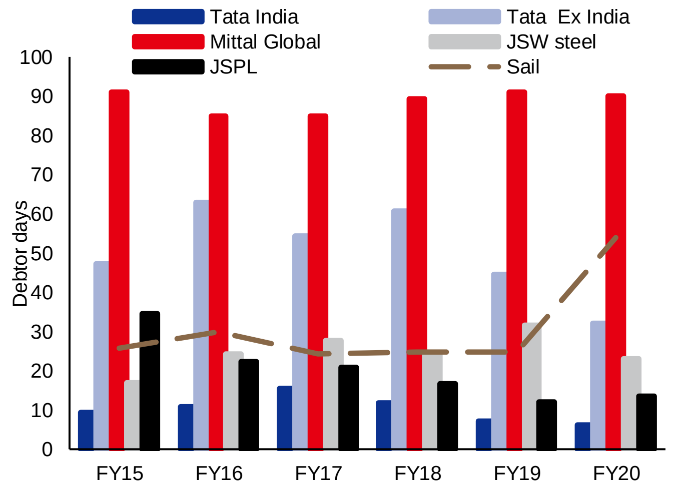
SOURCES: EIP RESEARCH, COMPANY REPORTS

Figure 86: Indian flat steel market is oversupplied; Tata Steel is expanding flat steel capacity by 5mt



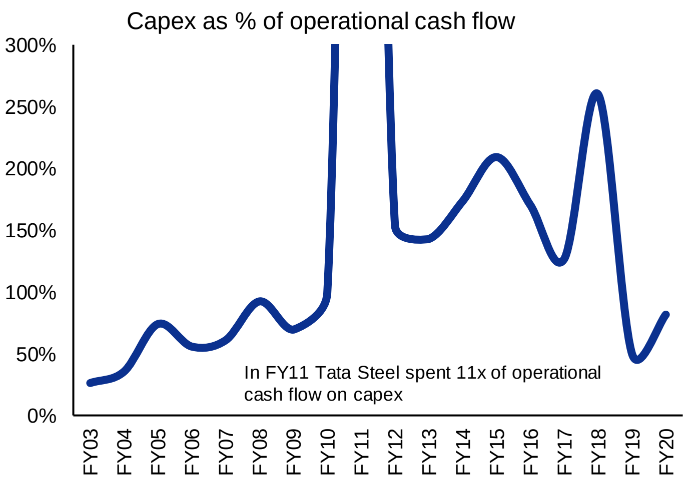
SOURCES: EIP RESEARCH, COMPANY REPORTS

Figure 87: Tata Steel's working capital intensity is unlikely to rise soon



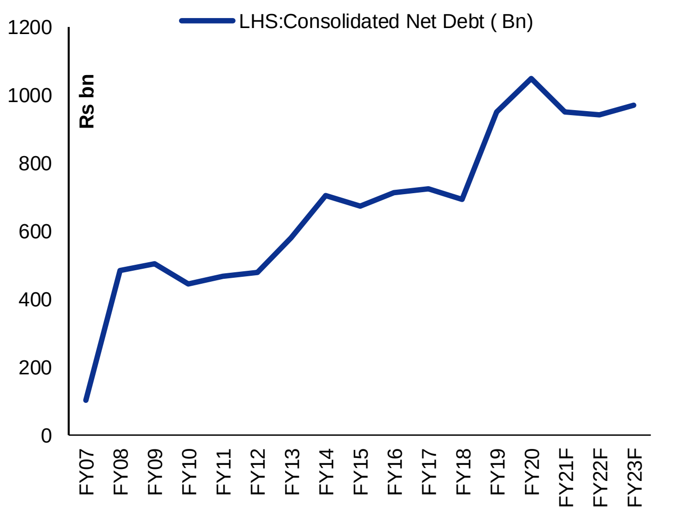
SOURCES: EIP RESEARCH, COMPANY REPORTS

Figure 88: Free cash flow generation has not been Tata Steel's forte



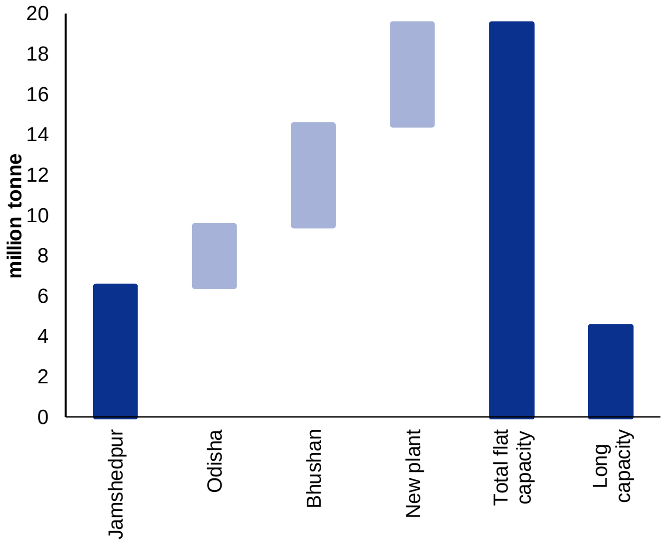
SOURCES: EIP RESEARCH, COMPANY REPORTS

Figure 89: Continued capex likely to sustain high debt



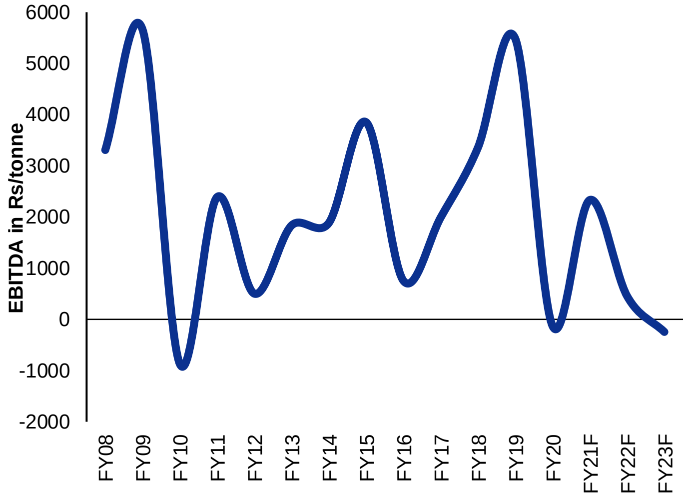
SOURCES: EIP RESEARCH ESTIMATES, COMPANY REPORTS

Figure 90: Indian operation primarily produces flat steel (81% capacity (FY21), which has not been good for some years



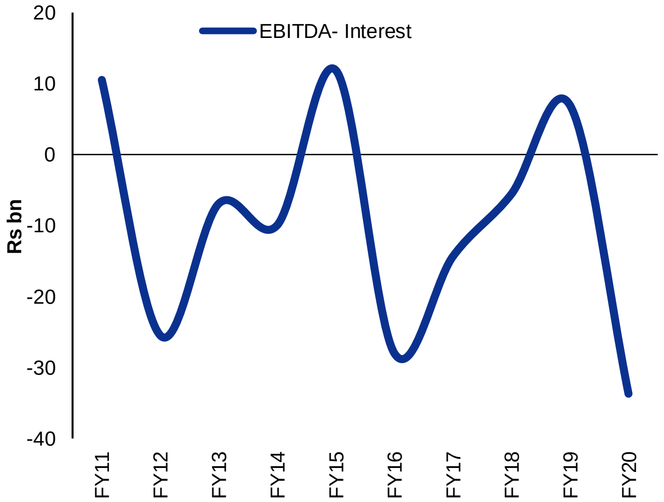
SOURCES: EIP RESEARCH, COMPANY REPORTS

Figure 91: Despite being a pure convertor Tata Steel Europe has not delivered consistently



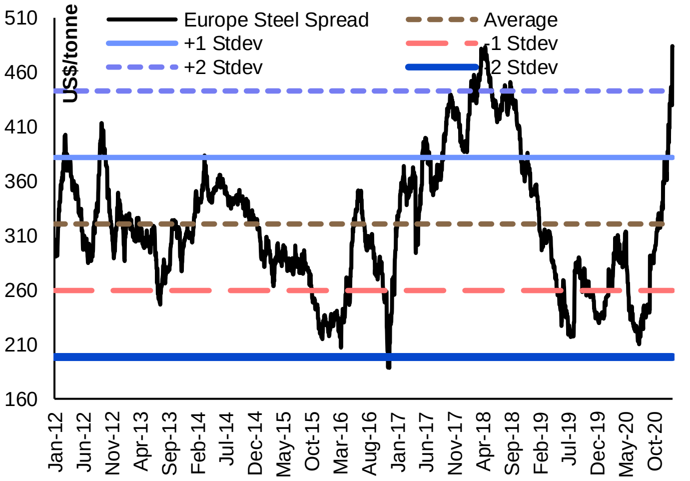
SOURCES: EIP RESEARCH ESTIMATES, COMPANY REPORTS

Figure 92: Europe business's EBITDA has not been able to pay interest or for capex



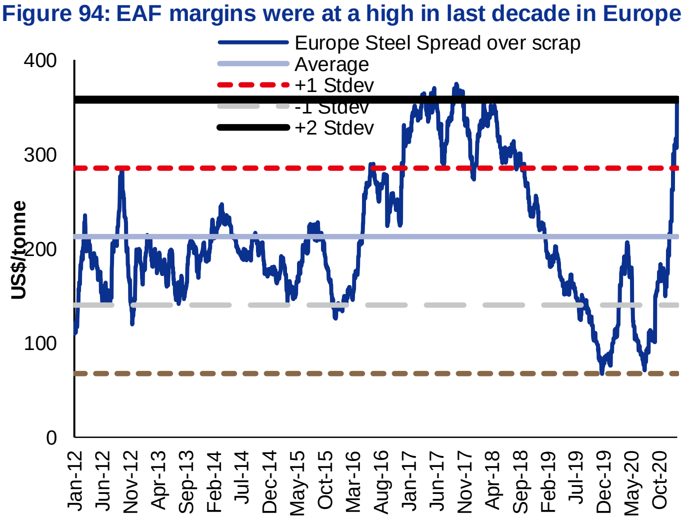
SOURCES: EIP RESEARCH, COMPANY REPORTS

Figure 93: European steel spreads for blast furnaces are at a multi-year high and driving up production



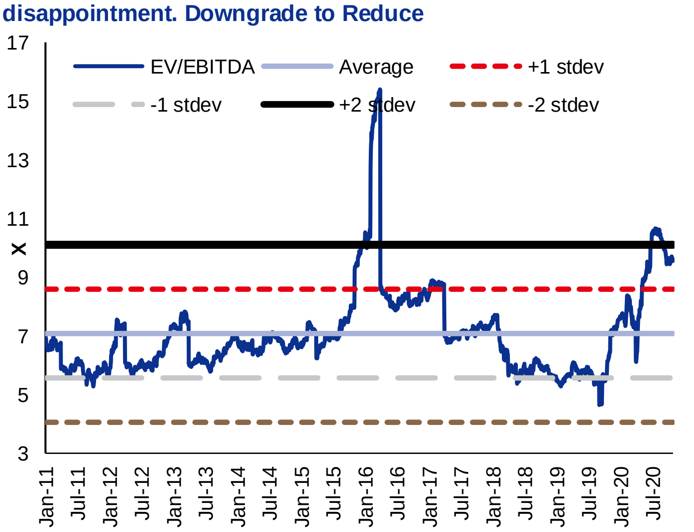
SOURCES: EIP RESEARCH, COMPANY REPORTS, BLOOMBERG

Figure 94: EAF margins were at a high in last decade in Europe



SOURCES: EIP RESEARCH, COMPANY REPORTS, BLOOMBERG

Figure 95: High valuations leave no room for earnings disappointment. Downgrade to Reduce



SOURCES: EIP RESEARCH, COMPANY REPORTS, BLOOMBERG

Highly leveraged to steel cycle; sell

With debt of nearly Rs1,000bn (end FY20), Tata Steel is the most leveraged to the steel cycle among its peers in our coverage universe. An earnings fall will have a significant impact on the equity value, in our view. There has been speculation (Source: Business Standard) it will sell its European assets. However, our valuation indicates these asset sales are not factored into the stock's price. Risk reward is unfavourable and we downgrade the stock to Reduce from Add.

End of captive mine lease visible in high EBITDA

Over the last 10 years, the bulk of the Tata Steel's EBITDA resulted from the mining business. According to the Mines and Minerals (Development and Regulation) (MMDR) Act, 2015, after 2030 all iron ore captive mining leases will expire and Tata Steel will have to make new bids for these mines. Hence, according a multiple to mining earnings is not rational. We add the NPV of savings because of captive iron ore for the next few years and add it to the base steel business valuation (assuming coking coal mine in perpetuity) to arrive at a value for Tata Steel.

MMDR Act 2015 represents seminal change for Indian mining ›

Prior to this amendment there were a slew of cases in different courts of India, disrupting mining activity. This law extended leases of all captive mines till 31 Mar 2020. It said, and we quote, "*Notwithstanding anything contained in sub-sections (2), (3) and sub-section (4), the period of lease granted before the date of commencement of the Mines and Minerals (Development and Regulation) Amendment Act, 2015, where mineral is used for captive purpose, shall be extended and be deemed to have been extended upto a period ending on the 31st March, 2030 with effect from the date of expiry of the period of renewal last made or till the completion of renewal period, if any, or a period of fifty years from the date of grant of such lease, whichever is later, subject to the condition that all the terms and conditions of the lease have been complied with*".

The law led to auctions of many iron ore mines at steep premiums

Figure 96: About 60mt of merchant mining production capacity changed hands at weighted average premium of 117%

Mine	Existing Lessee	Highest Bidder	Premium (%)
Nuagoan	KJS Ahluw alia	JSW Steel	95.2
Balda	Serajuddin	Serajuddin	118.05
Jiling Langalota	Essel Mining	Shyam	135
Jajang	Rungta	JSW Steel	110
Mahulsukha	Aryan Mining & Trading	Patnaik Minerals	92.7
Nadidih	Bonai Industrial Company	Formento	141.25
Gorumahisani	Ghanshyam Mishra & Sons	Ghanshyam Mishra & Sons	115
Nadidih Feegrade Mines	Feegrade Co.Pvt Ltd	Vishal LPG	142.35
Kolmong	Rungta	Yazdani Steel	100
Teherai	Bonai Industrial Company	Tarama	93.06
Siljora- Kalimati	Rungta	Debabrata Behera	154

SOURCES: EIP RESEARCH, INDIAN BUREAU OF MINES

Figure 97: Seasoned merchant category players like JSW, Serajuddin, Shyam Group and Formento have 70% share. Weighted average premium on captive mines has been 106% of notified IBM prices

Captive			Merchant		
Miner	Premium (%)	EC Limit (mt)	Miner	Premium (%)	EC Limit (mt)
JSW Steel	98.55	6	JSW Steel	95.2	5.62
ArcelorMittal	107.55	5.5	Serajuddin	118.05	15.15
JSW Steel	132	1.2	Shyam	135	6.28
Narbheram Pow er & Steel	90.9	3.5	JSW Steel	110	16.5
Kashvi International	150	1	Patnaik Minerals	92.7	0.04
			Formento	141.25	5.3
			Ghanshyam Mishra & Sons	115	0.75
			Vishal LPG	142.35	7.45
			Yazdani Steel	100	0.04
			Tarama	93.06	2.5
			Debabrata Behera	154	0.14

IBM REFERS TO INDIAN BUREAU OF MINES
SOURCES: EIP RESEARCH, IBM

Tata Steel's Joda (Odisha) iron ore mines are among the world's best

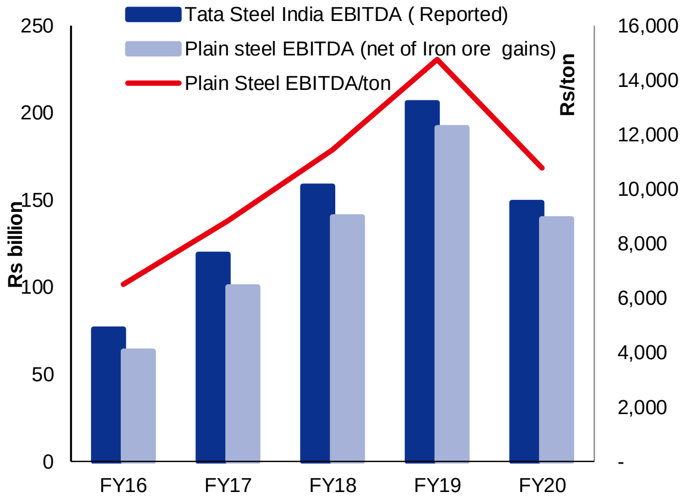
Tata Steel's mines in Joda, Odisha, are among the best in the world (in terms of % Fe content in iron ore). Readers will be amused to know that Tata Steel's old blast furnaces could only handle lumps of 67% plus grade. The company's tailing pond in Jamshedpur has more than 40mt of iron ore (of more than 60% Fe content). Given the premiums lower grade mines are commanding we infer that after 10 years these mines can command higher premiums.

By 2030F Tata Steel will become a normal steel maker

While we cannot speculate on the premium Tata Steel will pay to retain its Iron ore mine in 2030F, we believe Tata Steel could pay market price to procure iron ore. However, it will still have access to captive coking coal (at least as per current laws). Hence, we believe Tata Steel will become a normal steel converter like its global peers.

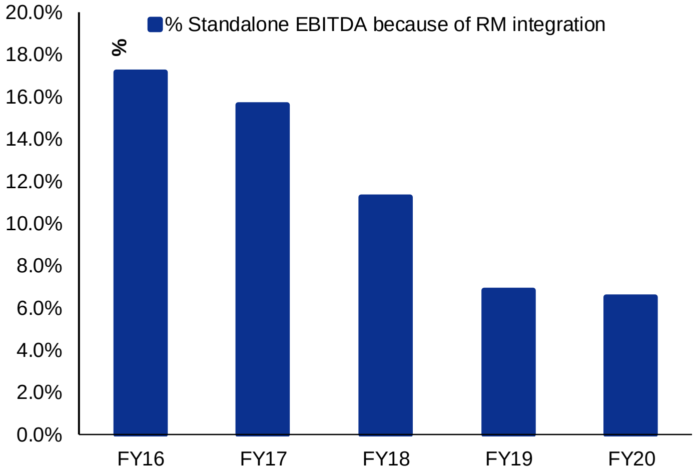
Over last 5 years on an average,Tata Steel has made 11% of the reported standalone EBITDA because of iron ore integration ›

Figure 98: Steel conversion EBITDA (with coking coal advantage) was Rs10,500/t



SOURCES: EIP RESEARCH, COMPANY REPORTS

Figure 99: On average 11% of Tata Steel's standalone EBITDA came from iron ore material integration



SOURCES: EIP RESEARCH, COMPANY REPORTS

We have assumed that if Tata Steel did not have captive iron ore it would have bought the same at Indian Bureau of Mines-notified prices.

As of now, no law indicates Tata Steel's coal mines will be taken away in 2030F

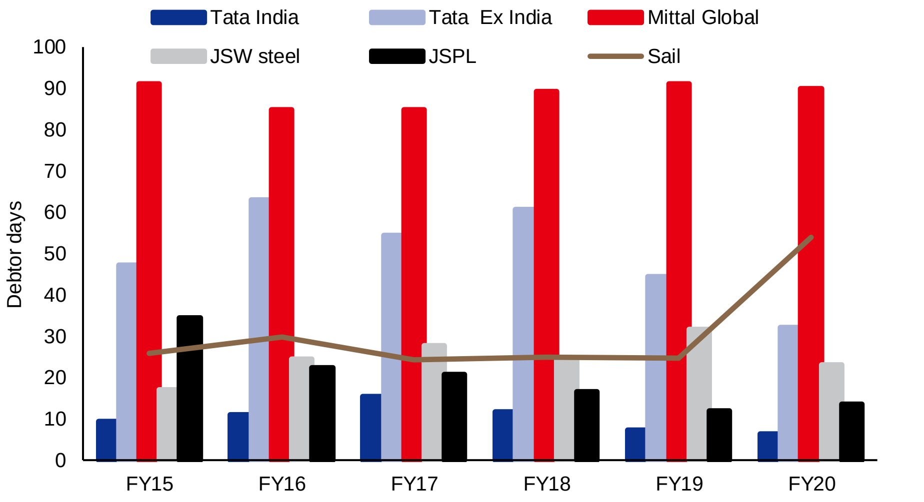
As the Coal Bearing Areas Act is separate from the MMDR Act, we cannot extrapolate the changes in the MMDR Act 2015 in relation to the coal blocks. However, policy is moving in the same direction. Having said that, we will not attempt to make a guess there. We have assumed the Tata Steel coking coal mine will continue in perpetuity.

Working capital may not rise even with Arcelor Mittal entering Indian market

The Tata Steel India division enjoyed beneficial credit terms in the last couple decades. Its debtor days were in the low single digit, while all its competition saw high debtor days. More than anything else this is the result of the belief in the Tata brand and, in our view, that is unlikely to change. Tata Steel sells steel through its dealer networks and never competes with its dealers. This practice is difficult for others to replicate.

Tata Steel's debt among lowest in the industry ›

Figure 100: Tata Steel's debtor days has been among the lowest in industry (globally)

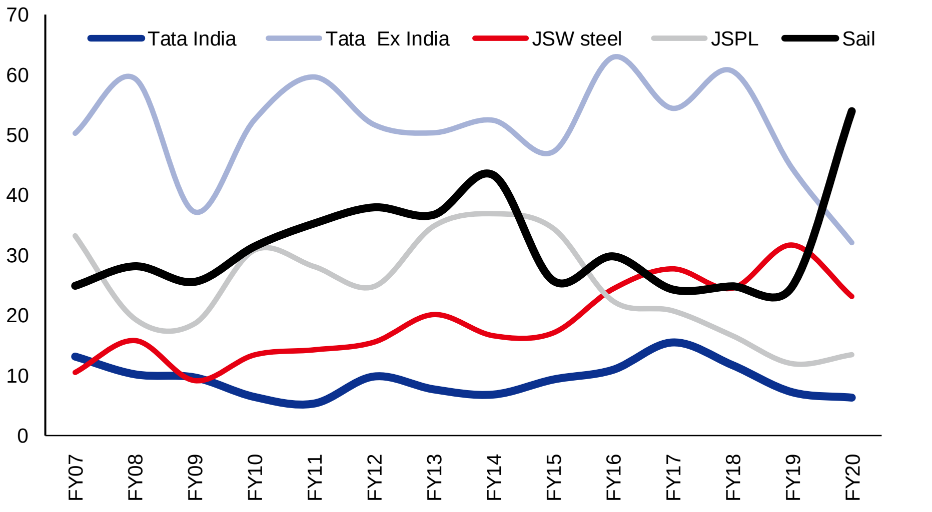


SOURCES: EIP RESEARCH, COMPANY REPORTS

Tata Steel, with other steel companies, slowly changed industry

Tata Steel pioneered the channel financing business in India. All its sales happens through the distributor channel. Tata Steel allows other equipment manufacturer (OEMs) users to buy from this distribution channel. It facilitates channel financing, which doesn't result in any contingent liability on Tata Steel's books. Other companies have followed this model, but their debtor days have not been as low as Tata Steel's.

Figure 101: Tata's bill discounting practice results in one of the industry's lowest debtor days



SOURCES: EIP RESEARCH, COMPANY REPORTS

New entrant like Arcelor Mittal can replicate this model if it has a wide distributor network like Tata

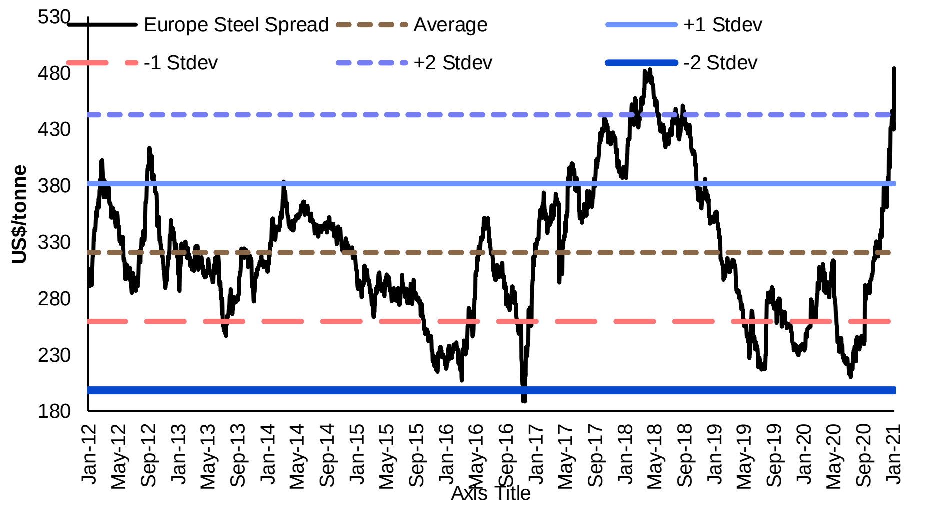
We believe Arcelor Mittal will distort the market initially as it has no distributorship in place, however, later credit period can stabilise on industry patterns.

If not sold, European assets will bite again

There is widespread expectation in the market that Tata Steel Europe will be sold and that servicing the liability of interest + capex will over. If that does not happen, we believe Tata Steel will have a tough time again.

Blast furnace steel margins in Europe are near the peak ›

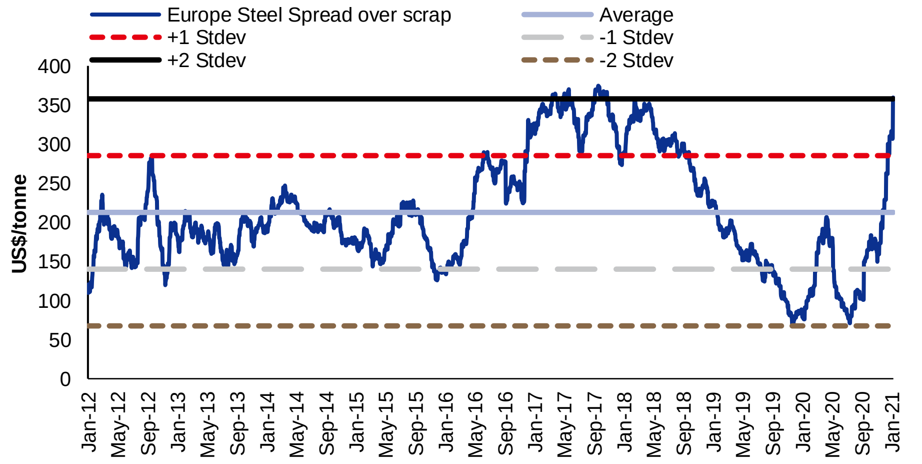
Figure 102: Overall steel margins in Europe are near their peak as business opened in the later part of last year which led to restocking



SOURCES: EIP RESEARCH, COMPANY REPORTS, BLOOMBERG

Scrap margins near all-time high ›

Figure 103: Steel spread over scrap is also near all time high

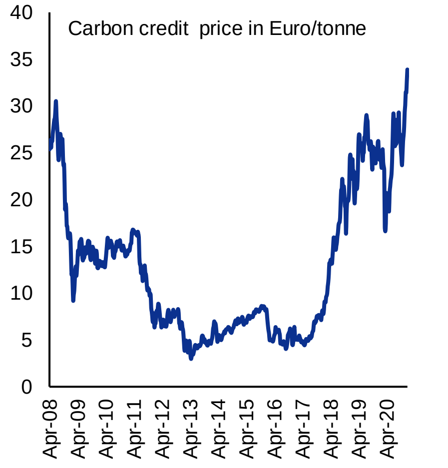


SOURCES: EIP RESEARCH, COMPANY REPORTS, BLOOMBERG

Matter of time before carbon-intensive EAFs start operating ›

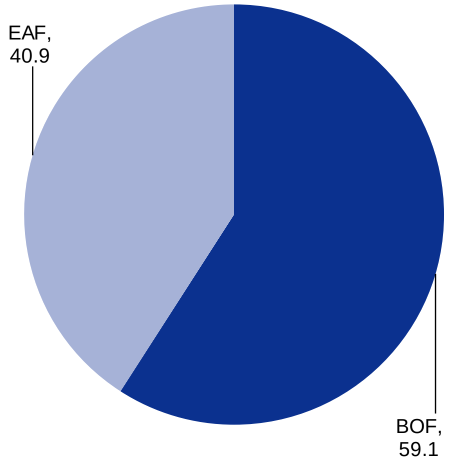
Electric arc furnaces (EAFs) account for almost 40% of steel production (CY20) in the European Union (EU). EAFs are 65% less carbon intensive than blast furnaces. In an era of new carbon regulations in the EU, these furnaces will have at least US$30/tonne cost advantage vis-à-vis blast furnaces (BFs). While new allocations are not available yet, the European Commission has maintained that allocations will be assigned on a rolling basis.

Figure 104: Carbon credit prices are rising as EU sets stricter agenda for 2021-30



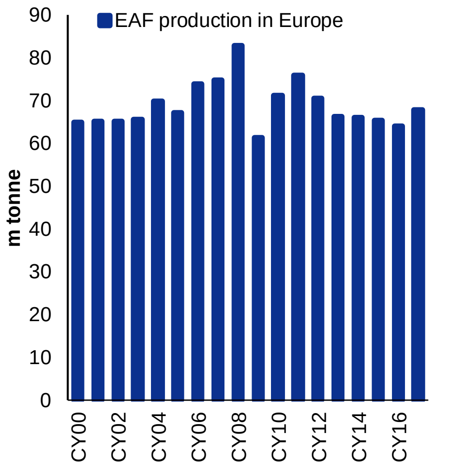
SOURCES: EIP RESEARCH, COMPANY REPORTS

Figure 105: In CY19 EAFs produced ~64mt (BOF: Blast furnace)



SOURCES: EIP RESEARCH, COMPANY REPORTS

Figure 106: EU EAF production capacity is at least 30% higher than current production level



SOURCES: EIP RESEARCH, COMPANY REPORTS

Current pandemic-related closure in Europe will force blast furnaces to shut down as they cannot ramp up fast like EAFs

The rapid rise in European prices is led by empty supply chains after the pandemic. Liquidity led to the perception of demand which likely would have led to long wait times for steel and, hence, the price rise, in our view. Blast furnaces need at least 20 days to start, while EAFs can start fast. So, if the steel spread remains where it is, we can see increased production from EAFs in the coming future. EAFs have a much lower carbon footprint, which is an added advantage.

European operations need to be sold ›

While the base for us would be zero EV for the European operations, anything more will be a positive for Tata Steel, in our view. We believe the next two quarters will be good for Tata Steel, hence, it may be the right time to sell its Europe asset. We feel sometimes it is good to leave 10-15% on the table for the other person in commodities, and Tata Steel is at the same juncture.

Earnings and Valuations

We expect EPS CAGR of -8% and EBITDA CAGR of -3% for FY21-23F. Steel prices are near their peak and we expect them to fall in the next few quarters after China opens after its New Year. With valuations and earnings (EPS estimates) at peak levels, we believe a price fall is likely in the offing and we downgrade Tata Steel to Reduce. As of now, our valuations build in a nominal equity value for a European asset's sell-off. The share price could rise somewhat if steel prices remain stable and TSE (Tata Steel Europe) is sold at positive equity value (probability of the same is extremely low).

Figure 107: Our realisation and cost assumptions

Tata Steel India (Rs/t)	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21F	FY22F	FY23F
Net Realisation	51,069	48,957	47,754	40,101	43,737	49,067	55,643	49,055	52,150	53,685	51,678
Raw Material Consumed	13,811	11,773	14,134	11,204	12,192	14,424	17,059	15,398	13,940	15,898	14,597
Cost of Goods Consumed	13,270	11,591	13,315	11,278	10,980	14,873	16,622	14,940	13,488	15,453	14,152
Employee Cost	4,816	4,311	5,259	4,527	4,197	3,974	4,043	4,088	4,133	4,179	4,225
Other Expenditure	18,108	18,012	17,741	16,321	17,738	17,234	18,773	17,964	18,131	18,493	18,938
Total Costs	36,194	33,913	36,316	32,125	32,914	36,081	39,439	36,992	35,752	38,126	37,316
EBITDA	14,875	15,043	11,439	7,976	10,823	12,987	16,204	12,063	16,398	15,559	14,362

SOURCES: EIP RESEARCH ESTIMATES, COMPANY REPORTS

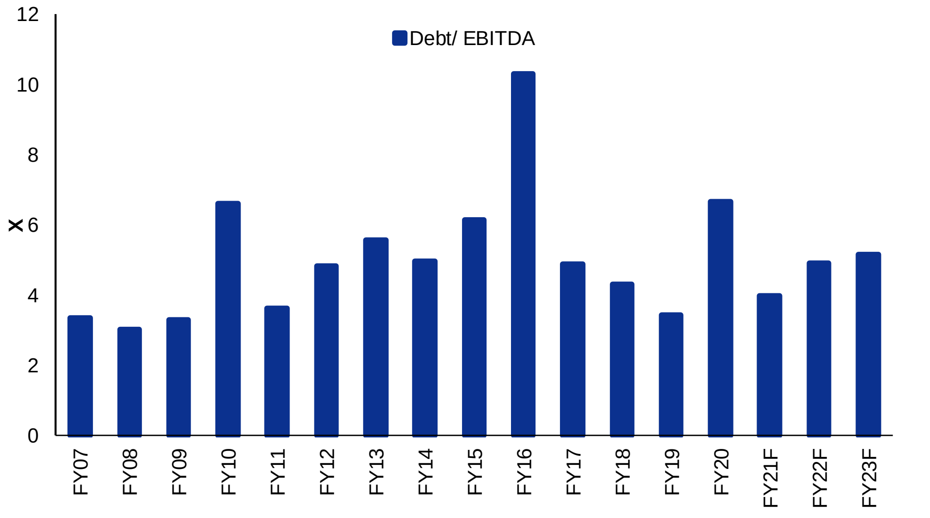
Figure 108: Tata Steel is running near capacity in standalone entity. Only BSL can increase sales volumes

Sales vol in mt	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21F	FY22F	FY23F
Tata Steel India Volume	7.48	8.52	8.75	9.54	10.97	12.15	12.69	12.32	12.50	12.70	12.70
BSL Volume							3.57	4.14	4.10	4.90	5.20
Europe Volume	13.07	13.86	13.67	10.97	9.93	9.99	9.64	9.29	9.10	9.65	9.70

SOURCES: EIP RESEARCH ESTIMATES, COMPANY REPORTS

Debt/ EBITDA on consolidated basis will not fall much

Figure 109: FY21F debt/ EBITDA will not fall below 4 in next few years



SOURCES: COMPANY REPORTS, EIP RESEARCH ESTIMATES

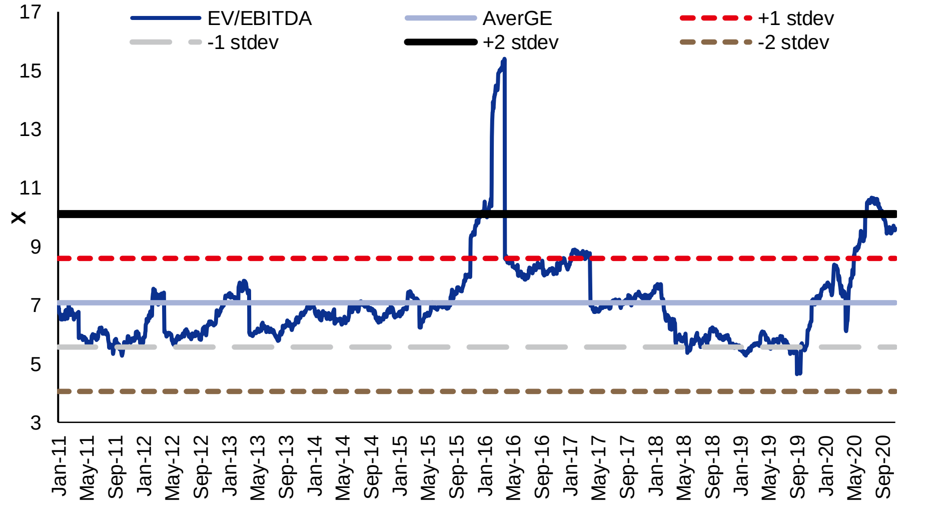
Courtesy investors' (Tata did rights issue hence book value went up) money Tata Steel still below +1SD on P/B ›

Figure 110: Courtesy investor money (rights issue) Tata Steel still looks fair on P/B

SOURCES: EIP RESEARCH, COMPANY REPORTS, BLOOMBERG

EV/EBITDA valuations appear high, more so with earnings likely to fall in coming years ›

Figure 111: Tata Steel trades at 10x one-year forward EV/EBITDA (last 10-year average was 7x). We value it at 7x FY22F to arrive at TP of Rs575



SOURCES: EIP RESEARCH, COMPANY REPORTS, BLOOMBERG

We value Tata Steel at Rs575/share ›

Figure 112: We take 10-year NPV of savings because of captive iron ore and add it to equity value. We assign 7x EV/EBITDA to the steel making EBITDA (including captive coal benefit) to arrive at a per share fair value of Rs575

(Rsm)	FY21	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30
Savings Because of Iron ore	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000
After tax savings	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000
NPV of Iron ore Savings	84,753									
FY22 EBITDA	2,36,710									
Plain EBITDA	2,16,710									
EV	15,16,973									
Equity Value	6,59,242									
Per share (Rs)	575									

SOURCES: EIP RESEARCH ESTIMATES, BLOOMBERG

- We have valued Tata Steel at 7x FY22F EV/EBITDA in line with its historical trading multiples.
- For NPV calculations we have used 10% discount rate (as average debt of tata steel over last 15 year has remained around 10%) and residual life of mine at 10 years.

Current share price assumes European asset sale at positive equity value of Rs20/share vs our negative value of Rs105

Figure 113: Market believes Tata Steel can garner at least €2bn EV for European assets

Tata Steel Europe's EBITDA, FY22F (Rs m)	**4,389**
Multiple (x)	7
EV (Rs m)	30,721
Debt in European Assets (Rs m)	1,51,380
Our negative value (Rs m)	-1,20,659
Negative value per share	-105.20
Market assignment of positive value	20.05

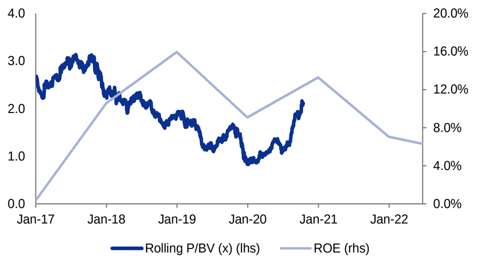
SOURCES: EIP RESEARCH, COMPANY REPORTS, BLOOMBERG

Potential Risk

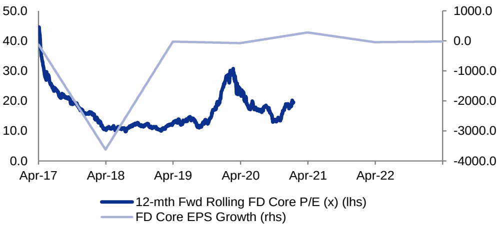
- Higher-than-expected steel price, which can lead to higher EBITDA hence higher stock prices.
- If Tata Steel is able to sell European asset at positive equity value then it will be an upside to our rating.

BY THE NUMBERS

P/BV vs ROE



12-mth Fwd FD Core P/E vs FD Core EPS Growth



Profit & Loss

(Rs mn)	Mar-19A	Mar-20A	Mar-21F	Mar-22F	Mar-23F
Total Net Revenues	**15,76,690**	**13,98,167**	**14,77,832**	**15,46,511**	**15,65,896**
Gross Profit	**15,76,690**	**13,98,167**	**14,77,832**	**15,46,511**	**15,65,896**
Operating EBITDA	**2,93,833**	**1,74,631**	**2,92,489**	**2,36,710**	**2,25,452**
Depreciation And Amortisation	(73,418)	(84,407)	(90,924)	(93,673)	(96,879)
Operating EBIT	**2,20,415**	**90,223**	**2,01,564**	**1,43,038**	**1,28,573**
Financial Income/(Expense)	(76,601)	(75,335)	(80,716)	(80,716)	(80,716)
Pretax Income/(Loss) from Assoc.	2,247	1,880			
Non-Operating Income/(Expense)	14,206	18,435	18,000	18,000	18,000
Profit Before Tax (pre-EI)	**1,60,267**	**35,203**	**1,38,848**	**80,321**	**65,856**
Exceptional Items	(1,210)	(37,521)			
Pre-tax Profit	**1,59,057**	**(2,317)**	**1,38,848**	**80,321**	**65,856**
Taxation	(67,184)	25,684	(34,948)	(20,217)	(16,576)
Exceptional Income - post-tax					
Profit After Tax	**91,873**	**23,367**	**1,03,900**	**60,104**	**49,280**
Minority Interests	10,962	3,829			
Preferred Dividends					
FX Gain/(Loss) - post tax					
Other Adjustments - post-tax					
Net Profit	**1,02,835**	**27,196**	**1,03,900**	**60,104**	**49,280**
Recurring Net Profit	1,03,533	64,716	1,03,900	60,104	49,280
Fully Diluted Recurring Net Profit	**1,03,533**	**64,716**	**1,03,900**	**60,104**	**49,280**

Cash Flow

(Rs mn)	Mar-19A	Mar-20A	Mar-21F	Mar-22F	Mar-23F
EBITDA	2,93,833	1,74,631	2,92,489	2,36,710	2,25,452
Cash Flow from Invt. & Assoc.					
Change In Working Capital	25,905	41,962	906	(14,903)	(14,037)
(Incr)/Decr in Total Provisions					
Other Non-Cash (Income)/Expense	(32,887)	31,705	(119)	(5,632)	(3,877)
Other Operating Cashflow	(7,016)	8,138	28,820	58,282	65,564
Net Interest (Paid)/Received	(77,419)	(75,807)	(80,716)	(80,716)	(80,716)
Tax Paid	50,942	21,059	34,948	20,217	16,576
Cashflow From Operations	**2,53,360**	**2,01,687**	**2,76,328**	**2,13,959**	**2,08,962**
Capex	(86,243)	(1,00,123)	(85,000)	(1,15,000)	(1,45,000)
Disposals Of FAs/subsidiaries					
Acq. Of Subsidiaries/investments					
Other Investing Cashflow	(2,12,775)	(45,181)			
Cash Flow From Investing	**(2,99,018)**	**(1,45,304)**	**(85,000)**	**(1,15,000)**	**(1,45,000)**
Debt Raised/(repaid)	82,412	76,073			
Proceeds From Issue Of Shares	(60)	1,875			12
Shares Repurchased					
Dividends Paid	(14,239)	(18,152)	(11,461)	(11,461)	(11,461)
Preferred Dividends					
Other Financing Cashflow	(74,840)	(76,742)	(80,716)	(80,716)	(80,716)
Cash Flow From Financing	**(6,727)**	**(16,946)**	**(92,177)**	**(92,177)**	**(92,166)**
Total Cash Generated	(52,386)	39,438	99,150	6,781	(28,204)
Free Cashflow To Equity	**36,753**	**1,32,457**	**1,91,328**	**98,959**	**63,962**
Free Cashflow To Firm	**31,760**	**1,32,191**	**2,72,044**	**1,79,675**	**1,44,678**

SOURCES: EIP RESEARCH ESTIMATES, COMPANY REPORTS

BY THE NUMBERS…cont'd

Balance Sheet

(Rs mn)	Mar-19A	Mar-20A	Mar-21F	Mar-22F	Mar-23F
Total Cash And Equivalents	58,662	1,14,866	2,14,016	2,20,797	1,92,594
Total Debtors	1,18,110	78,849	96,084	1,11,165	1,26,178
Inventories	3,16,561	3,10,687	3,04,455	3,04,925	3,04,998
Total Other Current Assets	96,577	82,925	82,925	82,925	82,925
Total Current Assets	**5,89,910**	**5,87,327**	**6,97,480**	**7,19,813**	**7,06,694**
Fixed Assets	13,90,865	14,99,930	14,94,005	15,15,332	15,63,453
Total Investments	32,133	28,533	28,533	28,533	28,533
Intangible Assets	39,966	40,545	40,545	40,545	40,545
Total Other Non-Current Assets	2,82,950	3,47,859	3,48,371	3,54,495	3,58,577
Total Non-current Assets	**17,45,914**	**19,16,867**	**19,11,455**	**19,38,905**	**19,91,108**
Short-term Debt	1,08,021	1,91,845	1,91,845	1,91,845	1,91,845
Current Portion of Long-Term Debt					
Total Creditors	2,17,170	2,13,809	2,26,136	2,26,687	2,26,772
Other Current Liabilities	1,88,437	1,80,568	1,80,150	1,80,248	1,81,211
Total Current Liabilities	**5,13,627**	**5,86,222**	**5,98,131**	**5,98,779**	**5,99,828**
Total Long-term Debt	9,00,141	9,71,437	9,71,437	9,71,437	9,71,437
Hybrid Debt - Debt Component					
Total Other Non-Current Liabilities	17,564	13,960	13,899	13,899	13,899
Total Non-current Liabilities	**9,17,706**	**9,85,398**	**9,85,336**	**9,85,336**	**9,85,336**
Total Provisions	1,91,596	1,70,946	1,71,400	1,71,891	1,72,096
Total Liabilities	**16,22,929**	**17,42,566**	**17,54,867**	**17,56,007**	**17,57,261**
Shareholders Equity	6,89,251	7,35,763	8,28,202	8,76,845	9,14,676
Minority Interests	23,645	25,866	25,866	25,866	25,866
Total Equity	**7,12,895**	**7,61,629**	**8,54,068**	**9,02,711**	**9,40,542**

Key Ratios

	Mar-19A	Mar-20A	Mar-21F	Mar-22F	Mar-23F
Revenue Growth	26.9%	(11.5%)	7.9%	4.6%	1.3%
Operating EBITDA Growth	37.1%	(40.6%)	67.5%	(19.1%)	(4.8%)
Operating EBITDA Margin	19.0%	12.7%	19.8%	15.3%	14.4%
Net Cash Per Share (Rs)	(392.36)	(433.72)	(392.70)	(389.90)	(401.57)
BVPS (Rs)	284.81	304.38	342.62	362.74	378.39
Gross Interest Cover	2.88	1.20	2.50	1.77	1.59
Effective Tax Rate	42.2%		25.2%	25.2%	25.2%
Net Dividend Payout Ratio	11.0%	17.7%	11.0%	19.1%	23.3%
Accounts Receivables Days	28.04	25.71	21.60	24.46	27.66
Inventory Days	nm	nm	nm	nm	nm
Accounts Payables Days	nm	nm	nm	nm	nm
ROIC (%)	12.0%	4.6%	10.3%	7.1%	6.2%
ROCE (%)	12.6%	4.7%	9.8%	6.7%	5.9%
Return On Average Assets	7.7%	5.6%	7.2%	5.3%	4.9%

SOURCES: EIP RESEARCH ESTIMATES, COMPANY REPORTS

India

ADD *(no change)*

Consensus ratings*:	Buy 19	Hold 0	Sell 2

Current price:	Rs280
Target price: ▼	Rs476
Previous target:	Rs540
Up/downside:	70.0%
EIP Research / Consensus:	30.9%
Reuters:	JNSP.NS
Bloomberg:	JSP IN
Market cap:	US$3,910m
	Rs2,85,248m
Average daily turnover:	US$38.9m
	Rs2838.3m
Current shares o/s:	1,020.0m
Free float:	39.6%

Source: Bloomberg

Source: Bloomberg

Price performance	1M	3M	12M
Absolute (%)	7.9	35.6	48.0
Relative (%)	4.8	14.1	27.4

Major shareholders	% held
Promoter and Promoter Group	60.4
ICICI Prudential Life Insurance	3.1
Kotak Tax Saver Scheme	2.6

Jindal Steel and Power

Deserves higher multiples; retain Add

- JSPL's resilient and flexible product portfolio (finished goods and raw materials like pellets and sponge iron) should help it withstand future price volatility.
- Coal block allocation is positive for the company, but higher plant load factor (PLF), which is key for its power business, is still elusive.
- We value JSPL on a sum-of-parts valuation to arrive at a TP of Rs476 from the earlier price target of Rs540.

Resilient earnings in a challenging environment; retain Add rating

As the steel supply chain normalizes, we believe there will be a sharp correction in steel prices in near term. However, as argued in our sector report, raw material prices (iron ore, pellets and sponge iron) can remain high. JSPL is uniquely positioned for this kind of scenario, in our view, as it can cut long steel production (if prices collapse too much) and switch its production line to produce pellet and sponge iron. Resilient earnings in a volatile environment, undemanding valuations, deleveraging balance sheet and improving return ratios make it our preferred pick in the steel space. Retain Add but lower our TP to Rs476.

Flexible product mix will help maintain steel business profitability

JSPL has ~8.5mt of steel-making capacity. It can make 6.7mt of value-added steel and sell 1.8mt as simple mild steel. At the same time, JSPL has currently 9mt of pellets and 3.6mt of sponge iron-making capacity as at FY20. In periods when long steel spreads are likely to be under stress, JSPL can shift to selling pellets and sponge iron. Our analysis indicates that in periods of stress, pellet and sponge iron spreads are unlikely to collapse. While we expect some export duty on pellets to be imposed in the coming months, an export duty of more than 30% will likely pose a risk to our steel earnings estimates.

Gare Palma IV/1 coal block allocation is a positive for power business

JSPL got the Gare Palma IV/1 coal block in 2020. It is an underground mine with a production capacity of 6mt p.a. and overall reserves of ~140mt (as at FY21). At Rs230 a tonne, the bid was 53.3% higher than the reserve price. Gare Palma IV/1 coal will be used in the Raigarh plant and in captive power plants near the mines, as per company. While the coal block is a positive for the company, we do not expect any quick revival. We expect minor easing of costs in the near term. The main driver of Jindal Power's RoE is the PLF, which should be around 50% in the coming quarters.

We value JSPL using sum of parts to arrive at the TP of Rs476

We value JSPL using an SOP valuation methodology. We value JPL (Jindal Power Limited) at 0.5x book value and the standalone steel business at 5.5x EV/ EBITDA (which is near -1.5SD of the mean of the last 12 years). While we believe JSPL deserves a higher multiple, we are cognizant of the fact that higher multiples do not happen fast and, hence, our end FY21F fair value is Rs422, which we roll forward by one year to arrive at an end-FY22F TP of Rs476. Inability to ramp up production or fresh capex announcement can be a downside risk to our Add rating.

Financial Summary	Mar-19A	Mar-20A	Mar-21F	Mar-22F	Mar-23F
Revenue (Rsm)	3,93,721	3,69,175	3,99,381	4,17,155	4,35,929
Operating EBITDA (Rsm)	83,537	78,539	1,20,745	1,04,477	1,06,196
Net Profit (Rsm)	(16,453)	(1,092)	31,900	29,399	30,778
Core EPS (Rs)	(0.7)	0.0	13.2	12.2	12.7
Core EPS Growth	(79.7%)	(100.1%)	15,94,894.0%	(7.8%)	4.7%
FD Core P/E (x)	(41.11)	(619.44)	21.19	22.99	21.96
DPS (Rs)	0.0	0.0	0.0	0.0	0.0
Dividend Yield	0.00%	0.00%	0.00%	0.00%	0.00%
EV/EBITDA (x)	7.92	8.20	4.21	4.39	3.81
P/FCFE (x)	15.01	17.53	11.46	14.47	7.61
Net Gearing	124.0%	114.4%	64.7%	46.2%	29.5%
P/BV (x)	1.3	1.3	1.1	1.1	1.0
ROE	(0.5%)	0.0%	9.5%	8.0%	7.7%
% Change In Core EPS Estimates			(0.41%)	(0.61%)	(0.69%)
EIP Research/Consensus EPS (x)			3.44	3.01	2.60

SOURCES: EIP RESEARCH ESTIMATES, COMPANY REPORTS. PRICED AS AT 25 JAN 2021

Analyst(s)

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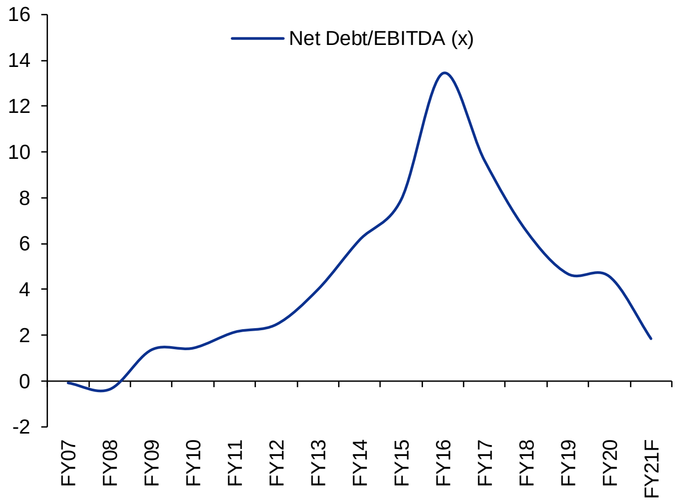
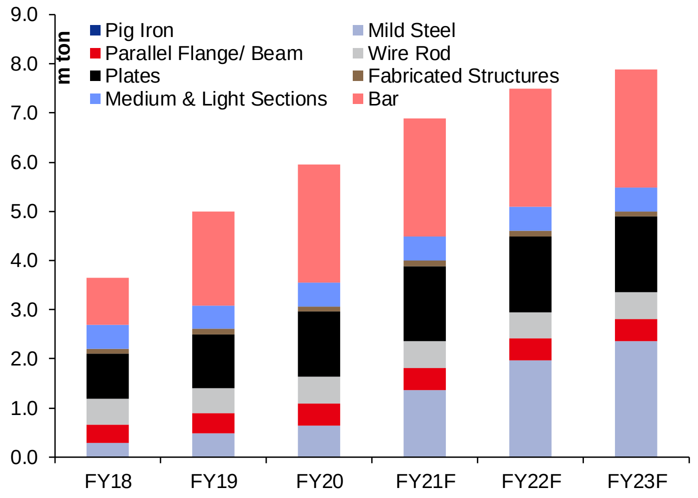
Figure 114: JSPL: Interesting deleveraging story in domestic steel



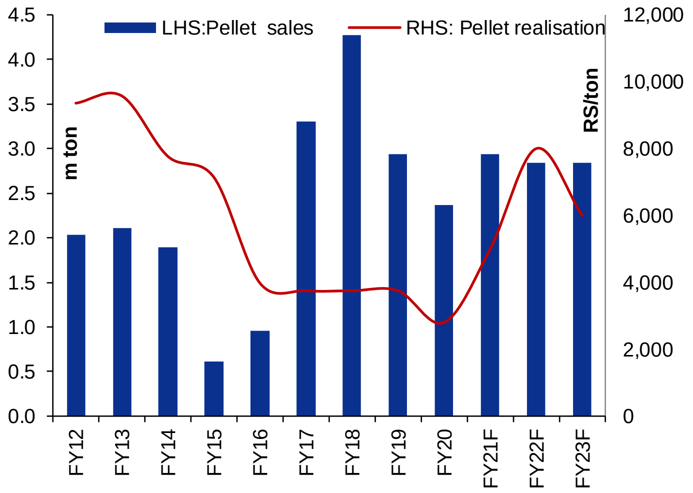
SOURCES: EIP RESEARCH ESTIMATES, COMPANY REPORTS

Figure 115: JSPL's entire sales portfolio is long steel, whose demand & prices will likely improve in coming quarters



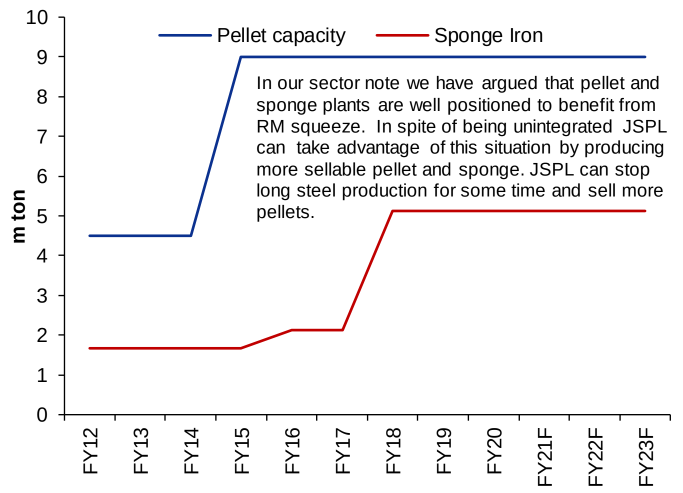
SOURCES: EIP RESEARCH ESTIMATES, COMPANY REPORTS

Figure 116: Positioned to take advantage of pellet price surge



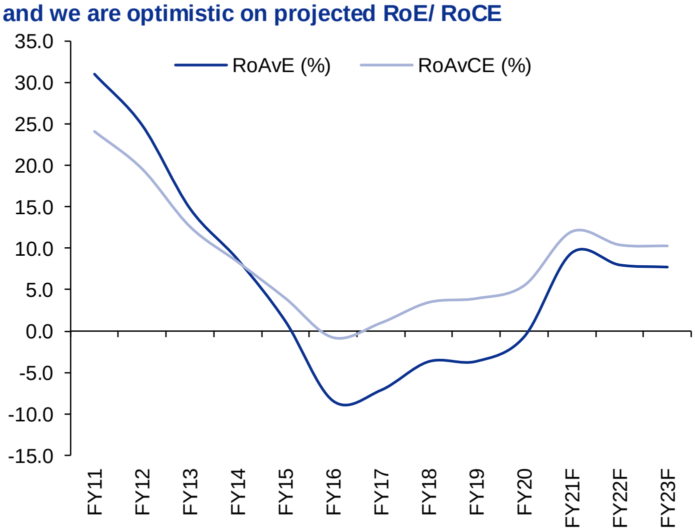
SOURCES: EIP RESEARCH ESTIMATES, COMPANY REPORTS

Figure 117: JSPL is positioned to take advantage of emerging Indian RM scenario



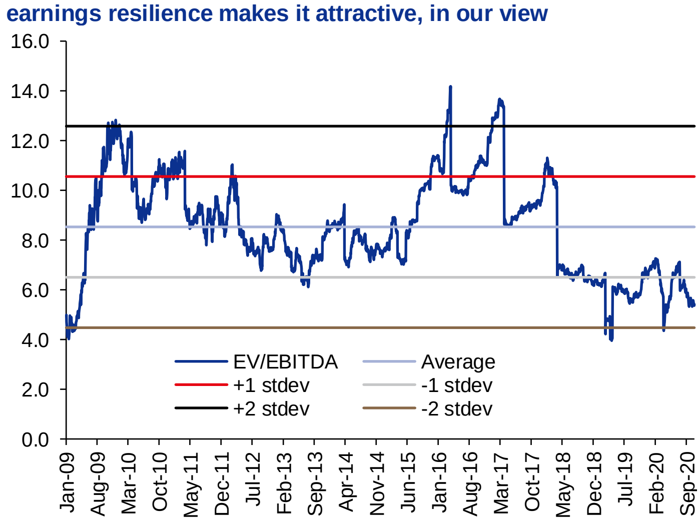
SOURCES: EIP RESEARCH ESTIMATES, COMPANY REPORTS

Figure 118: Earnings have highest resilience wrt steel prices, and we are optimistic on projected RoE/ RoCE



SOURCES: EIP RESEARCH ESTIMATES, COMPANY REPORTS

Figure 119: Undemanding valuations of JSPL vis-à-vis likely earnings resilience makes it attractive, in our view



SOURCES: EIP RESEARCH ESTIMATES, COMPANY REPORTS

Earnings resilient in challenging times

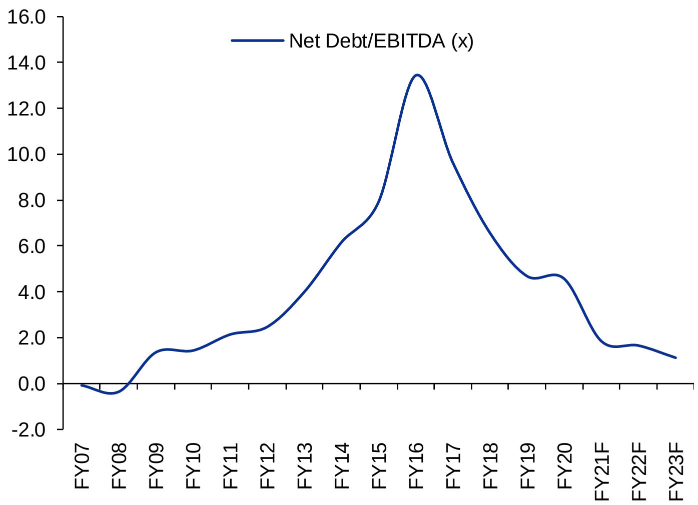
As the supply chain normalises, we expect steel prices to collapse. However, as we argued in our sector report, raw material prices of iron ore, pellets and sponge iron may likely remain high. JSPL is uniquely positioned for this kind of scenario as it can cut long steel production (if prices collapse too much) and switch its production line to produce pellets and sponge iron. Resilient earnings operating profit in an upcoming challenging environment, undemanding valuations, deleveraging balance sheet and improving return ratios make JSPL our preferred pick in the steel space. Hence, we lower our TP to Rs476 from Rs540 and retain our Add rating.

Balance sheet deleveraging

We believe JSPL's deleveraging of its balance sheet is among the best witnessed in corporate India. Its net debt/EBITDA fell to 2.4x in FY21F from a precarious 13.4x in FY16. We believe leverage will improve further to 1.4x by FY23F.

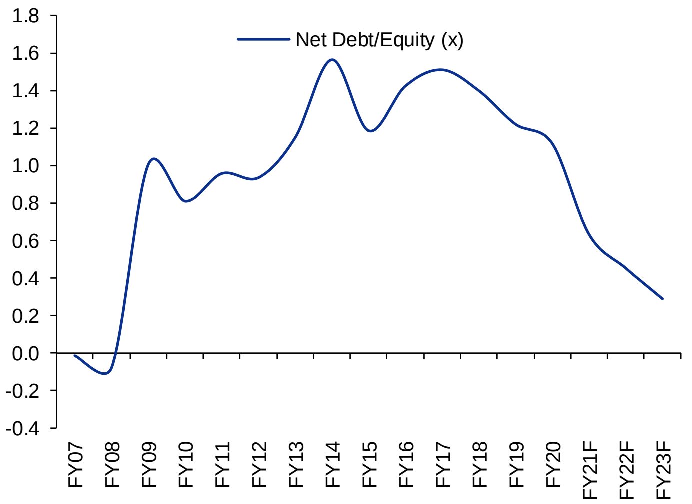
JSPL's leverage fell significantly in FY20; to improve further ›

Figure 120: Net debt/ EBITDA to fall to 1.4x in FY23F from 13.4x in FY16



SOURCES: EIP RESEARCH ESTIMATES, COMPANY REPORTS

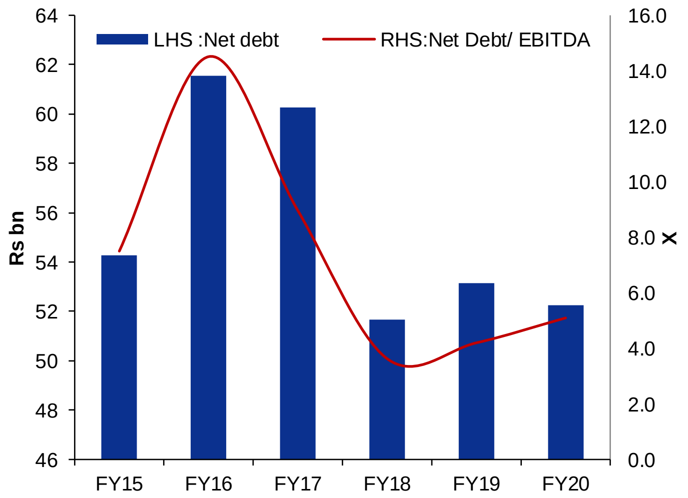
Figure 121: Net debt/ equity was never too high for JSW



SOURCES: EIP RESEARCH ESTIMATES, COMPANY REPORTS

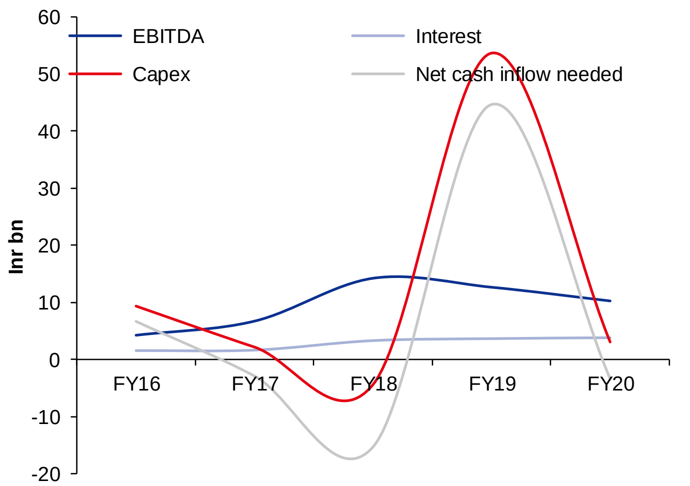
JSPL Oman plant sale was a welcome step to lower levearge ›

Figure 122: Oman's leverage was always a problem for JSPL



SOURCES: EIP RESEARCH, COMPANY REPORTS

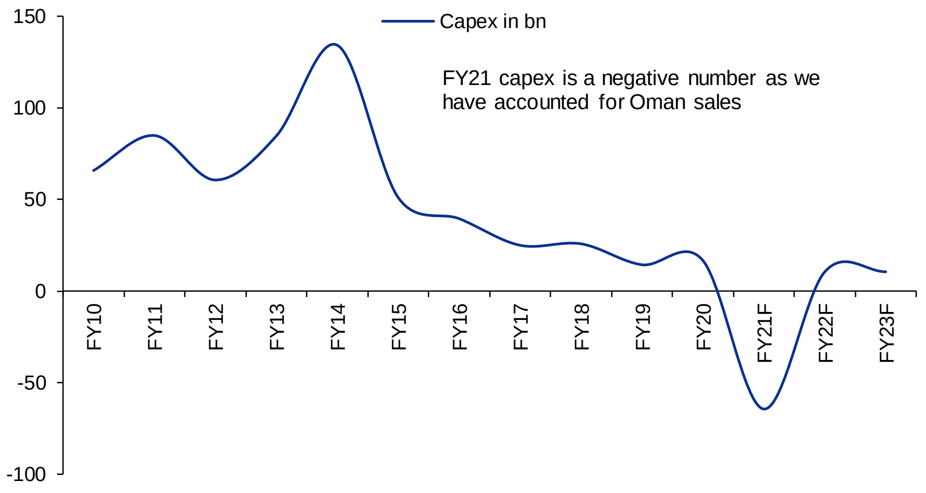
Figure 123: Oman was the proverbial weight around JSPL's neck



SOURCES: EIP RESEARCH, COMPANY REPORTS

Future muted capex likely to aid further debt reduction ›

Figure 124: JSPL is reducing its capex to Rs10bn-11bn for the next few years



SOURCES: EIP RESEARCH ESTIMATES, COMPANY REPORTS

Flexibility to run its operations will likely help JSPL come out unscathed in a price fall

Currently JSPL has ~8.5mt of steel-making capacity. It can make 6.7mt of value-added steel and sell 1.8mt as simple mild steel. At the same time, JSPL has 9mt of pellet and 3.6mt of sponge iron-making capacity. In the periods long steel spreads are likely to remain under stress, JSPL can shift to selling pellet and sponge iron, in our view. Our analysis indicates that while long steel spreads could come under stress, pellet and sponge prices are not likely to collapse.

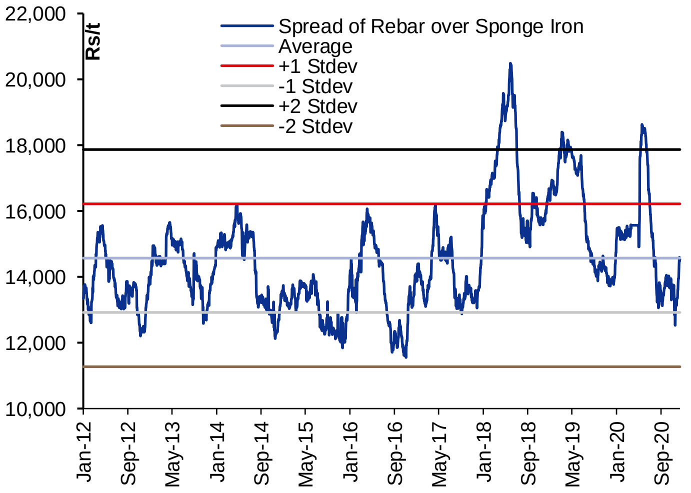
JSPL has multiple product selling opportunities ›

JSPL manufactures products across the value chain, many of which can be sold without further value addition. These products are 1) pellets, 2) sponge iron, 3) mild steel, and 4) value-added steel. It does not have a captive iron ore and coking coal, but has plants in Odisha and Chhattisgarh, where iron ore is easily available.

Long steel margins likely to be under pressure; JSPL hedged ›

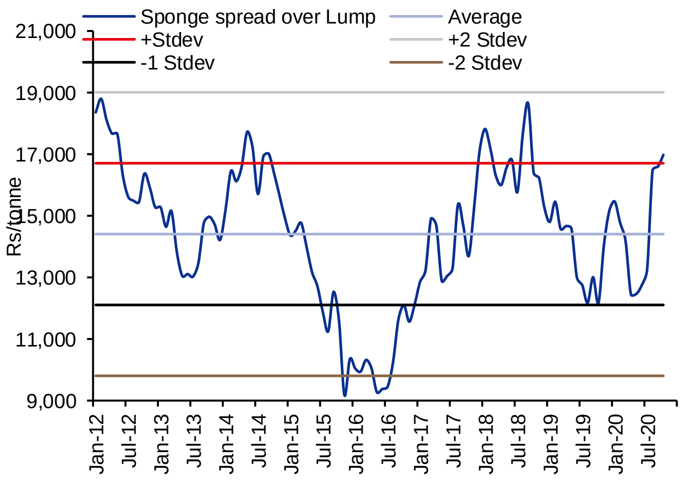
We say JSPL is hedged because it can shun the production of long steel and start selling pellets / sponge iron if it makes more money. As of now, sponge iron margins are better than steel-making margins.

Figure 125: Despite the scarcity of steel, long steel maker margins are barely touching their historical average



SOURCES: EIP RESEARCH, STEELMINT

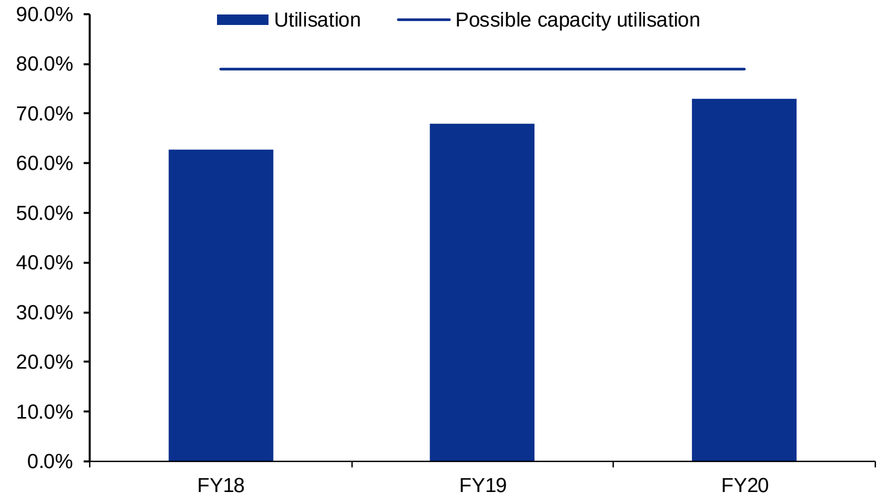
Figure 126: Sponge maker margins are at +1SD and likely to rise further as sponge is hitting the utilisation limit



SOURCES: EIP RESEARCH, STEELMINT

Sponge margins to improve as sponge makers near utilisation limits

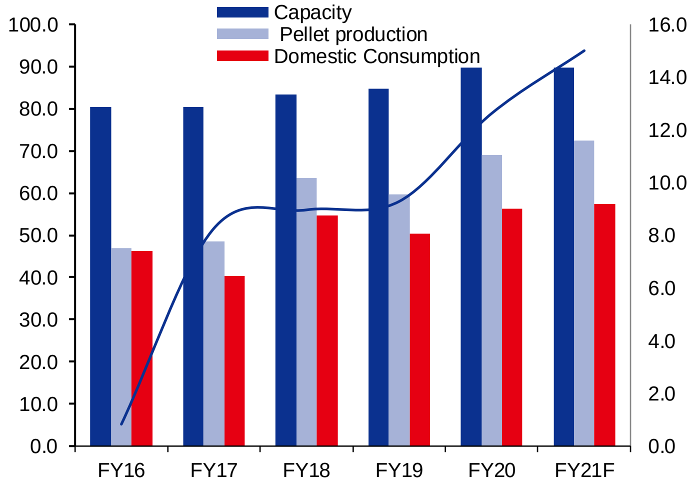
Figure 127: Of 950 sponge units in India, only 750 can operate. These units also cannot keep operating at 100% through the year



SOURCES: EIP RESEARCH, STEELMINT

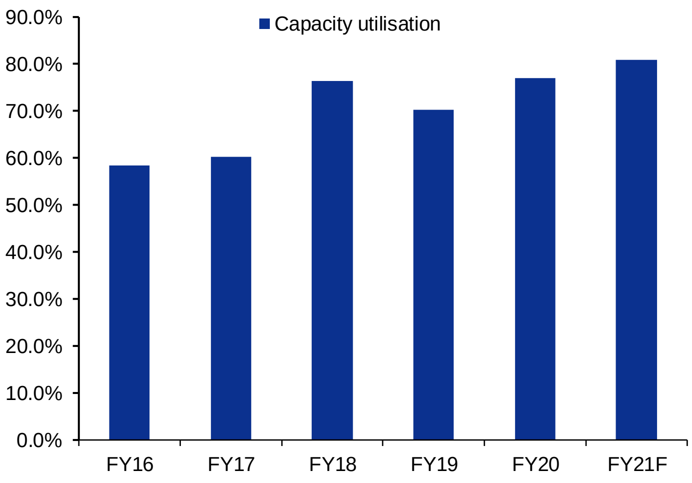
Pellets are also in a sweet spot vis-à-vis capacity

Figure 128: Pellet production in India is rising at 9% CAGR, but capacity only at 2.2% CAGR



SOURCES: EIP RESEARCH, STEELMINT

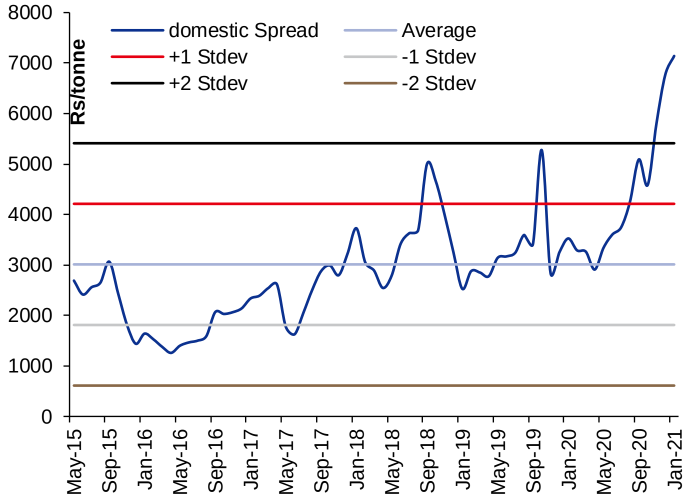
Figure 129: Like sponge iron, pellet plants cannot operate consistently at more than 85-90% capacity



SOURCES: EIP RESEARCH ESTIMATES, STEELMINT

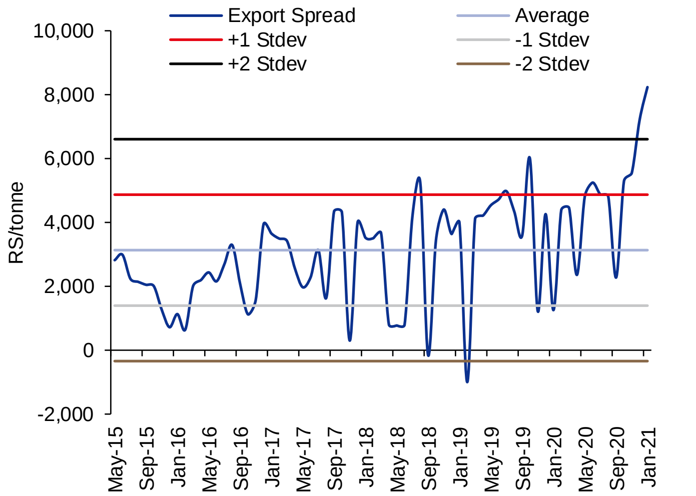
Pellet margins are jumping and unless exports are curbed margins will go up further

Figure 130: Spreads (pellet price - iron ore price) on domestic pellets is at a 5-year high



SOURCES: COMPANY REPORTS, STEELMINT

Figure 131: Similarly, exports' spreads (FOB export realisation-iron ore cost) are rising fast



SOURCES: COMPANY REPORTS, STEELMINT

As of now JSPL may make more selling/ exporting pellets than long steel

Figure 132: As of now JSPL is better off selling pellets than mild steel

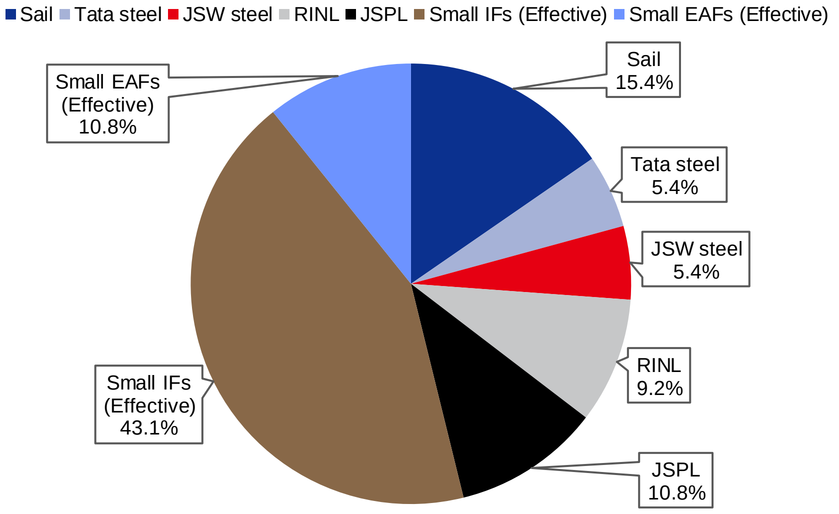
Cost of production of pellets (Rs/tonne)		
Power consumption	65	KwHr/tonne
-Power cost	3	Rs/ KwHr
-Power cost per tonne of pellets	195	Rs/ tonne pellets
-Fuel Consumption Norm	18	Kg/ tonne pellets
-price of Fuel oil	27	Rs/ Kg
- Fuel oil cost per tonne	486	Rs/ tonne pellets
Coal Consumption Norm	10	Kg/ tonne pellets
-Price of coal	3	Rs/ Kg
- Fuel oil cost per tonne	30	Rs/ tonne pellets
Bentonite		
-Consumption Norm	10	Kg/ tonne pellets
-Price of Bentonite	2	Rs/ Kg
-Bentonite cost per tonne	20	Rs/ tonne pellets
Labour and Maintenance	200	Rs/ tonne pellets
Miscellaneous	150	Rs/ tonne pellets
Overall process costing	1,081	Rs/ tonne pellets
- Fines Consumption norm	1.03	Tonne/ tonne of pellets
-Price of iron ore	5,000	Rs/tonne
-Freight to plants	20	Rs/tonne
-Wastage	2	%
-Cost per tonne landed	5,276	Rs/tonne
Overall costing	6,357	Rs/ tonne pellets
Selling price of pellets	11,800	Rs/ tonne pellets
EBITDA for pellet plant	5,443	Rs/ tonne pellets
Pellet required per tonne of steel	1.80	Tonne/tonne of finished steel
Margins made by JSPL if they sell pellet in lieu of steel	9,797	Tonne/tonne of finished steel

SOURCES: EIP RESEARCH, COMPANY REPORTS

Long steel may face margin pressures for 9-12 months, but is better placed for the long term ❯

India's effective long steel capacity in FY22F should be 65mt against the likely demand of 50mt. With no new capacity coming up we can expect India's long steel industry to run at 85% utilisation in FY23F. Hence, a margin squeeze, if any, will be felt only in the next 9-12 months. Post that, we believe the situation should be good for long steel manufacturers in India.

Figure 133: India's effective long steel capacity in FY22F should be 65mt vs likely demand of 50mt



SOURCES: EIP RESEARCH ESTIMATES, COMPANY REPORTS

Coal block is positive for JSPL, but don't expect a quick revival in power business

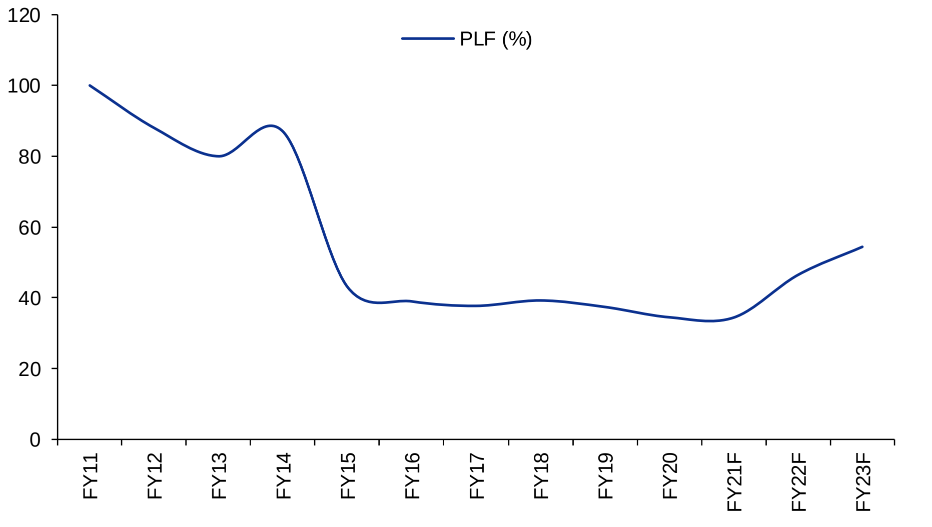
JSPL won the Gare Palma IV/1 coal block in a recent auction. The coal block is a shot in the arm for JSPL as it will lower fuel costs for the company. However, we don't expect a dramatic improvement in power demand and, hence, PLF may not rise.

JSPL finally got the coal block ›

JSPL finally got the Gare Palma IV/1 coal block in 2020 – an underground mine with a 6mt p.a. production capacity and ~140mt in overall reserves. At Rs230 a tonne the bid was 53.3% higher than the reserve price. Gare Palma IV/1 coal will be used in the Raigarh plant and in captive power plants near the mines (more on the mine in this link).

We are not very bullish on power demand, hence don't expect significant ramp-up in PLF ›

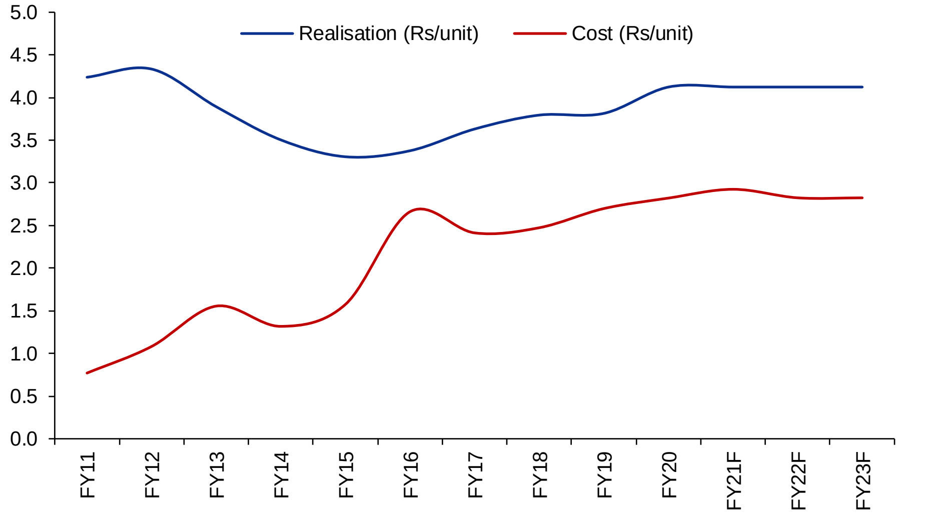
Figure 134: Expect PLF to touch 50% by FY23F



SOURCES: EIP RESEARCH ESTIMATES, COMPANY REPORTS

Coal block ramp-up may take time, hence don't expect signifiant cost reduction in near term ›

Figure 135: Coal mine costs and realisations



SOURCES: EIP RESEARCH ESTIMATES, COMPANY REPORTS

Earnings and valuations

We expect EBITDA CAGR of 6% over FY21F-23F. Steel prices are near their peak and we expect them to fall as soon as China opens up after the Chinese New Year. With valuations and earnings at peak levels, there is a likely price fall in the next few quarters, in our view.

Figure 136: Our realisations and cost assumptions

JSPL Standalone (Rs/t)	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21F	FY22F	FY23F
Sales Realisation	51,280	49,758	41,360	42,084	46,410	53,865	43,157	51,175	47,659	46,498
Net Realisation	49,044	47,621	38,776	41,568	45,386	54,133	43,281	51,018	47,502	46,341
Raw Material Consumed	16,341	16,559	16,224	15,485	18,927	25,444	19,093	19,159	19,702	19,197
Cost of Goods Consumed	17,711	16,013	17,130	16,483	18,184	25,230	18,766	19,159	19,702	19,197
Employee Cost	1,934	2,313	1,691	1,596	1,397	1,210	1,120	1,154	1,165	1,177
Other Expenditure	18,714	18,579	15,779	16,584	16,806	16,229	14,019	14,969	14,996	15,059
Total Costs	35,813	34,383	31,321	32,858	34,819	42,381	33,747	35,125	35,705	35,276
EBITDA	13,232	13,237	7,455	8,710	10,567	11,752	9,534	15,893	11,797	11,065

SOURCES: EIP RESEARCH ESTIMATES, COMPANY REPORTS

Figure 137: We are now building in minimum pellet sales but, as explained, JSPL can adjust its product profile to sell more pellets

Sales (mt)	FY17	FY18	FY19	FY20	FY21F	FY22F	FY23F
Mild Steel	0.16	0.29	0.48	0.65	1.36	1.96	2.36
Parallel Flange/ Beam	0.27	0.38	0.41	0.45	0.45	0.45	0.45
Wire Rod	0.49	0.51	0.51	0.54	0.54	0.54	0.54
Plates	0.79	0.92	1.10	1.32	1.54	1.54	1.54
Fabricated Structures	0.08	0.10	0.10	0.11	0.11	0.11	0.11
Medium & Light Sections	0.39	0.48	0.48	0.48	0.48	0.48	0.48
Bar	0.84	0.96	1.92	2.40	2.40	2.40	2.40
Other Finished Steel Products	0.12	0.12	0.12	0.12	0.12	0.12	0.12
Pellet sales	3.30	4.27	2.94	2.37	2.94	2.84	2.84

SOURCES: EIP RESEARCH ESTIMATES, COMPANY REPORTS

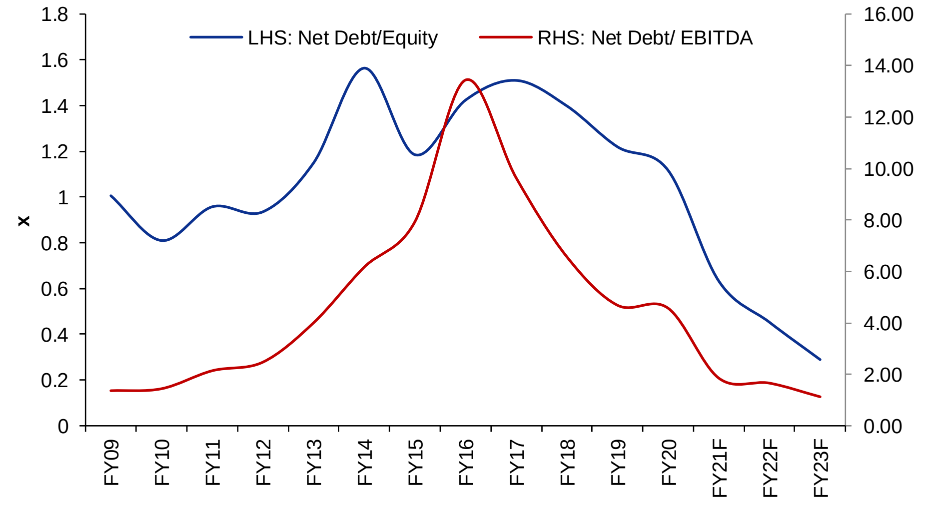
Figure 138: Dramatic improvement in power business performance unlikely in the near term

Key Assumptions	FY16	FY17	FY18	FY19	FY20	FY21F	FY22F	FY23F
Capacity (MW)	2,800	2,800	3,400	3,400	3,400	3,400	3,400	3,400
Units Generated (m units)	8,887	8,612	10,905	10,396	9,583	9,555	12,923	15,120
PLF (%)	39	38	39	37	35	34	46	54
Power Sold (MW)	1,092	1,057	1,335	1,273	1,173	1,170	1,580	1,850
Revenue (Rs m)	30,008	31,274	41,379	39,657	39,515	39,401	53,286	62,345
EBITDA (Rs m)	6,351	10,486	14,399	11,600	12,476	11,454	16,783	19,636
Realisation (Rs/unit)	3.4	3.6	3.8	3.8	4.1	4.1	4.1	4.1
Cost (Rs/unit)	2.7	2.4	2.5	2.7	2.8	2.9	2.8	2.8
EBITDA (Rs/unit)	0.7	1.2	1.3	1.1	1.3	1.2	1.3	1.3

SOURCES: EIP RESEARCH ESTIMATES, COMPANY REPORTS

Net debt / EBITDA to keep trending down

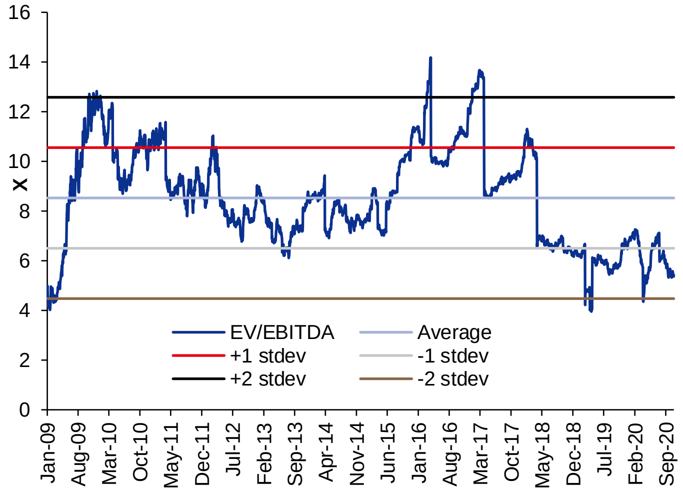
Figure 139: Net debt/ EBITDA to fall as company limits capex to minimum levels



SOURCES: EIP RESEARCH ESTIMATES, COMPANY REPORTS

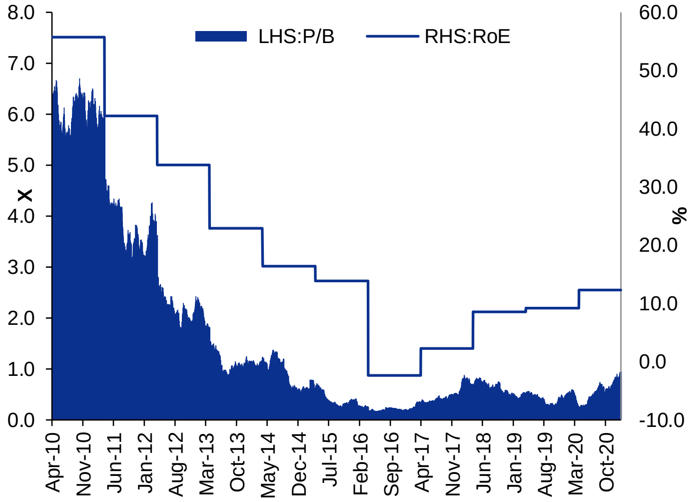
Valuations are well below historical mean

Figure 140: Valuation well below EV/EBITDA historical average



SOURCES: EIP RESEARCH, COMPANY REPORTS

Figure 141: P/B not pricing in expected recovery in RoE



SOURCES: EIP RESEARCH, COMPANY REPORTS

We retain our Add rating but lower our TP to Rs476

Figure 142: Sum-of-parts valuation

Standalone Valuation		
Standalone FY22E EBITDA	Rs m	89,655
EV/EBITDA Multiple	x	5.5
End FY21E EV	**Rs m**	**4,93,103**
Power Valuation		
Power FY22E Book Value	Rs m	95,482
P/B Multiple	x	0.5
End FY21E Equity Value	Rs m	47,741
End FY22E Net Debt	Rs m	64,289
End FY21E EV	**Rs m**	**1,12,030**
End FY21E Total EV	**Rs m**	**6,05,133**
End FY22E Consolidated Net Debt	Rs m	1,73,200
End FY21E Equity Value	Rs m	4,31,933
Others EBITDA	Rs m	-1,961
End FY22E Equity Value	Rs/share	476
1-year Forward Price Target	**Rs/share**	**476**

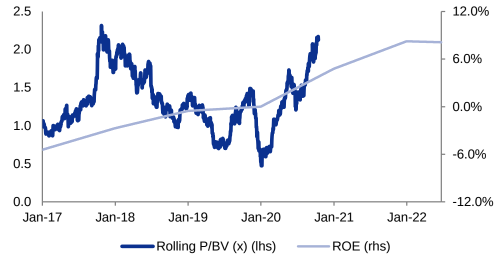
SOURCES: EIP RESEARCH ESTIMATES, COMPANY REPORTS

Potential Risk

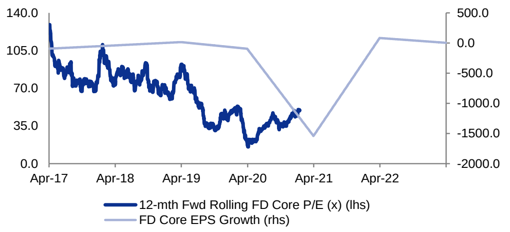
- Inability to ramp up production or fresh capex announcement can be a downside risk to our rating.
- New capex start will stop deleveraging of balance sheet hence a downside to our rating.

BY THE NUMBERS

P/BV vs ROE



12-mth Fwd FD Core P/E vs FD Core EPS Growth



Profit & Loss

(Rs mn)	Mar-19A	Mar-20A	Mar-21F	Mar-22F	Mar-23F
Total Net Revenues	**3,93,721**	**3,69,175**	**3,99,381**	**4,17,155**	**4,35,929**
Gross Profit	**3,93,721**	**3,69,175**	**3,99,381**	**4,17,155**	**4,35,929**
Operating EBITDA	**83,537**	**78,539**	**1,20,745**	**1,04,477**	**1,06,196**
Depreciation And Amortisation	(54,804)	(38,672)	(38,156)	(37,045)	(37,482)
Operating EBIT	**28,733**	**39,866**	**82,588**	**67,433**	**68,714**
Financial Income/(Expense)	(43,682)	(41,493)	(34,016)	(26,395)	(25,309)
Pretax Income/(Loss) from Assoc.					
Non-Operating Income/(Expense)	1,716	262	743	1,516	1,962
Profit Before Tax (pre-EI)	**(13,233)**	**(1,365)**	**49,315**	**42,554**	**45,368**
Exceptional Items	(14,784)	(1,094)			
Pre-tax Profit	**(28,017)**	**(2,459)**	**49,315**	**42,554**	**45,368**
Taxation	3,902	(1,539)	(17,415)	(13,155)	(14,589)
Exceptional Income - post-tax					
Profit After Tax	**(24,115)**	**(3,997)**	**31,900**	**29,399**	**30,778**
Minority Interests	7,662	2,905			
Preferred Dividends					
FX Gain/(Loss) - post tax					
Other Adjustments - post-tax					
Net Profit	**(16,453)**	**(1,092)**	**31,900**	**29,399**	**30,778**
Recurring Net Profit	(1,669)	2	31,900	29,399	30,778
Fully Diluted Recurring Net Profit	**(1,669)**	**2**	**31,900**	**29,399**	**30,778**

Cash Flow

(Rs mn)	Mar-19A	Mar-20A	Mar-21F	Mar-22F	Mar-23F
EBITDA	83,537	78,539	1,20,745	1,04,477	1,06,196
Cash Flow from Invt. & Assoc.					
Change In Working Capital	4,654	15,127	1,292	(5,382)	(4,219)
(Incr)/Decr in Total Provisions					
Other Non-Cash (Income)/Expense	15,890	2,396	(479)	(232)	7
Other Operating Cashflow	29,126	40,731	(70)	1,601	(1,908)
Net Interest (Paid)/Received	(42,642)	(41,493)	(34,016)	(26,395)	(25,309)
Tax Paid	(296)	(35)	17,415	13,155	14,589
Cashflow From Operations	**90,269**	**95,264**	**1,04,885**	**87,224**	**89,357**
Capex	(11,897)	(16,307)	64,408	(10,500)	(10,500)
Disposals Of FAs/subsidiaries					
Acq. Of Subsidiaries/investments					
Other Investing Cashflow	3,576	308			
Cash Flow From Investing	**(8,321)**	**(15,999)**	**64,408**	**(10,500)**	**(10,500)**
Debt Raised/(repaid)	(36,897)	(40,676)	(1,10,296)	(30,000)	10,000
Proceeds From Issue Of Shares		5,129			
Shares Repurchased					
Dividends Paid					
Preferred Dividends					
Other Financing Cashflow	(45,717)	(40,072)	(34,016)	(26,395)	(25,309)
Cash Flow From Financing	**(82,614)**	**(75,620)**	**(1,44,312)**	**(56,395)**	**(15,309)**
Total Cash Generated	(666)	3,646	24,981	20,329	63,549
Free Cashflow To Equity	**45,051**	**38,589**	**58,997**	**46,724**	**88,857**
Free Cashflow To Firm	**1,24,590**	**1,20,759**	**2,03,309**	**1,03,119**	**1,04,166**

SOURCES: EIP RESEARCH ESTIMATES, COMPANY REPORTS

BY THE NUMBERS…cont'd

Balance Sheet

(Rs mn)	Mar-19A	Mar-20A	Mar-21F	Mar-22F	Mar-23F
Total Cash And Equivalents	4,266	9,438	34,418	54,748	1,18,297
Total Debtors	30,285	35,493	38,955	46,167	51,137
Inventories	65,095	63,687	77,894	78,472	79,916
Total Other Current Assets	43,454	51,291	1,23,264	1,31,590	1,37,024
Total Current Assets	**1,43,101**	**1,59,909**	**2,74,531**	**3,10,978**	**3,86,373**
Fixed Assets	7,24,504	7,18,973	6,16,409	5,89,864	5,62,882
Total Investments	1,452	1,430	1,430	1,430	1,430
Intangible Assets	6,164	6,098	6,098	6,098	6,098
Total Other Non-Current Assets	14,788	11,009	11,632	11,952	12,007
Total Non-current Assets	**7,46,908**	**7,37,511**	**6,35,570**	**6,09,344**	**5,82,418**
Short-term Debt	48,259	27,789	27,789	27,789	27,789
Current Portion of Long-Term Debt					
Total Creditors	52,043	55,671	72,563	74,321	76,738
Other Current Liabilities	65,640	87,482	1,61,523	1,70,500	1,75,712
Total Current Liabilities	**1,65,942**	**1,70,942**	**2,61,875**	**2,72,610**	**2,80,238**
Total Long-term Debt	3,47,331	3,40,455	2,30,159	2,00,159	2,10,159
Hybrid Debt - Debt Component					
Total Other Non-Current Liabilities	4,360	13,224	13,224	13,224	13,224
Total Non-current Liabilities	**3,51,692**	**3,53,679**	**2,43,383**	**2,13,383**	**2,23,383**
Total Provisions	56,790	59,192	59,336	59,423	59,486
Total Liabilities	**5,74,423**	**5,83,813**	**5,64,594**	**5,45,416**	**5,63,107**
Shareholders Equity	3,20,847	3,21,371	3,53,271	3,82,670	4,13,449
Minority Interests	(5,261)	(7,764)	(7,764)	(7,764)	(7,764)
Total Equity	**3,15,586**	**3,13,607**	**3,45,507**	**3,74,906**	**4,05,684**

Key Ratios

	Mar-19A	Mar-20A	Mar-21F	Mar-22F	Mar-23F
Revenue Growth	43.8%	(6.2%)	8.2%	4.5%	4.5%
Operating EBITDA Growth	29.1%	(6.0%)	53.7%	(13.5%)	1.6%
Operating EBITDA Margin	21.2%	21.3%	30.2%	25.0%	24.4%
Net Cash Per Share (Rs)	(161.70)	(148.43)	(92.47)	(71.65)	(49.50)
BVPS (Rs)	132.58	132.95	146.15	158.31	171.04
Gross Interest Cover	0.66	0.96	2.43	2.55	2.72
Effective Tax Rate			35.3%	30.9%	32.2%
Net Dividend Payout Ratio					
Accounts Receivables Days	22.50	32.52	34.02	37.24	40.74
Inventory Days	nm	nm	nm	nm	nm
Accounts Payables Days	nm	nm	nm	nm	nm
ROIC (%)	3.7%	5.4%	12.9%	10.9%	11.5%
ROCE (%)	3.7%	5.3%	11.8%	10.2%	10.1%
Return On Average Assets	3.9%	4.3%	7.3%	6.1%	5.9%

SOURCES: EIP RESEARCH ESTIMATES, COMPANY REPORTS

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Score Range:	90 - 100	80 – 89	70 - 79	Below 70 or	No Survey Result
Description:	Excellent	Very Good	Good	N/A	

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Corporate Governance Report of Thai Listed Companies (CGR). CG Rating by the Thai Institute of Directors Association (Thai IOD) in 2019, Anti-Corruption 2019

ADVANC – Excellent, Certified, **AEONTS** – Good, n/a, **AH** – Very Good, n/a, **AMATA** – Excellent, Declared, **ANAN** – Excellent, Declared, **AOT** – Excellent, n/a, **AP** – Excellent, Certified, **ASP** – Very Good, Certified, **BAM** – not available, n/a, **BANPU** – Excellent, Certified, **BAY** – Excellent, Certified, **BBL** – Very Good, Certified, **BCH** – Good, Certified, **BCP** - Excellent, Certified, **BCPG** – Excellent, Certified, **BDMS** – Very Good, n/a, **BEAUTY** – Good, n/a, **BEC** – Very Good, n/a, **BGRIM** – Very Good, Declared, **BH** - Good, n/a, **BJC** – Very Good, n/a, **BJCHI** – Very Good, Certified, **BLA** – Very Good, Certified, **BPP** – Very Good, Declared, **BR** - Good, n/a, **BTS** - Excellent, Certified, **CBG** – Very Good, n/a, **CCET** – Good, n/a, **CENTEL** – Very Good, Certified, **CHAYO** - Good, n/a, **CHG** – Very Good, Declared, **CK** – Excellent, n/a, **COL** – Excellent, Declared, **CPALL** – Excellent, Certified, **CPF** – Excellent, Certified, **CPN** - Excellent, Certified, **CPNREIT** – not available, n/a, **CRC** – not available, n/a, **DELTA** - Excellent, Declared, **DEMCO** – Excellent, Certified, **DDD** – Very Good, n/a, **DIF** – not available, n/a, **DREIT** – not available, n/a, **DTAC** – Excellent, Certified, **EA** – Excellent, n/a, **ECL** – Very Good, Certified, **EGCO** - Excellent, Certified, **EPG** – Very Good, n/a, **ERW** – Very Good, n/a, **GFPT** - Excellent, Certified, **GGC** – Excellent, Certified, **GLOBAL** – Very Good, n/a, **GLOW** – Very Good, Certified, **GPSC** – Excellent, Certified, **GULF** – Very Good, n/a, **GUNKUL** – Excellent, Certified, **HANA** - Excellent, Certified, **HMPRO** - Excellent, Certified, **HUMAN** – Good, n/a, **ICHI** – Excellent, Declared, **III** – Excellent, n/a, **INTUCH** - Excellent, Certified, **IRPC** – Excellent, Certified, **ITD** – Very Good, n/a, **IVL** - Excellent, Certified, **JASIF** – not available, n/a, **BJC** – Very Good, n/a, **JMT** – Very Good, n/a, **KBANK** - Excellent, Certified, **KCE** - Excellent, Certified, **KKP** – Excellent, Certified, **KSL** – Excellent, Certified, **KTB** - Excellent, Certified, **KTC** – Excellent, Certified, **LH** - Excellent, n/a, **LPN** – Excellent, Certified, **M** – Very Good, Certified, **MACO** – Very Good, n/a, **MAJOR** – Very Good, n/a, **MAKRO** – Excellent, Certified, **MALEE** – Excellent, Certified, **MC** – Excellent, Certified, **MCOT** – Excellent, Certified, **MEGA** – Very Good, n/a, **MINT** - Excellent, Certified, **MK** – Very Good, n/a, **MTC** – Excellent, n/a, **NETBAY** – Very Good, n/a, **OSP** – Very Good, n/a, **PLANB** – Excellent, Certified, **PLAT** – Very Good, Certified, **PR9** – Excellent, n/a, **PSH** – Excellent, Certified, **PSTC** – Very Good, Certified, **PTT** - Excellent, Certified, **PTTEP** - Excellent, Certified, **PTTGC** - Excellent, Certified, **QH** – Excellent, Certified, **RATCH** – Excellent, Certified, **ROBINS** – Excellent, Certified, **RS** – Excellent, n/a, **RSP** – not available, n/a, **S** – Excellent, n/a, **SAPPE** – Very Good, Declared, **SAT** – Excellent, Certified, **SAWAD** – Very Good, n/a, **SC** – Excellent, Certified, **SCB** - Excellent, Certified, **SCC** – Excellent, Certified, **SCN** – Excellent, Certified, **SF** – Good, n/a, **SHR** – not available, n/a, **SIRI** – Very Good, Certified, **SPA** - Good, n/a, **SPALI** - Excellent, n/a, **SPRC** – Excellent, Certified, **STA** – Very Good, Certified, **STEC** – Excellent, n/a, **SVI** – Excellent, Certified, **SYNEX** – Excellent, Certified, **TASCO** – Excellent, Certified, **TCAP** – Excellent, Certified, **THANI** – Excellent, Certified, **TIPCO** – Very Good, Certified, **TISCO** - Excellent, Certified, **TKN** – Very Good, n/a, **TMB** - Excellent, Certified, **TNR** – Very Good, Certified, **TOP** - Excellent, Certified, **TPCH** – Good, n/a, **TPIPP** – Good, n/a, **TRUE** – Excellent, Certified, **TU** – Excellent, Certified, **TVO** – Excellent, Declared, **UNIQ** – not available, n/a, **VGI** – Excellent, Certified, **WHA** – Excellent, Certified, **WHART** – not available, n/a, **WICE** – Excellent, Certified, **WORK** – Good, n/a.

1 CG Score 2019 from Thai Institute of Directors Association (IOD)
2 AGM Level 2018 from Thai Investors Association
3 Companies participating in Thailand's Private Sector Collective Action Coalition Against Corruption programme (Thai CAC) under Thai Institute of Directors (as of November 30, 2018) are categorised into:
companies that have declared their intention to join CAC, and companies certified by CAC.
4 The Stock Exchange of Thailand : the record of listed companies with corporate sustainable development "Thai sustainability Investment 2018" included:
SET and mai listed companies passed the assessment conducted by the Stock Exchange of Thailand: THSI (SET) and THSI (mai)
SET listed companies passed the assessment conducted by the Dow Jones Sustainability Indices (DJSI)

Recommendation Framework

Stock Ratings	Definition:
Add	The stock's total return is expected to exceed 10% over the next 12 months.
Hold	The stock's total return is expected to be between 0% and positive 10% over the next 12 months.
Reduce	The stock's total return is expected to fall below 0% or more over the next 12 months.

The total expected return of a stock is defined as the sum of the: (i) percentage difference between the target price and the current price and (ii) the forward net dividend yields of the stock. Stock price targets have an investment horizon of 12 months.

Sector Ratings	Definition:
Overweight	An Overweight rating means stocks in the sector have, on a market cap-weighted basis, a positive absolute recommendation.
Neutral	A Neutral rating means stocks in the sector have, on a market cap-weighted basis, a neutral absolute recommendation.
Underweight	An Underweight rating means stocks in the sector have, on a market cap-weighted basis, a negative absolute recommendation.

Country Ratings	Definition:
Overweight	An Overweight rating means investors should be positioned with an above-market weight in this country relative to benchmark.
Neutral	A Neutral rating means investors should be positioned with a neutral weight in this country relative to benchmark.
Underweight	An Underweight rating means investors should be positioned with a below-market weight in this country relative to benchmark.