Equity Research

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BSE Sensex: 45427

ICICI Securities Limited is the author and distributor of this report

Sector update

- Tata Steel (Downgraded to HOLD from ADD)
- Hindalco (Downgraded to HOLD from ADD)
- Jindal Steel (Downgraded to REDUCE from ADD)
- JSW Steel (SELL)
- NMDC (HOLD)
- Vedanta (REDUCE)
- Hind Zinc (HOLD)
- NALCO (HOLD)

INDIA

Metals

Outlook 2021: Steer clear of steel/aluminium

Our outlook for metal stocks under coverage remains cautious to negative for CY21. We rate all metal stocks at either HOLD / REDUCE / SELL. In this report, we downgrade Tata Steel and Hindalco to HOLD from ADD and JSPL to REDUCE from ADD. The current margins, valuations clearly tell a story of caution. Chinese demand stimuli, artificial RM shortages through restrictions on scrap imports (helping all the commodities -- iron ore and aluminium in particular) sustain the rally for now. Deleveraging, as a theme, is important but overhyped given such cyclically high margins, valuations.

What happened in CY20?

- **Covid induced correction, followed by a sharp recovery.** The extent of correction and the V-shaped recovery can be gauged from the fact that while Q1FY21 witnessed ~Rs6,000/te EBITDA for Tata Steel, it can very well be ~Rs18,000-19,000/te for Q4FY21.
- **Chinese demand outlook improved**. Chinese steel demand continues to surprise all through the year (even in November). Despite 12-13% production growth, there has hardly been any increase in exports. Consensus demand estimates for CY21 stands at 4-5% YoY, which is impressive given the base of CY20.
- **Valuations are rich.** We looked at asset valuations. Stock prices have doubled after touching 0.5x P/B or below. At current P/B, RoEs are already stretching and testing the upcycle RoE. The margin of safety is gone.
- **Steel/Aluminium margin curves are testing cyclical highs.** The same is true for Indian counterparts (Chart 1-3). Chinese BoF spreads are at levels where firms are making decent profits even while costs are challenged artificially – through restrictions of scrap and of late coking coal imports from Australia. Latest Chinese aluminium smelter profits (average) ~US$500-600/te.
- **Strength in iron ore continues.** Continuous restrictions of scrap imports in China have increased costs for Chinese EAF-led players, thereby, allowing relative BoF profitability at higher iron ore prices. Brazilian export recovery has been much slower than expected. Nov' 20 exports fell ~6% MoM, Vale has reduced production guidance for CY20. 400mnte Brazilian ore production has been pushed back to CY23. Indian iron ore mining witnessed disruption as expected, the same could hardly translate into returns for NMDC, given the additional incidence of premium to renew Karnataka mines. Yet supply stays constrained and is leading to elevated pellet prices (~ Rs 11000/te now) and margins for players like NMDC (Q3/Q4FY21 margins can be ~Rs2,600-2,700/te).

CY21 Outlook (India steel/iron ore/aluminium)

- **We rate all metal stocks at either HOLD / REDUCE / SELL. In this report, we downgrade Tata Steel and Hindalco to HOLD from ADD and JSPL to REDUCE from ADD.**
- With spreads at cyclical high, CY21 comes with a high probability of correction in spreads – across steel, aluminium. As spreads correct, so will valuations.
- Given that aluminium is a start-stop sector, increase in aluminium profitability is leading to a delayed response to increase in aluminium production. Hence, pricing response in alumina is a bit delayed.
- **There is hardly any EV theme in conventional commodities (steel/aluminium/zinc)** that we see. There is no copper miner in India barring Hindustan Copper, where there was newsflow of a possible merger with Coal India/NMDC.
- There are **artificial supports to global spreads** driven by Chinese restrictions on imports of scrap, and on restrictions of coking coal. It's not a matter of if, but when restrictions ease.
- **Past cycle learnings**. The trigger for directional change in margins cannot be anticipated. The downturn will be equally sharp. Avoid commodities is the call for CY21.

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Table 1: Asset valuation (P/B) is the only metric that works in the sector

	Reco		Target Price		P/B (x)			RoE (%)			
	New	Old	New	Old	FY21E	FY22E	FY23E	FY21E	FY22E	FY23E	Comment
Tata Steel	**HOLD**	***ADD***	590	550	1.1	1.0	1.0	5.0	4.6	7.9	Target P/B at ~0.9x, maintained. Valuations roll over to FY23E. Ijmuiden asset sale newsflow may lead to only tactical upside.
NMDC	*HOLD*	*HOLD*	103	94	1.0	0.9	0.9	15.0	9.8	8.9	Implied target P/B of 0.91x. Valuing at DCF, rolled over to FY23, as steel plant is yet to commission and stabilise.
JSW Steel	*SELL*	*SELL*	265	236	2.1	1.8	1.6	14.0	12.4	11.5	RoEs reached 23/24% in FY18/FY19. P/B consequently approached 2.5x. Incredibly difficult to call these mature cyclical moves. Target P/B maintained at 1.2x, rolled over to FY23E.
Jindal Steel and Power	**REDUCE**	***ADD***	245	213	0.86	0.81	0.76	10.8	5.8	7.0	Target P/B at ~0.7x (0.6x earlier). Difficult to see sustainable RoEs crossing 7-8%, given permanent underutilisation of power assets. Rolled over valuations to FY23E.
Hindalco	**HOLD**	***ADD***	270	221	0.91	0.83	0.75	9.4	9.4	10.1	Target P/B at ~0.8x; rolled over to FY23E. Novelis is improving the RoE. Earnings though are benefitting from cyclicality.
NALCO	HOLD	*HOLD*	39	39	0.7	0.8	0.8	6.6	7.9	7.2	Target P/B at ~0.9x (from 0.8x earlier). Roll over to FY23E.
Hindustan Zinc	HOLD	*HOLD*	237	218	2.62	2.56	2.51	19.0	20.4	22.5	Target at 2.47x FY23E P/B (6x FY23E EV/EBITDA). With zinc prices at US$2700/te, and silver prices at Rs65,000/te, risk-reward is not alluring. Valuations rolled over to FY23E.
Vedanta	*REDUCE*	*REDUCE*	110	89	0.77	0.72	0.67	16.5	19.0	16.5	Target ~0.8x P/B FY23E. Valuations rolled over to FY23E.

Source: I-Sec research

Table 2: Earnings change for the sector – MTM earnings continue to witness improvement

(%)	FY21E			FY22E			
	Sales	EBITDA	PAT	Sales	EBITDA	PAT	Comment
JSPL	1.7	5.6	15.6	0.6	2.3	10.3	Pellet prices increased to Rs 10,000/te for FY21 and part FY22E from earlier Rs 7000/te. Steel margins increased given spot spreads for FY21E.
NMDC	14.8	25.8	26.1	7.2	15.6	19.2	EBITDA/te assumptions increased for FY21 and FY22E given continued shortage witnessed in domestic iron ore
Hind Zinc	6.0	1.2	1.4	3.4	5.8	6.8	Increase in Zinc and Lead LME assumptions. Zinc price has been increased to US$2300/te for FY22 from US$2200/te earlier.
NALCO	1.5	160.2	359.6	37.1	148.0	342.5	Volumes increased, Cost of production runrate substantially reduced. Both reflects H1FY21 runrate
Vedanta	4.7	18.7	54.5	1.7	22.3	70.4	Significant increase in earnings is witnessed in Zinc India, Aluminium , Oil and Gas as well as Zinc International business operations

Source: I-Sec research

Table 3: Global steel valuation table

	EV/E (x)				P/E (x)				P/B (x)			
	-2FY	-1FY	+1FY	+2FY	-2FY	-1FY	+1FY	+2FY	-2FY	-1FY	+1FY	+2FY
China												
Angang	4.2	3.0	6.2	5.5	4.9	3.4	14.3	10.7	0.5	0.5	0.5	0.5
Baoshan	4.2	3.8	5.5	5.0	7.3	6.5	12.8	11.0	0.9	0.8	0.7	0.7
China Steel Corp	9.9	8.8	17.1	11.2	21.3	15.3		26.7	1.2	1.1	1.2	1.2
Maanshan	4.6	3.7	7.0	6.3	3.7	2.3	9.7	7.7	0.6	0.5	0.5	0.5
Regional Average	**5.7**	**4.8**	**9.0**	**7.0**	**9.3**	**6.9**	**12.3**	**14.0**	**0.8**	**0.7**	**0.7**	**0.7**
Russia												
Severstal	6.0	4.8	6.3	5.5	9.2	7.0	9.4	8.3	3.9	4.0	4.8	3.9
Evraz	4.9	3.4	6.0	5.6	9.0	4.1	10.9	9.1	6.4	3.6	6.4	4.6
Magnitogorsk	3.6	2.8	4.8	3.5	6.4	4.9	12.9	6.2	1.3	1.2	1.5	1.3
Regional Average	**4.8**	**3.7**	**5.7**	**4.9**	**8.2**	**5.4**	**11.0**	**7.8**	**3.9**	**3.0**	**4.2**	**3.3**
Brazil												
CSN	14.3	11.6	7.3	7.1		11.2	21.6	10.7	5.2	4.5	4.8	3.3
Gerdau	12.0	7.7	8.4	6.9	50.4	16.6	16.5	12.8	1.6	1.5	1.3	1.2
Usiminas	10.7	9.2	10.1	7.6	53.3	30.1		16.1	1.2	1.2	1.2	1.2
Regional Average	**12.3**	**9.5**	**8.6**	**7.2**	**51.9**	**19.3**	**19.0**	**13.2**	**2.7**	**2.4**	**2.5**	**1.9**
US												
Arcelor Mittal	3.8	3.1	8.7	5.6	5.0			16.3	0.6	0.5	0.6	0.6
Nucor	7.4	4.8	8.9	8.3	16.2	7.5	20.2	17.6	2.1	1.7	1.6	1.6
Steel Dynamics	7.0	4.6	8.6	8.4	14.8	7.2	15.3	15.1	2.9	2.2	1.9	1.7
Regional Average	**6.2**	**4.1**	**8.8**	**8.0**	**11.3**	**7.3**	**17.7**	**16.3**	**1.7**	**1.3**	**1.3**	**1.3**
Japan/Korea												
Hyundai	5.2	5.6	9.2	7.4	5.6	9.8		22.1	0.3	0.3	0.3	0.3
Posco	4.1	3.7	5.6	4.7	7.6	7.3	16.6	10.5	0.5	0.5	0.5	0.5
Nippon	7.2	6.6	16.0	8.8	6.5	5.3		13.3	0.4	0.4	0.5	0.5
Regional Average	**5.5**	**5.3**	**10.3**	**7.0**	**6.6**	**7.5**	**16.6**	**15.3**	**0.4**	**0.4**	**0.4**	**0.4**
India												
Tata Steel	7.9	5.8	8.5	6.5	9.8	7.9	32.5	10.0	1.5	1.1	1.0	0.9
JSW Steel	9.8	7.1	9.3	7.2	19.6	11.6	22.5	14.2	3.4	2.7	2.3	2.0
Jindal Steel	8.0	6.0	5.0	5.2		73.3	12.8	12.3	0.9	0.8	0.8	0.8
Regional Average	**10.4**	**6.5**	**8.0**	**6.5**	**14.7**	**25.5**	**22.6**	**11.9**	**1.6**	**1.3**	**1.2**	**1.1**

Source: Bloomberg, I-Sec research

Table 4: Global aluminium valuation table

	EV/E (x)				P/E (x)				P/B (x)			
	-2FY	-1FY	+1FY	+2FY	-2FY	-1FY	+1FY	+2FY	-2FY	-1FY	+1FY	+2FY
Alcoa	2.8	2.2	6.1	4.5	7.4	6.6		80.4	0.7	0.8	1.3	1.4
Norsk Hydro	5.4	5.4	6.7	5.4	10.3	12.2	40.6	15.3	0.9	0.9	1.1	1.0
Rusal	6.5	6.0	18.8	12.4	6.1	NA	9.9	4.5	1.8	1.4	1.1	0.9
Alumina Ltd	11.2				10.5	6.0	23.6	22.4	1.8	1.8	2.5	2.5
Chalco	10.6	11.1	11.3	10.2	16.0	20.5	70.4	31.9	0.9	0.9	0.7	0.7
Hindalco	6.9	6.2	6.3	5.3	11.9	9.8	14.6	9.2	1.2	1.0	0.9	0.8
Vedanta	3.1	3.2	3.4	3.1	5.3	7.3	10.2	7.4	0.8	0.8	0.9	0.9
NALCO	3.6	2.0	5.2	4.4	7.4	4.6	20.9	13.5	0.8	0.7	0.8	0.8
Average	**6.5**	**5.4**	**7.9**	**6.4**	**10.8**	**10.1**	**29.6**	**21.6**	**1.1**	**1.0**	**46.8**	**41.4**

Source: Bloomberg, I-Sec research

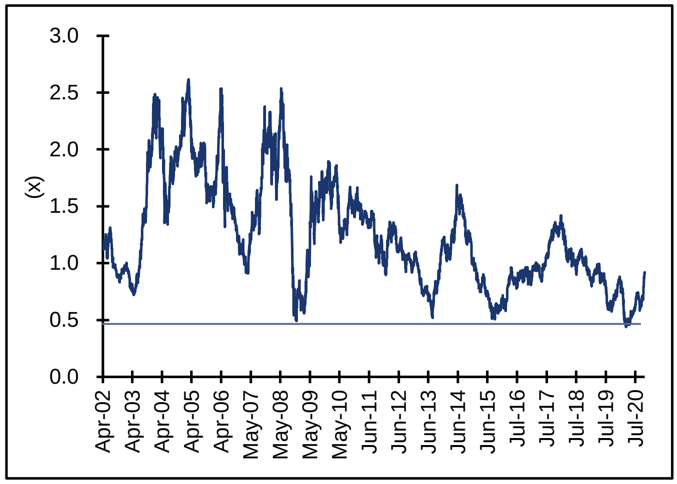
Steel: Valuations bottomed out in CY19, and looks like peaking out in CY20

We only looked at asset valuations. Through the last two years, we have laboured to attract investor attention to the simple yet powerful heuristic of cycle prediction. Combination of P/B and margins is giving a fair indicator that cycle has peaked or is near peaking.

Chart 1: JSPL trebled after touching the famed valuation band

Source: Company data, I-Sec research

Chart 2: Tata Steel has more than doubled since touching 0.5x again



Source: Company data, I-Sec research

Chart 3: JSW Steel – it evaded the framework. It's clear now that RoE is too high to allow P/B to compress to 0.5x

Source: Company data, I-Sec research

The P/B has also rebounded nicely. For the time being the predictive power of thee P/B framework needs to be reassessed. Margins are what is paramount now. Most of the P/B have recalibrated themselves to a RoE which is a notch higher than what through cycle can warrant. Risks are significant now.

Chinese outlook improved

Majority lead indicators of China signal demand strength; the question is for how long

Through CY20, Chinese steel demand should reflect the success of the government's massive economic stimulation efforts. Steel demand uptick looks limited in the coming year as focus shifts towards consumption and new energy investments which are supposed to be much less steel intensive. **There has been a shift in demand pattern for CY20, what has been real estate led has become manufacturing led. This kind of shift can consolidate at best. (Comment)**

Chart 4: China manufacturing PMI continues to expand…

Chart 5: ... led by new orders PMI

Source: Bloomberg, I-Sec research

Chart 6: Total space newly started witnessed a YoY growth in Nov'19…

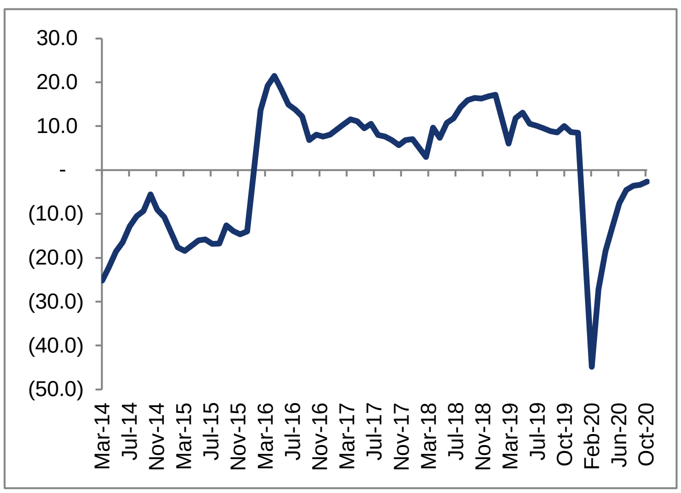
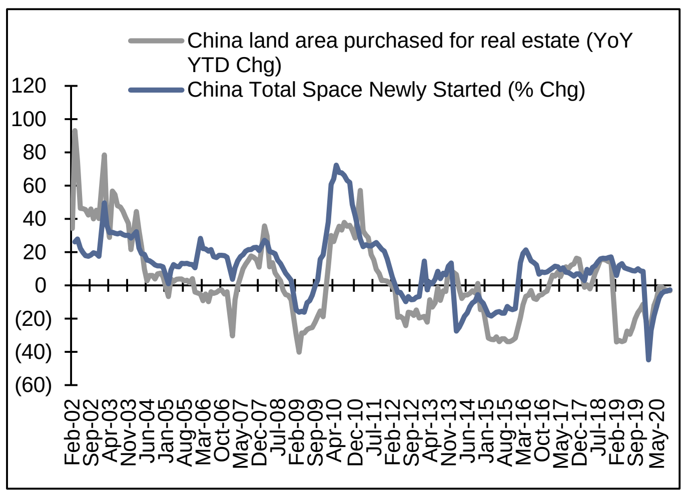


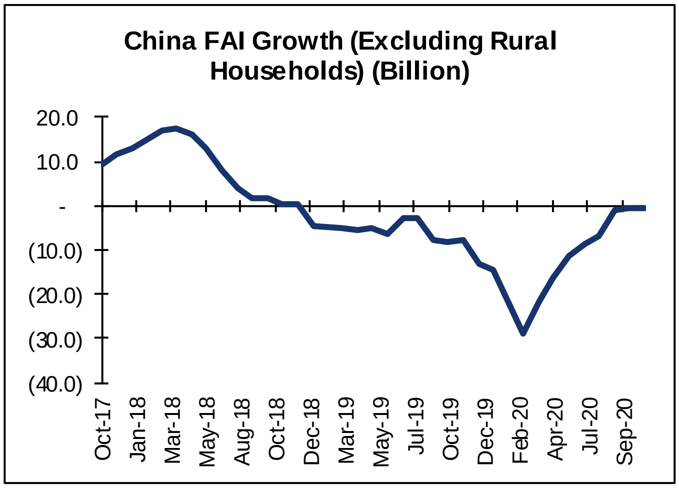
Chart 7: ...despite a negative yet improving land area purchased in China



Source: Bloomberg, I-Sec research

Continuous decline (%) in land area purchased has translated into decline for new space started as well. An indicator which is showing negative numbers for full year.

Chart 8: China FAI growth is taking a U-turn



Source: Bloomberg, I-Sec research

Chart 9: Total social finance grows at a phenomenal rate (mn RMB)

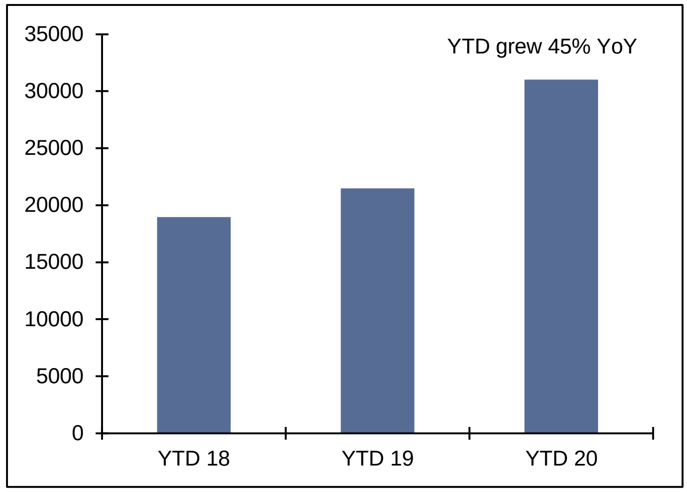


Chart 10: ...and so did China's monthly loan

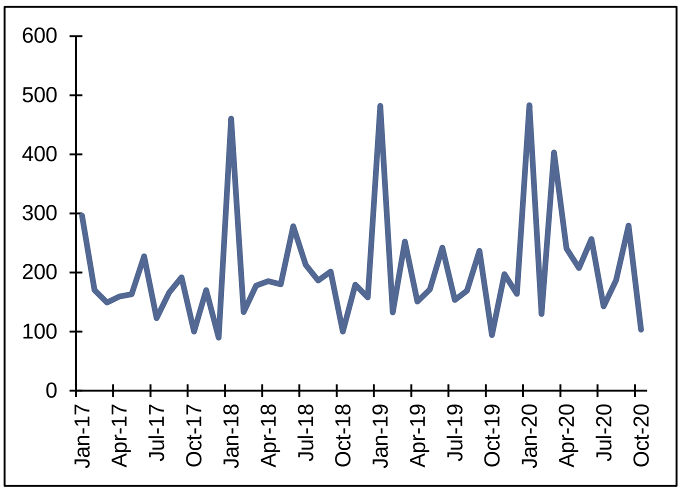
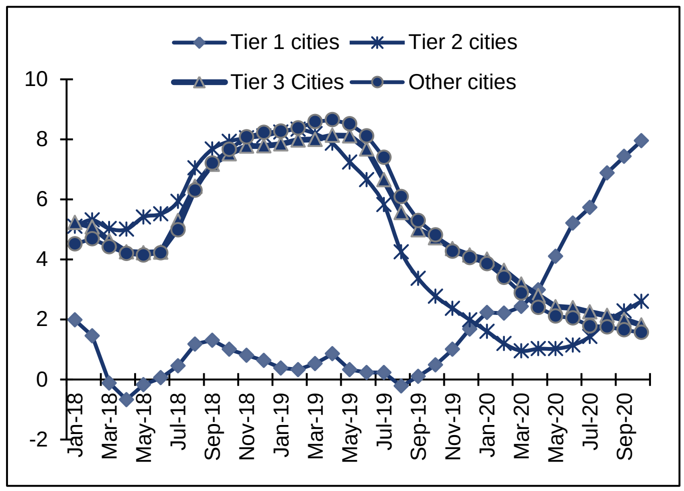


Chart 11: Residential inflation in China's tier-1 and tier-2 cities has been substantial

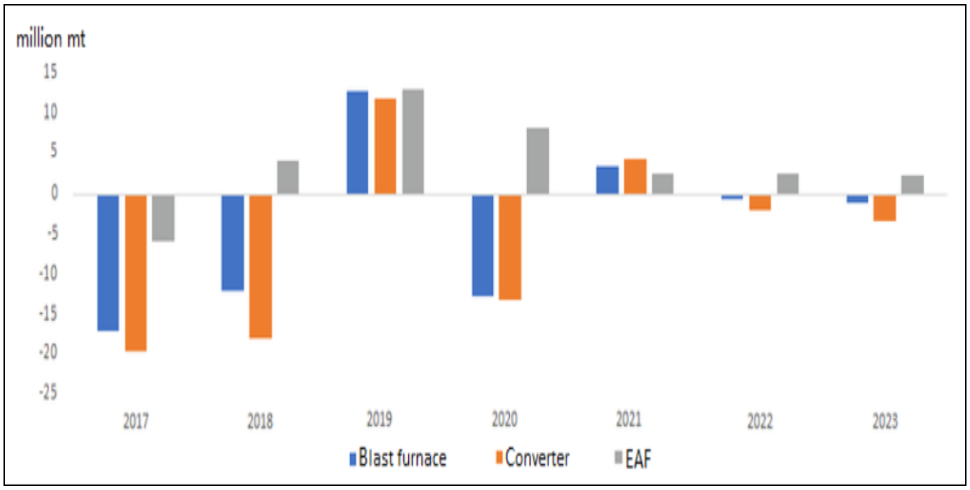


Source: Bloomberg, I-Sec research

Region-wise capacity revamp ongoing in China and production is expected to rise in CY21

China is carrying out capacity overhaul over the past few years amid environmental concerns. Thus, as a part of this revamp, iron and steel capacity in China is gradually set to transfer from the north to the southern regions. The country is promoting replacement of blast furnaces with EAFs as these are more environment-friendly resulting in electric furnaces increasing each year till CY23. In CY19 and CY20, China's net EAF capacity is set to grow by 21.4mnte, with 13.2mnte in 2019 and 8.19mnte in 2020. The domestic production of steel products is anticipating a rise in CY20 against the backdrop of higher capacity utilisation rates amid capacity replacement.

Chart 12: Net increase of facility capacity in 2017-2023

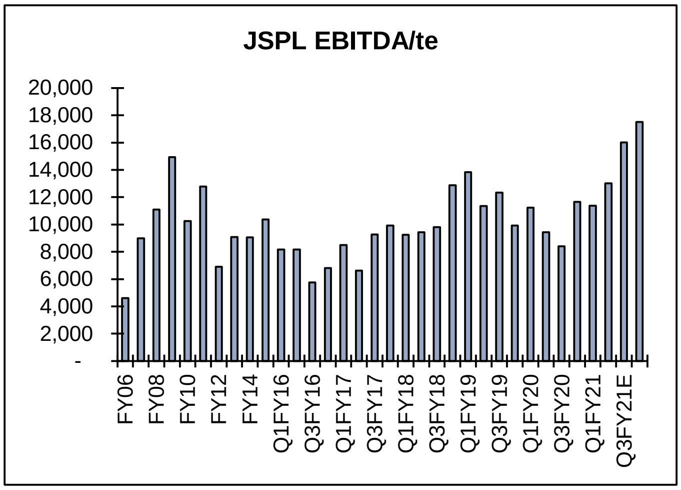


Source: Industry, I-Sec research

Steel margins approaching cyclical highs

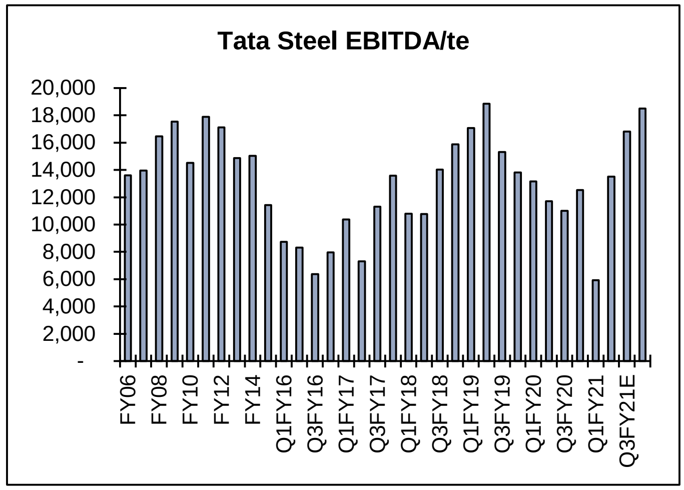
Steel profitability expected in Q3/Q4FY21 has reached cyclical peaks and its difficult to sustain these spreads. Given that the cycles have shortened, this calls for caution.

Chart 13: JSPL EBITDA/te



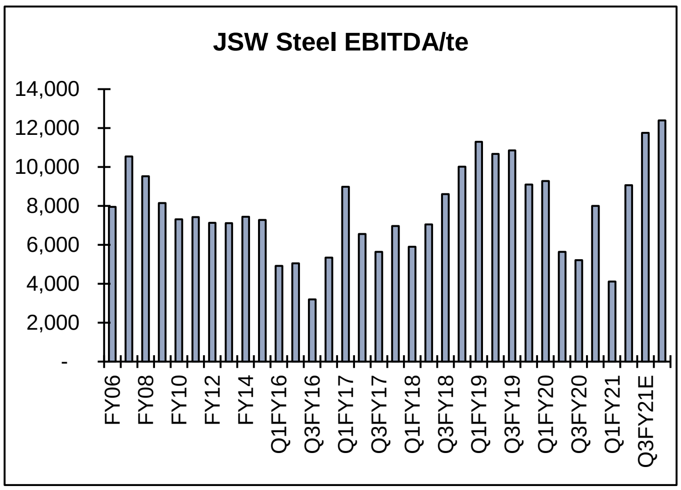
Source: Company, I-Sec research

Chart 14: Tata Steel EBITDA/te



Source: Company, I-Sec research

Chart 15: JSW Steel EBITDA/te

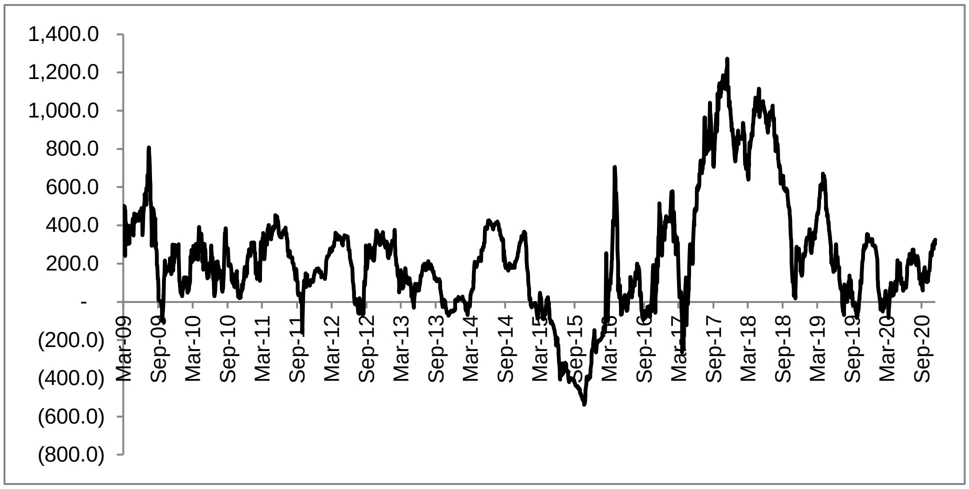


Source: Company, I-Sec research

Past 20 years margin trend has been seldom breached in a sustainable fashion.

Chinese BOF margins have witnessed an uptick. The uptick would have been much higher but for the increased RM prices (scrap and coal) inside China and artificially induced one may assess.

Chart 16: Chinese BOF profitability (RMB/te)



Source: Bloomberg, I-Sec research

Significant global easing environment witnessed – but all signs indicate peaking out of support

We see multiple tailwinds globally for commodity industry prevalent across US, Europe and China. US Federal Reserve balance sheet has started expansion with US Federal funds' effective rate falling. Such quantitative easing measures are similar in Europe with ECB refinancing rate at subdued levels. In China also, rates continue to be conducive. The tailwinds though have persisted for a while, and typically in the past, these kind of inflationary commodity spread and continued easing has not continued hand in hand. There are policy puts and calls which gets triggered, and margin as well as P/B valuations in the sector are good forward looking indicators for the same.

Chart 17: Expanding Federal Reserve balance sheet…

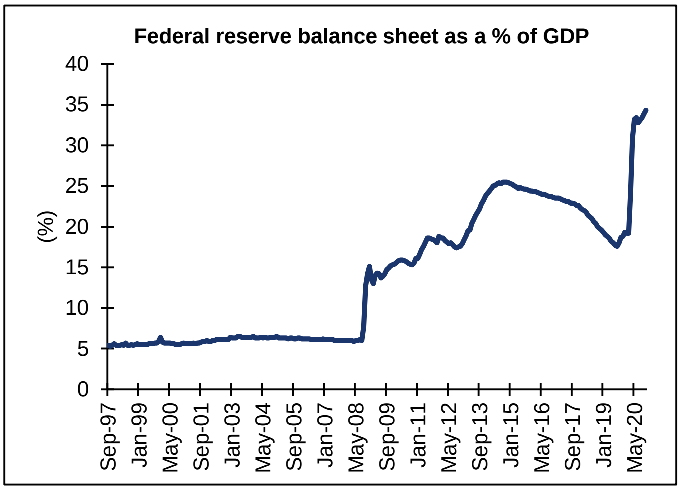
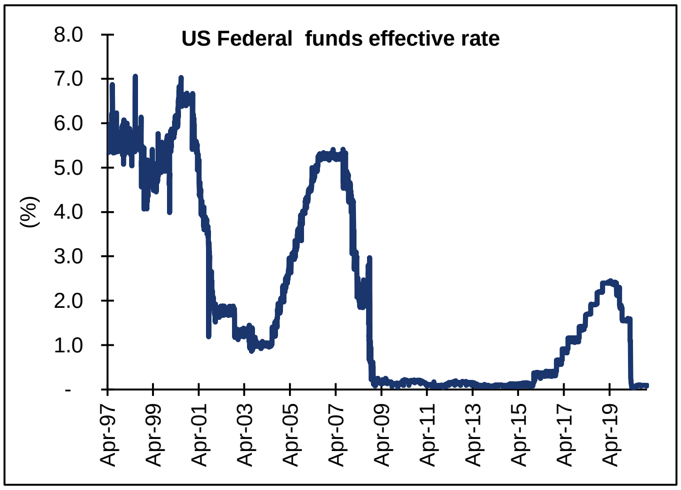


Chart 18: …coupled with falling US Fed effective rates



Source: Bloomberg, I-Sec research

Chart 19: ECB rates have been at zero

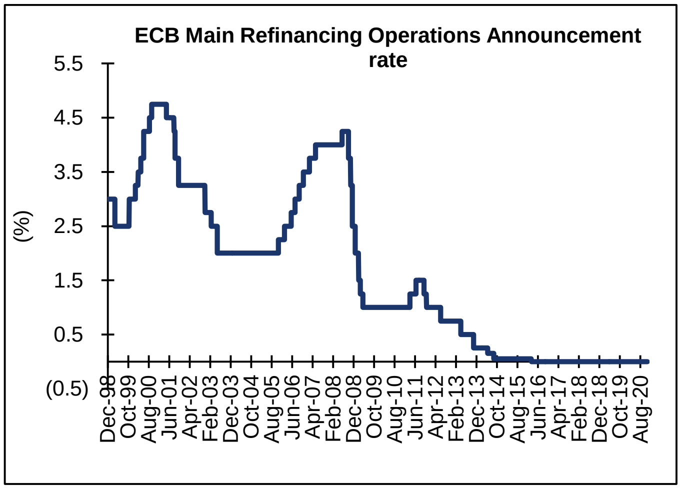
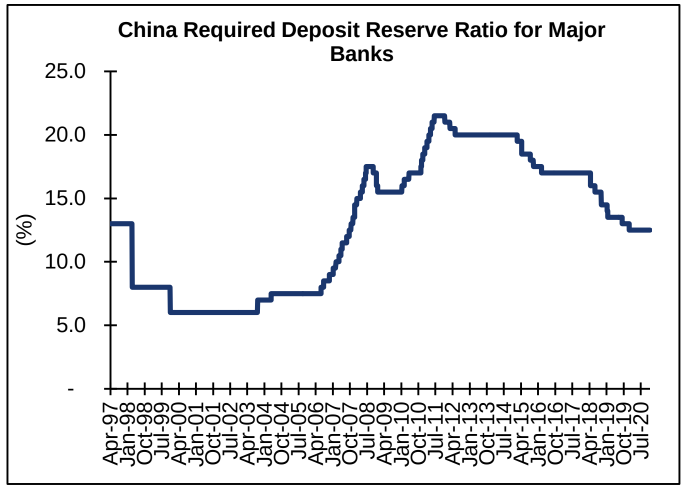
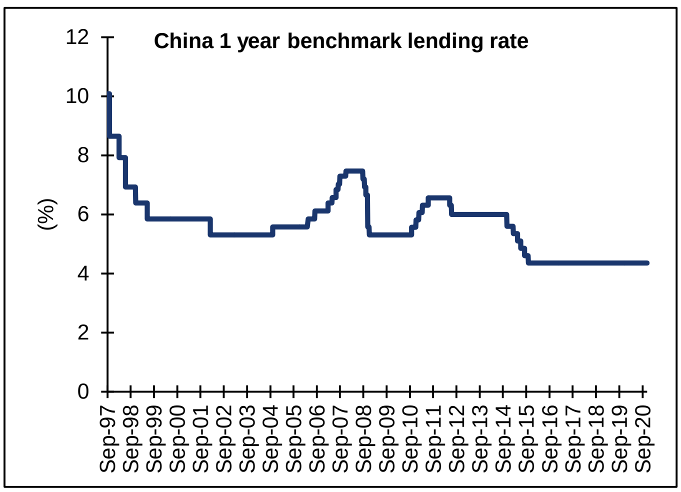


Chart 20: Chinese deposit ratios of banks have been falling…



Source: Bloomberg, I-Sec research

Chart 21: …with benchmark rates maintained at low levels



Source: Bloomberg, I-Sec research

Indian steel looks particularly vulnerable; asset valuations through the cycle need to be respected

We have been highlighting the following for Indian steel industry: i) **Indian steel demand can very well peak at 150mnte**, ii) India has already become a net exporter of steel (HR+CR) and will see associated pricing movements, iii) capacity competition between incumbents is driven by refusal to acknowledge the true potential of Indian steel demand and hence, has failed to create any shareholder value through cycles, and iv) as steel industry matures, so will the business model – we see some moves by steel makers.

India steel demand can very well peak at 150mnte

The following table highlights where India stands exactly in its steel journey to US$2,000 per capita, a phase where historically, countries have been most steel intensive. While industry participants have largely seen the latest phase of consolidation with the lens of **IBC,** periodic bankruptcy defaults have characterised Indian steel sector whenever there is a push to expand capacity with an ideological demand potential in mind.

Table 5: Steel intensity of countries as they passed through India's current GDP/capita – India ranks at the bottom

	Steel intensity of GDP (te/mn $)
Czech	
Germany	
Italy	195
Poland	147
Sweden	
United Kingdom	
Russia	
Canada	
Mexico	77
United States	
Brazil	64
Algeria	68
Egypt	43
South Africa	
Iran	96
Saudi Arabia	54
United Arab Emirates	
China	154
Hong Kong, China	91
India	42
Indonesia	19
Japan	358
Malaysia	71
Pakistan	
Philippines	26
Vietnam	82
Australia	

Source: I-Sec research

India has already seen a move to be a net exporter of steel (HR +CR)

India is consolidating its net exporter status in HRC and CRC, a status which the country witnessed for the first time in CY18 after 14 long years. In the past, we have seen that when you convert into a net exporter of steel there will be a discount to import parity which you will draw (pre CY04 case study).

FY18 witnessed, for the first time in the last 14 years, India turning to a net exporter of both HRC and CRC – the trend continues.

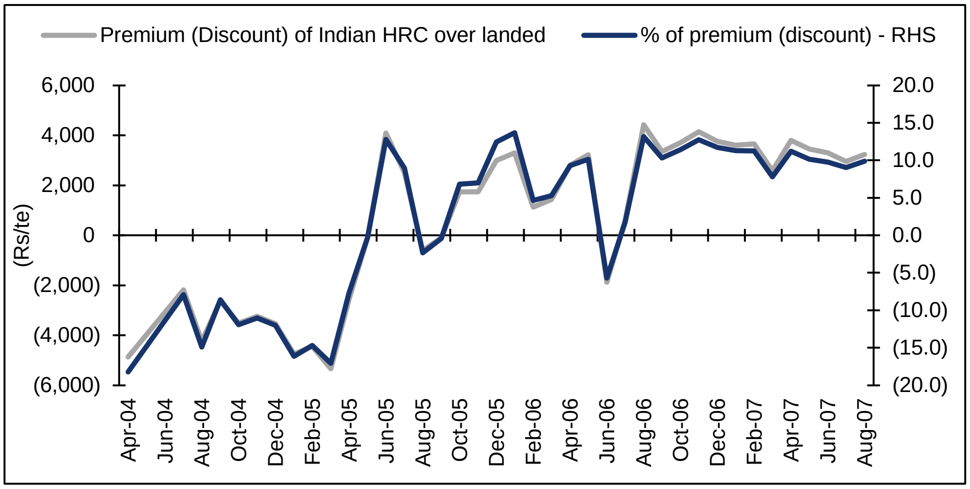
Table 6: India turning into a net exporter of HR/CR, in absence of demand support

	FY04	FY06	FY08	FY15	FY16	FY18	FY19
Production HR	4	10	12	21	21	40	40
Net Exports HR	**1.1**	**(0.2)**	**(1.4)**	**(0.7)**	**(3.1)**	**1.5**	**0.7**
Production GP/GC	3.1	3.8	4.4	6.9	7.2	8.7	9.5
Net Exports GP/GC	1.4	1.7	1.8	1.2	0.8	(0.0)	(0.2)
Production CRC	3.6	4	4.4	7.5	5.9	15.6	14.7
Net Exports CRC	**0.5**	**-**	**(0.3)**	**(1.1)**	**(1.5)**	**0.7**	**0.1**

Source: JPC, Bloomberg, I-Sec research

Higher exports of HR/CR bring back memories of 2004 and prior, when Indian prices used to trade even at 10-20% discount to imported landed costs.

Chart 22: India prices were at a discount of 10-20% during CY04-05



Source: Company data, I-Sec research

What is the longer run regional theme? India is becoming less and less relevant for regional steel making

China's significant thrust on coastal steel making, around 96mnte already built, 40-50mnte under construction and another 100mnte under planning. Expansion of capacities in Vietnam and Indonesia and existing capacities in Japan/Taiwan/South Korea will dominate Pacific basin -- why set up a steel plant in India now? Also, the shift in steel capacities to coast and increased share of EAF capacities (as scrap reservoir increases) will keep capital outlay for the industry still quite high (At US$70-75bn in 2019).

Table 7: China coast steelmaking capacity: Present and possible

Company	Capacity	Construction
Tangshan Delong Steel	2.4	Completed
Hbis Co	20	Under
Handan Zongheng Iron steel	8	Completed
Shougang Jingtang	20	Under
Others in Hebei Province	20	Under
Shandong Luli	1	Completed
Linyi Sande Special Steel	2	Completed
Linyi Sande Special Steel	3	Completed
Huasheng Jiangquan Group	6	To be
Lianyungang Xing Xin	3	Completed
Jiangsu Binxin Special Steel	7.2	To be
Jiangsu Delong Nickel Industry	2	Under
China Baowu	20	To be
Fujian Dingsheng	1.7	Under
Baosteel Desheng ST	5.7	Under
Fusian Wuhang ST	0.8	Completed
Fujian Sangang	3	Under
Guangdong Youngjin Metal	0.7	Under
Liugang Zhongjin ST	5	Under
Guangxi Shenglong Metallugical	3.4	Under
Liuzhou Iron & Steel	14.7	Under
Baoshan Iron & Steel	10.8	Completed
Guangdong Guangqing Metal	3	Completed
Ningbo Iron & Steel	4	Completed
Baoshan Iron and steel	17	Completed
Xuzhou Baofeng Special steel	8	To be
Shandon Linyi Lingang ST	2	To be
Shandong Steel Group Rizhao	8	Completed
Rizhao Steel	18	Completed
Qingdao Special	4.2	Completed
Weifang Special Steel	3	Completed
Shandong Shounguang Juneng Special	2.6	Completed
Dongbei Special Dalian	1.2	Completed
Minmetal Yingkou Mediaum plate	6	Completed
Angang Steel Bayuquan	6.2	Completed

Source: WSD data, I-Sec research

Table 8: China coast steelmaking capacity: Present and possible

(mnte)	Capacity
Completed	104.2
Under	96.2
To be	43.2

Source: WSD data, I-Sec research

Aluminium: Chinese smelter margins at ~US$500/te doesn't augur well

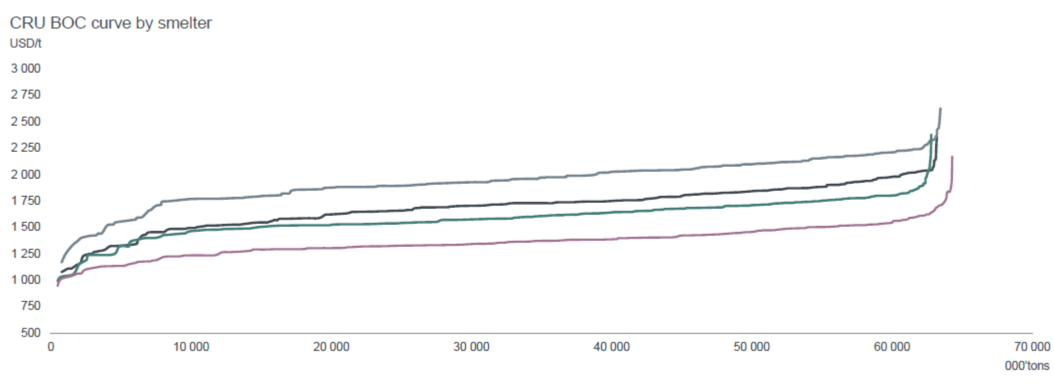
As we have seen historically, any uptick in commodity cycle first reflects in steel sectors and later followed by aluminium. Also, given the start stop nature of the commodity, in 2008 and 2015 we have seen ~70-90% of Chinese smelters making losses for 6-9 months before cycle recoups and recovers. With Chinese aluminium spreads (China) at US$500/te, the cycle can no longer be played into.

Global aluminum shipments could rise 2% in 2021 vs this year's pandemic-led 3% decline. China orders picked up from Q2, fuelled by the automotive sector and Beijing's investments in infrastructure construction.

China's aluminum capacity utilisation rate may pick up from CY22 after a slight dip to 84% in CY21, when 2.8mnte will be commissioned, by our calculations. **The rate, which may reach 86% by end-2020, has remained above 80% since 2017 vs 78% in 2016, due to Beijing's crackdown on illegal and loss-making capacity**, and its control over new factory construction. As a result, smelters conducted capacity swaps whereby they closed old and expensive plants, then build new facilities in provinces with cheap energy resources

Hindalco is insulated from the deep cyclicality of aluminium due to presence of recycling business of Novelis. Yet one looks at Novelis and can also see elevated spreads driven by i) Scrap LME Spread, ii) higher can margins driven by a supply squeeze, iii) higher proportion of the portfolio in specialty (building and solutions) taking strength from scrap LME spread, years of capacity creep and a demand uptick in the US from 2018 onwards, and iv) perennially depreciating BRL against US$.

Chart 23: Cost curve still substantially lower on low RM prices



Source: Bloomberg, I-Sec research

Chart 24: Global reportedinventory of aluminium

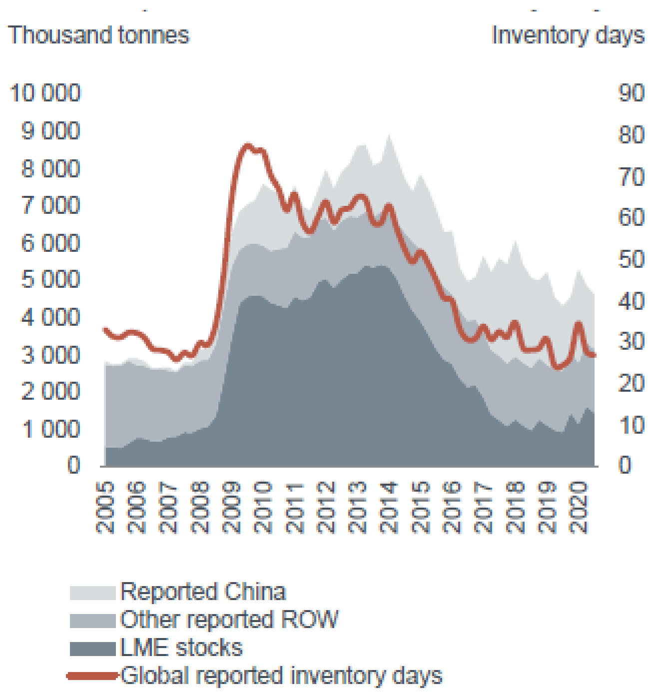
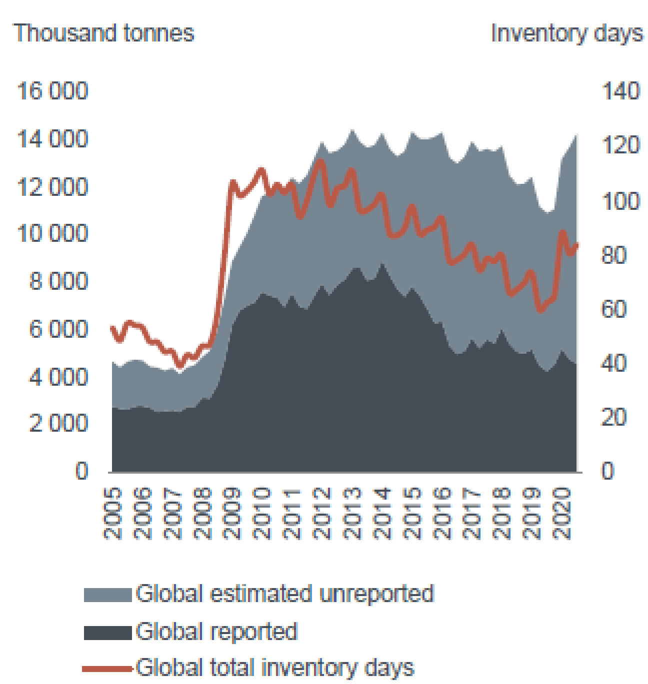


Chart 25: Total global stocks



Source: Company, I-Sec research

Iron ore – Chinese production growth of 2-3% will balance the market

As expected, the iron ore auctions in Odisha have impacted domestic demand supply scenario of iron ore. Domestic iron ore prices have increased ~Rs1,000/te as supply fails to ramp up post iron ore auctions. JSW Steel e-auctions from Odisha have been held up as it has been pointed out that **lumps are being sold in lieu of RoM.**

Globally - iron ore is destined for 2021 surplus unless miners dial back. Vale, Rio is set to lead growth charge in CY21.

Table 9: Major supplier shipment outlook

Wet mnte	**CY17**	**CY18**	**CY19**	**CY20**	**CY21**
Rio Tinto	328	338	325	329	338
BHP Billiton	268	274	273	280	286
Fortescue	170	170	173	172	177
Vale- fines + pellets	341	364	312	314	347
Anglo American	66	51	67	63	71
Kumba (adjusted to wet basis)	49	47	46	41	48
Kumba (as reported dry basis)	45	43	43	38	44
Minas - Rio	17	4	21	22	23
Roy Hill	45	55	58	58	60
India	27	17	26	12	8
Total	1245	1269	1234	1228	1287
YoY growth	*34*	*24.0*	*(35.0)*	*(6.0)*	*59.0*

Source: Bloomberg, I-Sec research

Table 10: CY21 is expected to witness a sharp surplus

(mnte - wet basis)	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020e**	**2021e**	**2022e**	**2023e**
Global Trade											
Total seaborne iron ore demand (a)	**1,242**	**1,402**	**1,421**	**1,485**	**1,549**	**1,550**	**1,539**	**1,501**	**1,527**	**1,534**	**1,540**
YoY growth	*5.8%*	*12.3%*	*1.8%*	*4.9%*	*3.1%*	*0.1%*	*-0.6%*	*-3.1%*	*1.7%*	*0.4%*	*0.4%*
China Iron Ore Imports (Wet mnte basis)	***882***	***1,003***	***1,025***	***1,102***	***1,157***	***1,145***	***1,144***	***1,150***	***1,135***	***1,137***	***1,130***
China iron ore imports (Dry mnte basis)	***820***	***933***	***953***	***1,025***	***1,076***	***1,065***	***1,064***	***1,070***	***1,056***	***1,057***	***1,051***
China as % of seaborne market	66%	67%	67%	69%	69%	69%	69%	71%	69%	69%	68%
Total seaborne iron ore supply (b)	**1,270**	**1,402**	**1,424**	**1,513**	**1,550**	**1,553**	**1,525**	**1,509**	**1,584**	**1,656**	**1,672**
YoY growth	*6.6%*	*10.8%*	*2.6%*	*5.3%*	*1.5%*	*0.2%*	*-1.6%*	*-2.8%*	*5.0%*	*4.5%*	*1.0%*
Seaborne Balance (b-a)	**28.0**	**0.0**	**2.9**	**28.5**	**1.5**	**2.7**	**-14.7**	**7.3**	**56.6**	**121.8**	**132.7**
Incremental Supply - Incremental Demand	**32.8**	**-28.0**	**2.9**	**25.6**	**-27.0**	**1.2**	**-17.3**	**22.0**	**49.3**	**65.2**	**10.8**

Source: Bloomberg, I-Sec research

This assumes a 1% YoY growth in steel production for CY21 in China (demand estimates are varying in between 4-5%) with ~16mnte EAF capacity addition as well as a higher utilisation. This leads to 4-5% growth in EAF production globally.

Coking coal – consensus sees US$130/te, forward curve meets at US$137/te

Looking forward to CY21, the balance of risks is skewed to the upside, as the market calls for a higher cost supply to meet a rebound in demand. This year's narrative has been marred by constrained imports of coking coal from China as a mini trade war simmers between the countries.

Slightly more than 15%, or 41mnte, of coal capacity is unprofitable on cost curve that covers 80% of global supply. After incorporating capacity owned by private mining companies, or an extra 64mnte, which lacks readily available cost data, more than 30% of global mine supply was losing money at the price of $110/te for premium hard-coking coal.

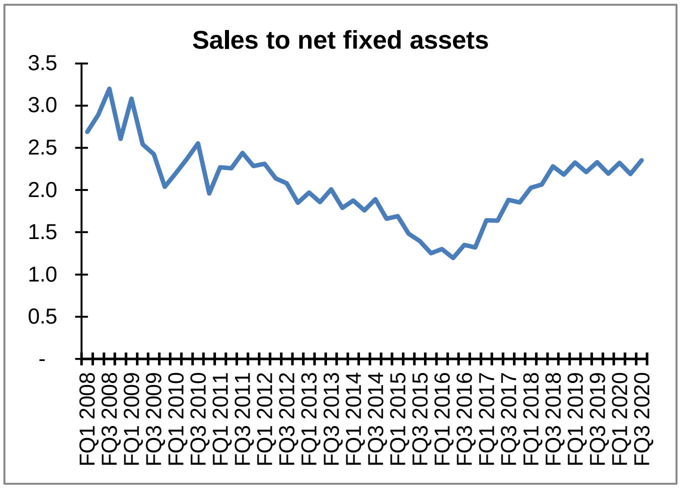
Table 11: Seaborne supply is expected to grow at 5% in CY21

	2016	2017	2018	2019	2020E	2021E	2022E	
Supply								
Australia	**188**	**171**	**181**	**184**	**170**	**177**	**187**	**Number of de-bottlenecking/brownfield and greenfield additions**
Yoy %	1.1%	-9.0%	5.8%	1.7%	-7.7%	4.2%	5.5%	
United States	**36**	**50**	**56**	**51**	**37**	**40**	**42**	**Loss-making & demand-related capacity cuts**
Yoy %	-10.0%	38.9%	12.0%	-8.9%	-26.5%	6.7%	5.0%	
Canada	**27**	**29**	**30**	**31**	**30**	**30**	**32**	**Teck baseline recovery + Grassy Mountain ramp in '21**
Yoy %	-3.6%	7.4%	3.4%	3.3%	-3.8%	0.6%	6.7%	
Russia	**22**	**23**	**26**	**28**	**23**	**27**	**30**	**Mechel & Severstal growth & creep from Evraz**
Total - Landborne	**2.6**	**4.6**	**4.3**	**5.4**	**5**	**5**	**5**	
Total - Seaborne	***19.4***	***18.4***	***21.7***	**22.6**	**18**	**22**	**25**	
% seaborne	*88%*	*80%*	*84%*	*81%*	*79%*	*81%*	*83%*	
Yoy %	*18.9%*	*4.5%*	*13.0%*	*7.7%*	*-16.9%*	*16.0%*	*11.1%*	
Mozambique	**5**	**8**	**8**	**6**	**4**	**5**	**7**	**Vale (Moatize) and Chirodzi (Jindal) ramping**
Yoy %	12.5%	70.9%	5.0%	-31.0%	-22.9%	0.7%	55.6%	
Mongolia	**24**	**26**	**28**	**34**	**24**	**34**	**39**	**Trans-Mongolian Railway boost; Tavan-Tolgoi - Ganqimaodu rail in '21**
Yoy %	85.8%	11.4%	5.3%	22.7%	-30.0%	42.9%	14.7%	
Total Supply	**301**	**307**	**329**	**334**	**289**	**312**	**337**	
Yoy %	*4.1%*	*2.0%*	*7.1%*	*1.4%*	*-13.5%*	*8.2%*	*7.8%*	
Seaborne Supply	**275**	**276**	**297**	**294**	**260**	**273**	**293**	
Yoy %	*0.6%*	*0.5%*	*7.5%*	*-0.9%*	*-11.7%*	*5.2%*	*7.1%*	
Demand								
Total Demand	**296**	**307**	**317**	**320**	**289**	**312**	**320**	
Yoy %	4.2%	3.8%	3.3%	0.8%	-9.6%	7.8%	2.8%	
Total Seaborne Demand	**258**	**267**	**278**	**276**	**256**	**268**	**272**	
Yoy %	0.2%	3.7%	3.8%	-0.4%	-7.2%	4.6%	1.3%	
Total Market								
Un-Adj Suplus/(Deficit)	**5**	**0**	**12**	**14**	**(0)**	**1**	**16**	
Avg. Monthly Trade	22.8	22.8	24.4	24.5	21.7	22.8	24.2	
EOY Carry-Over Tonnage	11.4	11.4	12.2	12.3	10.9	11.4	12.1	
Time Adj. Surplus/(Deficit)	**(6)**	**(11)**	**(1)**	**2**	**(11)**	**(11)**	**4**	
Seaborne Market Un-Adj Suplus/(Deficit)	**17**	**9**	**20**	**18**	**3**	**5**	**21**	
Avg. Monthly Trade	23	23	24.4	24.5	21.7	22.8	24.2	
EOY Carry-Over Tonnage	11.4	11.4	12.2	12.3	10.9	11.4	12.1	
Time Adj. Surplus/(Deficit)	**6**	**(2)**	**7**	**6**	**(7)**	**(6)**	**9**	

Source: Bloomberg, I-sec research

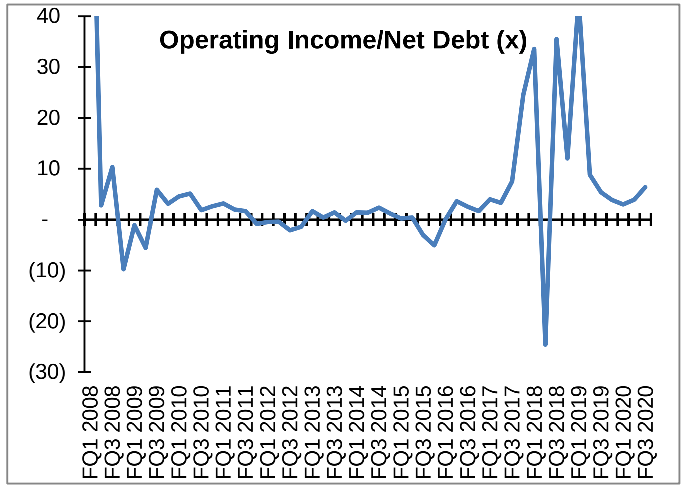
Annexure 1: China steel companies (set of 12) financial analysis

Chart 26: Asset turn at relatively elevated levels



Source: Bloomberg, I-Sec research

Chart 27: Debt servicing appears comfortable



Source: Bloomberg, I-Sec research

Working capital analysis

Chart 28: Inventory days – increase gradually becoming alarming

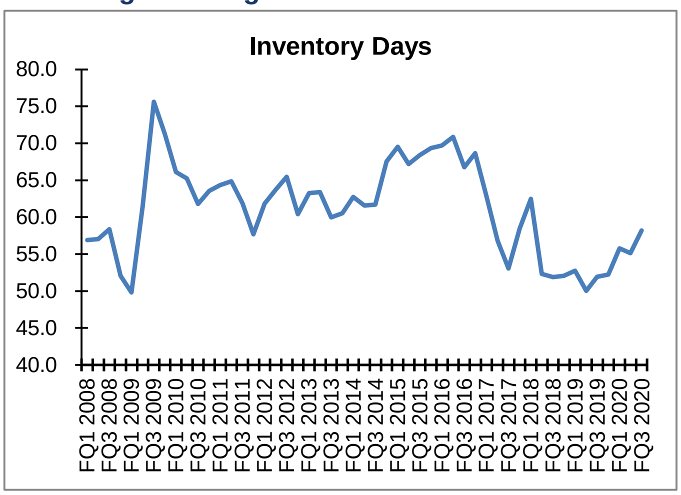


Chart 29: Receivables have become higher than any cycle seen

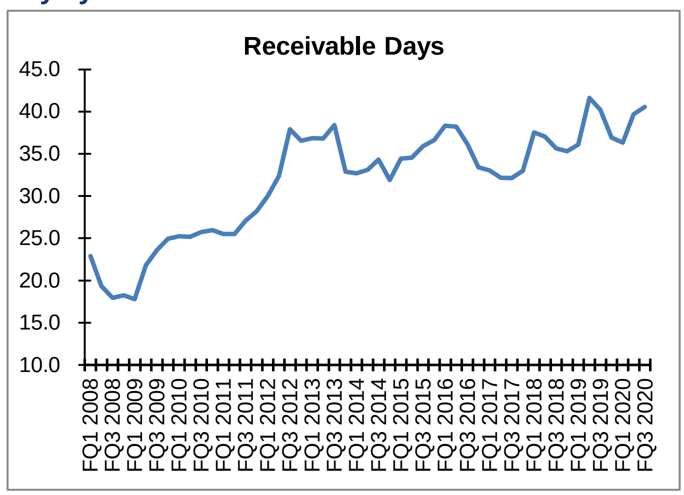
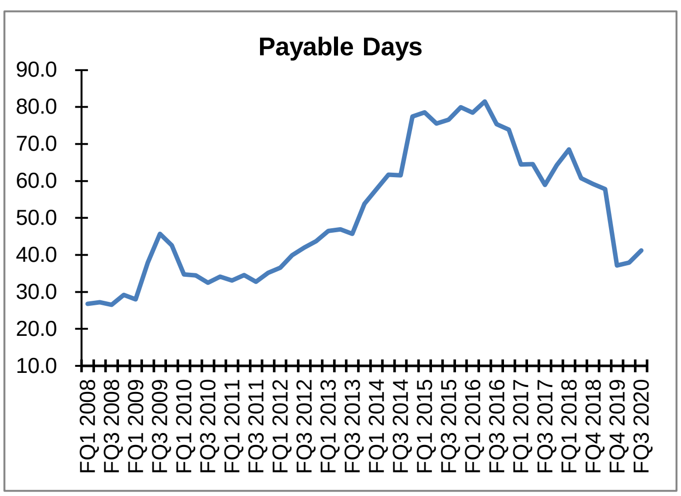
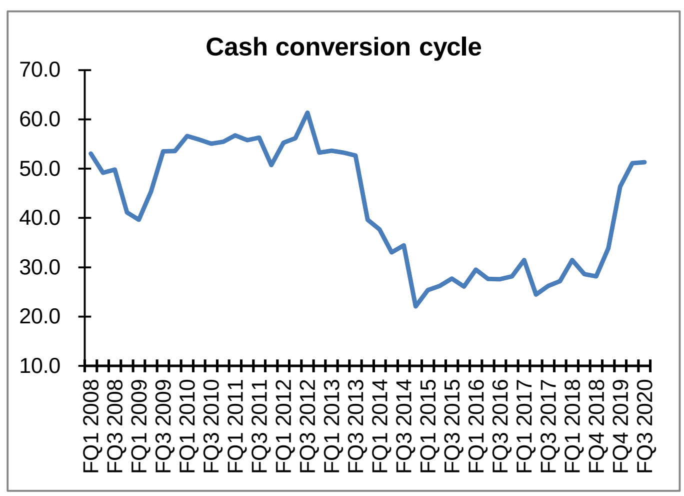


Chart 30: Payable days have started increasing



Source: Bloomberg, I-Sec research

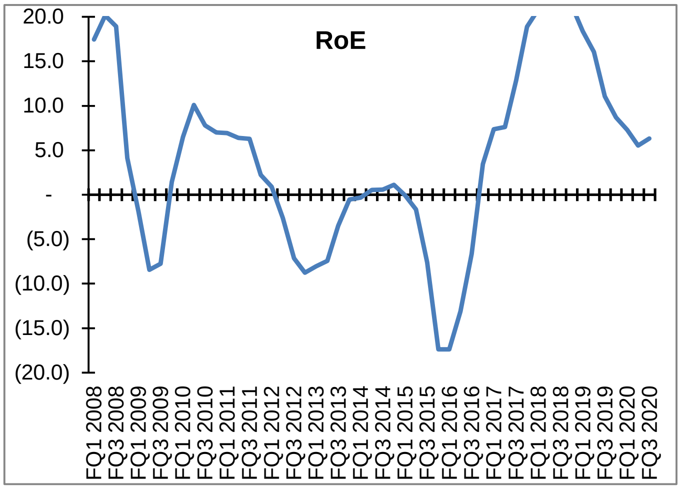
Chart 31: Cash conversion cycle getting stretched



Source: Bloomberg, I-Sec research

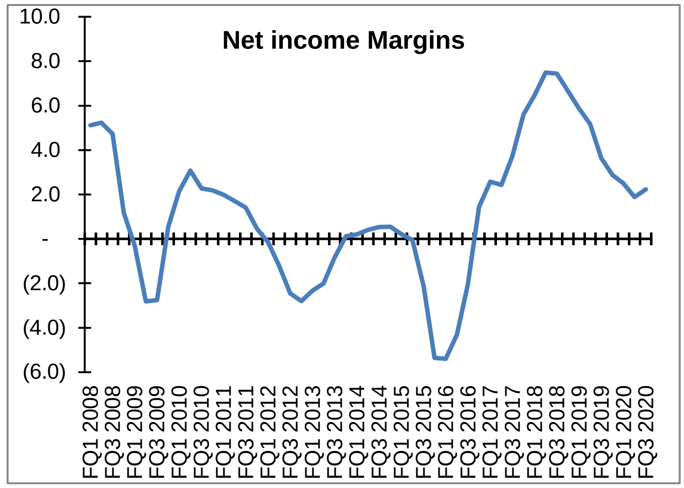
Dupont – RoE improvement underway

Chart 32: RoE has started to inch up



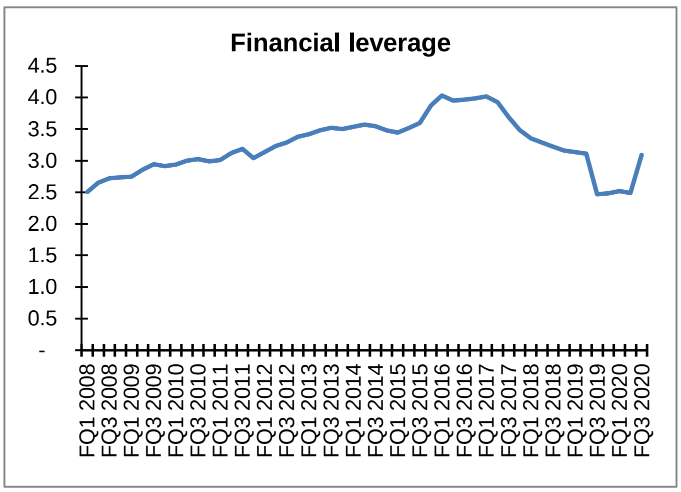
* Source: Bloomberg, I-Sec research

Chart 33: ...led by higher PAT margins…



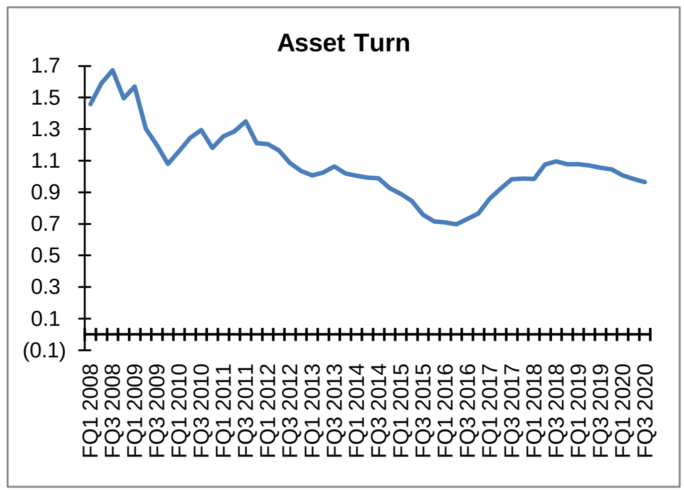
Source: Bloomberg, I-Sec research

Chart 34: …higher leverage levels…



Source: Bloomberg, I-Sec research

Chart 35: ...slightly offset by asset turnover



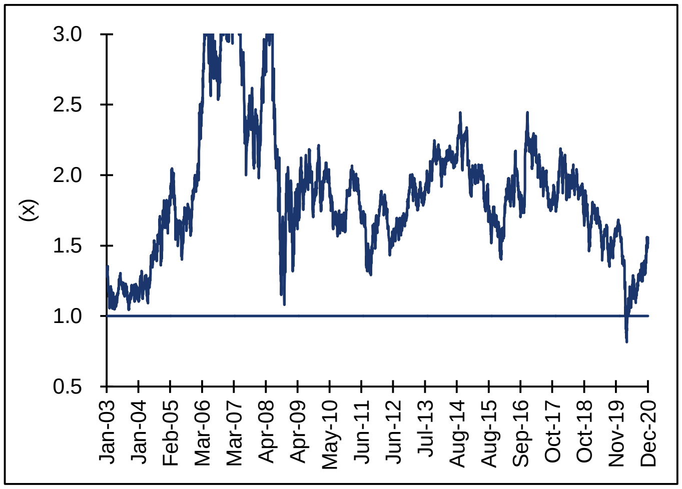
Source: Bloomberg, I-Sec research

Our universe of 12 Chinese steel stocks is showing an aggregate delevraging of US$5-6bn over the last 3-4 years. Not much deleveraging could happen in CY20 (Q319 TO Q320 net debt has been largely flat). Capex figures have been inching up and what industry data shows is that majority of the capex is the migration of capacities from urban centres to coastal regions.

Annexure 2: 1 year fwd. P/B of 0.5x and its predictability of business cycles for global ferrous players

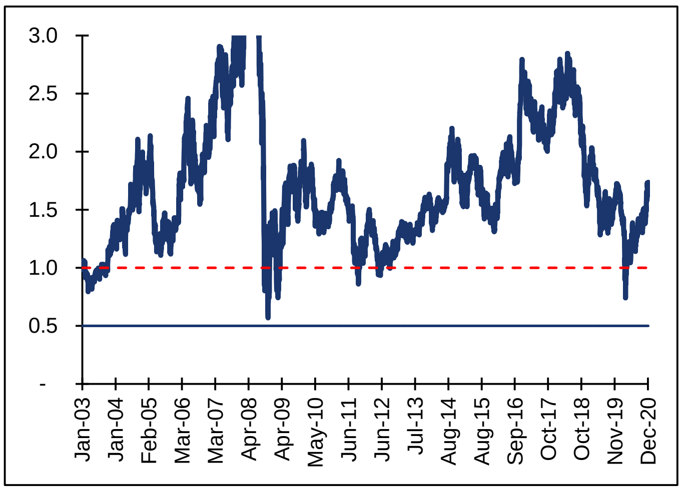
US Steel players

Nucor*



US Steel

Steel Dynamics

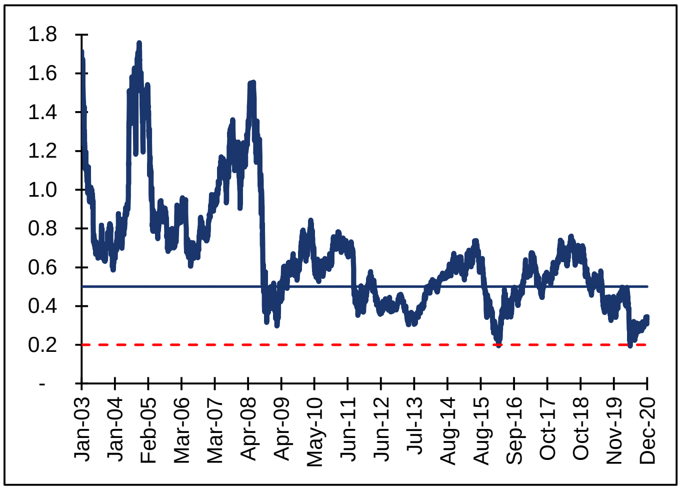


Source: Bloomberg, I-Sec research

Nucor rebounded from 1x P/B – the benefits a debt free steel player is expected to witness.

EU steel players

Arcelor Mittal



Source: Bloomberg, I-Sec research

Salzgitter

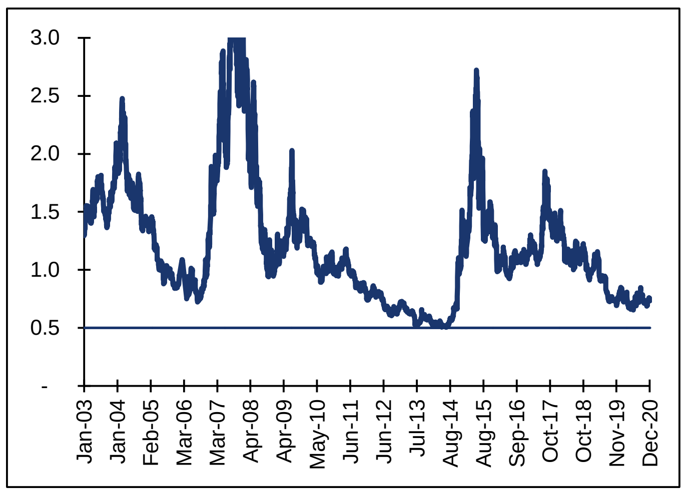
Source: Bloomberg, I-Sec research

Trend for recovery of European players P/B has been extremely muted. Unless, this is driven by ESG concerns (which is the new elephant in the room), the P/B is expected to normalise.

Chinese steel players

Angang

Maanshan



Source: Bloomberg, I-Sec research

Chinese steel players also have failed to show meaningful price uptick, despite so much increase in underlying prices.

Brazilian/CIS steel players

CSN

Source: Bloomberg, I-Sec research

Gerdau

Source: Bloomberg, I-Sec research

Usinas

Source: Bloomberg, I-Sec research

Brazilian trend is very similar to India and highlights the predictability of 0.5x P/B as a bedrock.

Japan/Korea steel players

POSCO*

Source: Bloomberg, I-Sec research

Nippon

Source: Bloomberg, I-Sec research

JFE

Source: Bloomberg, I-Sec research

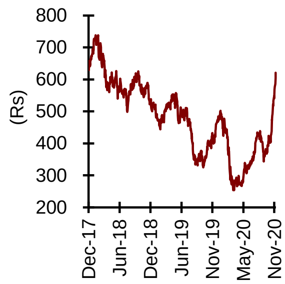
Kobe

Source: Bloomberg, I-Sec research

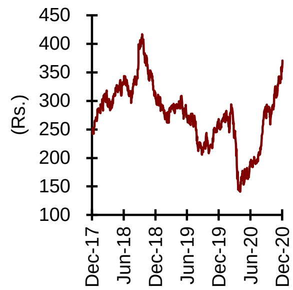
Japan and European players exhibit significant opportunity. The valuation appears much more prospective.

Price charts

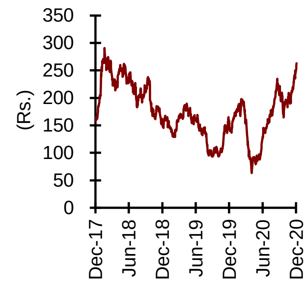
Tata Steel



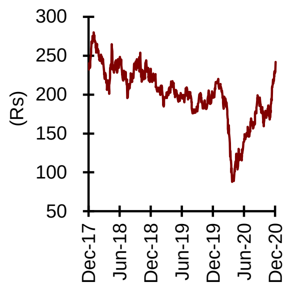
JSW Steel



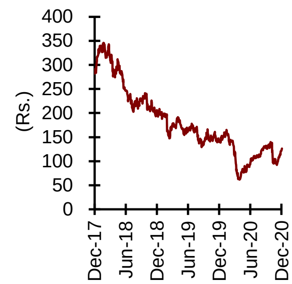
JSPL



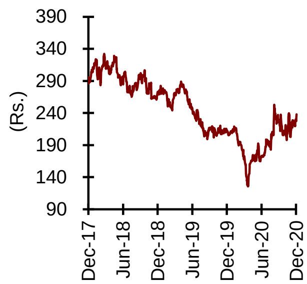
Hindalco



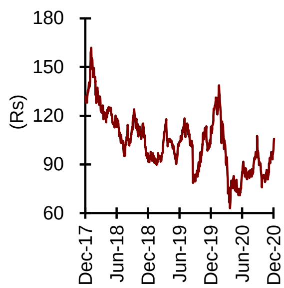
Vedanta



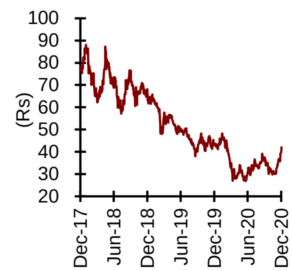
Hindustan Zinc



NMDC



Nalco



Source: Bloomberg

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