

## Strong Margins Trajectory to Deliver Deleveraging and Growth

We initiate coverage on Tata Steel with a BUY recommendation and a Target Price (TP) of Rs 1,700/share, implying an upside of 26% from the CMP. The stock is currently trading at 4.6x EV/EBITDA (consensus 1-Year forward) below its 10Y average of 6.3x. We expect steel prices to remain resilient which would drive strong cash flows for the company in the upcoming quarters and allow it to continue deleveraging even after pursuing its growth Capex. Although higher coking coal prices would impact the margins in 1HFY23, the margin trajectory continues to be robust and above the historical average, thereby driving profitability for the company.

### Recent steel price upsurge has restored the company's balance sheet

Tata steel achieved massive deleveraging, post which, the company's net debt has come down from the peak of ~Rs 1 Lc Cr in FY20 to Rs 62,869 Cr as of Dec'21. Strong steel prices, disciplined Capex outflow, and working capital management has put the company's balance sheet on solid footing. We expect its Net debt/EBITDA to decline to 0.95x from the peak of 5.8x in FY20 (FY21 at 2.4x), much below the cycle average target of 2.0x, putting the company in a comfortable position to pursue growth Capex moving forward.

### Sufficient growth optionality and journey towards 40mtpa is visible now

Tata intends to double its capacity from 19.6mtpa to ~40mtpa through a combination of organic/inorganic expansion in India. Post the recent acquisition of Bhushan Steel, Usha martin steel business and NINL (Neelanchal Ispat Nigam Ltd.), the company has got sufficient land bank and iron ore mines which would provide it with sufficient optionality to enhance its production capacity. It is currently pursuing growth Capex at the Kalinganagar phase II to expand from 3mtpa to 5mtpa, (completion expected by the end of FY24). It continues to focus on ramping up the existing 1mtpa plant at NINL and front-loading the Capex to simultaneously expand it to 4.5mtpa. Growth optionality would enable Tata Steel to manage cash flows towards Capex as well as maintain the capital discipline through the steel cycle. However, because it had focussed on deleveraging in the last few years, the volume growth will be muted till FY24.

### Margins off the peak but remains above cycle average

Group EBITDA/tonne peaked at Rs 24,112/tonne in Q2FY22, driven by strong steel prices. While we don't foresee a repeat of the peak margin level, mainly due to higher coking coal prices, the future margin trajectory continues to be strong as resilient steel prices aid in maintaining the margins above the historical average. We expect EBITDA to jump 114% YoY in FY22E at Rs 66,202 Cr and decline from the peak in FY23E/24E at Rs 49,504 Cr and Rs 41,327 Cr respectively. These levels, nonetheless, are much above the historical EBITDA levels in the past decade (FY18/19/20 at Rs 21,369/29,770/18,103 Cr).

### Regional steel prices to remain resilient in the near term

Regional steel prices have increased recently due to the escalated Russia-Ukraine conflict. Indian domestic HRC prices have increased by 13% MoM in India, +40% in Europe, 34% in the US and 5% in China (export FOB price). The steel price hike is sharp in Europe which incentivised the Indian steel mills for exports to the EU. China's decarbonisation leading to lower steel exports is creating opportunities for Indian steel mills to fill the volumes. Coking coal prices have stood strong eating into the steel mills' margins, due to supply shortage from Australia. However, the Apr'22 and May'22 coking coal contracts are pointing towards price correction. SGX FOB Premium Hard coking coal active contract prices are at \$593/tonne (down from the peak of \$635/tonne in Mid March). Apr'22 and May'22 futures prices are at \$480/\$443/tonne, drop-in spot coking coal prices would be a positive catalyst for the stock.

### Valuation & Recommendation

We initiate coverage with a BUY rating and value the company using SoTP by assigning 1 year forward EV/EBITDA based on its geographical segments. We ascribe 6.0x, 5.0x and 3.5x multiple to India standalone, other operations (excl standalone) and Europe on FY24E EBITDA to arrive at 1 year forward TP of Rs 1,700/share, implying an upside potential of 26% from the CMP.

### Key Financials (Consolidated)

(Rs Cr)	FY21	FY22E	FY23E	FY24E
Net Sales	1,56,294	2,29,106	2,29,124	2,03,410
EBITDA	30,504	66,202	49,504	41,327
Net Profit	7,490	33,691	23,043	17,854
EPS (Rs)	63.8	274.9	187.7	145.2
PER (x)	21.1x	4.9x	7.2x	9.3x
P/BV (x)	2.1x	1.6x	1.3x	1.2x
EV/EBITDA (x)	5.8x	3.5x	4.3x	4.9x
ROE (%)	11%	36%	20%	13%

Source: company, Axis Research

CMP as of 5<sup>th</sup> April, 2022

CMP (Rs)	1344
Upside /Downside (%)	26%
High/Low (Rs)	1535/819
Market cap (Cr)	1,60,742
Avg. daily vol. (6m) Shrs.	86,50,555
No. of shares (Cr)	122

### Shareholding (%)

	Jun-21	Sep-21	Dec-21
Promoter	34.41	34.41	33.92
FIIs	21.94	22.38	21.36
MFs / UTI	11.13	10.67	10.51
Banks / Fls	0.07	0.06	0.14
Others	32.45	32.48	34.07

### Financial & Valuations

Y/E Mar (Rs Cr)	FY22E	FY23E	FY24E
Net Sales	2,29,106	2,29,124	2,03,410
EBITDA	66,202	49,504	41,327
Net Profit	33,691	23,043	17,854
EPS (Rs)	274.9	187.7	145.2
PER (x)	4.9x	7.2x	9.3x
P/BV (x)	1.6x	1.3x	1.2x
EV/EBITDA (x)	3.5x	4.3x	4.9x
ROE (%)	36%	20%	13%

### Key Drivers (%) (Growth in %)

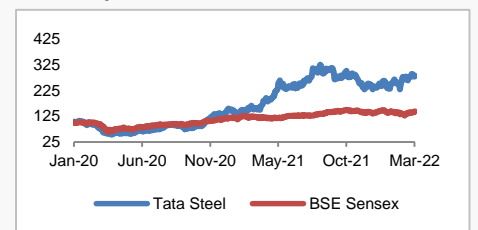
Y/E Mar	FY22E	FY23E	FY24E
Net Sales	47	0	(11)
EBITDA	117	(25)	(17)
Net Profit	350	(32)	(23)

### Axis vs. Consensus

EPS Estimates	FY22E	FY23E	FY24E
Axis	274.9	187.7	145.2
Consensus	304.5	188.7	179.6

**Mean Consensus TP (12M) Rs 1,620**

### Relative performance



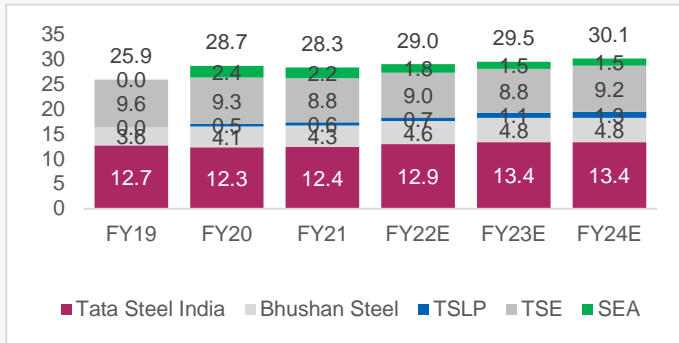
Source: Capitaline, Axis Securities

**Aditya Welekar**  
 Research Analyst

Email: aditya.welekar@axissecurities.in

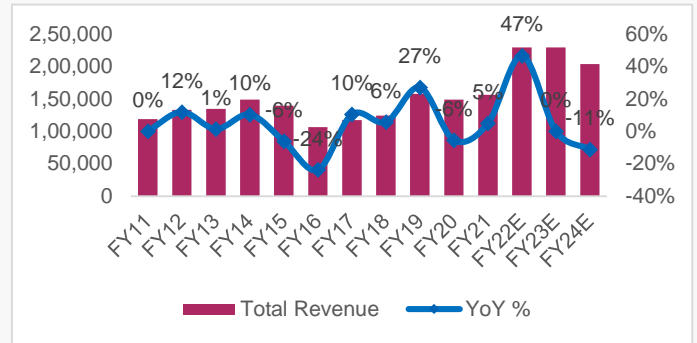
### Financial Story in Charts

**Exhibit 1: Delivery volume growth to remain muted in FY22-24E**

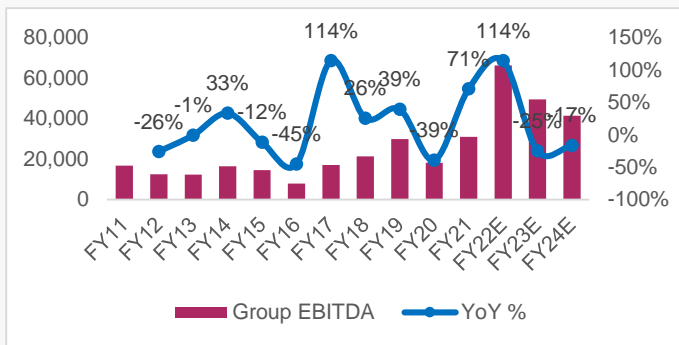


Source: company, Axis Securities, TSBSL (Bhushan steel) merged with Tata Steel India

**Exhibit 2: Revenue off the peak but above cycle average in FY23/24E**

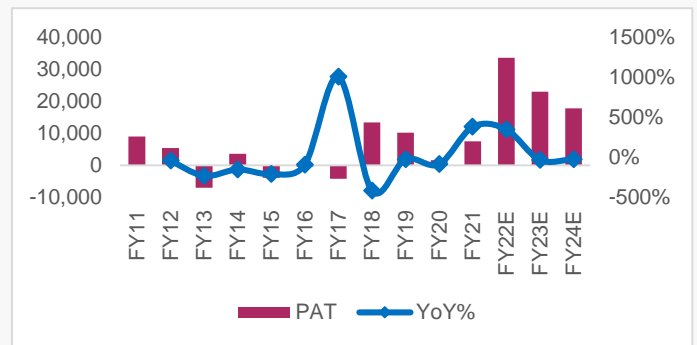


**Exhibit 3: EBITDA to remain elevated compared to the last decade**

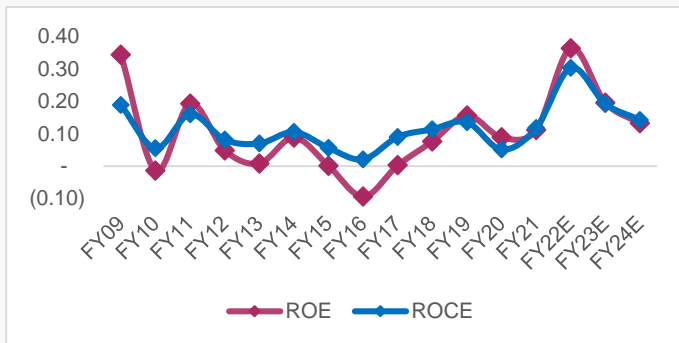


Source: company, Axis Securities

**Exhibit 4: PAT to reflect strength in EBITDA**

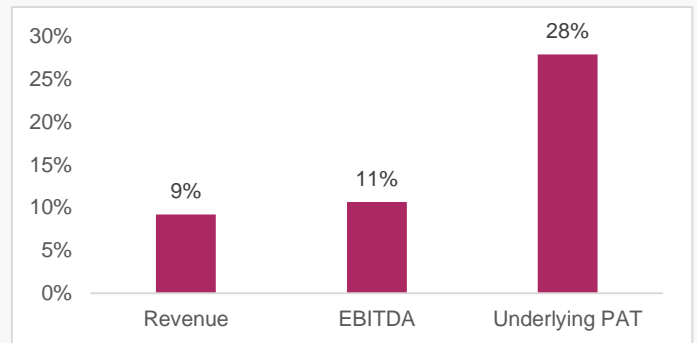


**Exhibit 5: ROE & ROCE to exhibit further improvement**

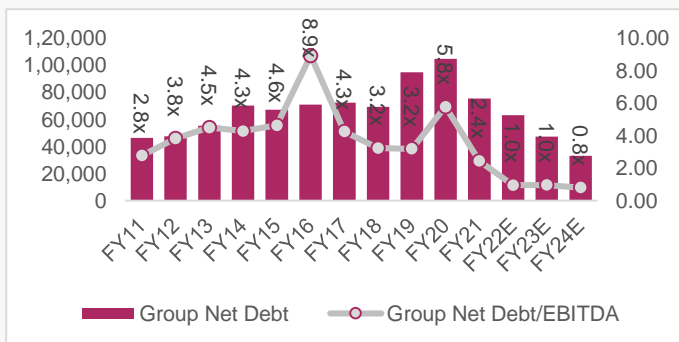


Source: company, Axis Securities

**Exhibit 6: Robust Revenue/EBITDA/PAT CAGR growth (FY21-FY24E)**

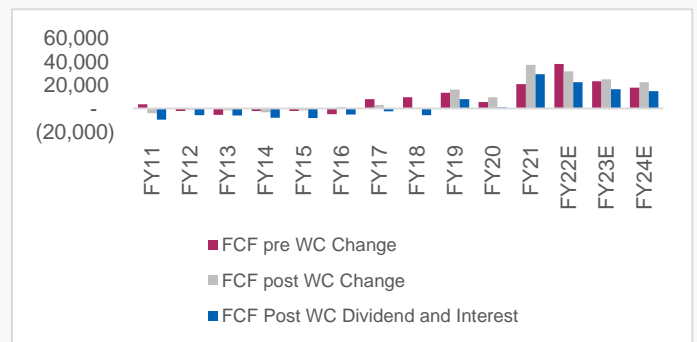


**Exhibit 7: Deleveraging to continue (Net Debt/EBITDA < 2.0x)**



Source: company, Axis Securities

**Exhibit 8: Underlying cash flows (FCF Ex WC) to stay robust**



## Company Overview

Tata Steel Group is one of the world's largest steel companies with a steel production capacity of ~35mtpa. According to the World Steel Association (WSA), the group ranked 12<sup>th</sup> globally in terms of crude steel production (28.1 mtpa) in 2020. Established in India as Asia's first integrated private steel company in 1907, the group has a presence across the entire value chain of steel manufacturing, including producing and distributing finished products as well as mining & processing iron ore and coal for steel production.

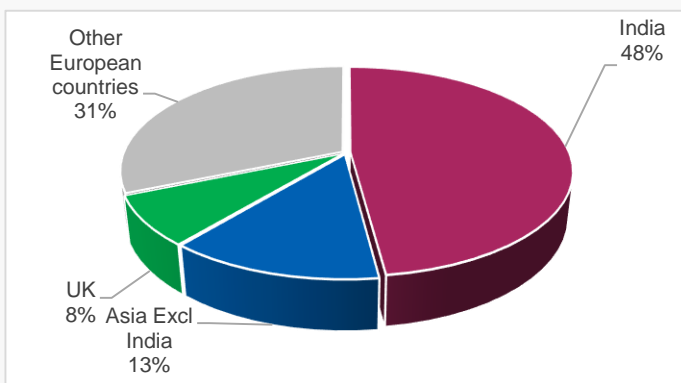
*Tata steel group has ~35mtpa steel production capacity. Its Indian operations has 100% iron ore and ~25% coking coal integration.*

- **Total crude steel production capacity of ~35mtpa:** Tata steel operates in different geographically based segments. These are
  - Tata steel India (19.6 mtpa),
  - Tata Steel long products (1 mtpa),
  - Tata Steel Europe (12.4 mtpa), and
  - Tata Steel South East Asia (1.4 mtpa).

The company's long subsidiary (Tata Steel Long products) acquired Neelachal Ispat Nigam Ltd (NINL) (93.71% stake) in Jan'22 which has an idle 1.1mtpa steel plant capacity.

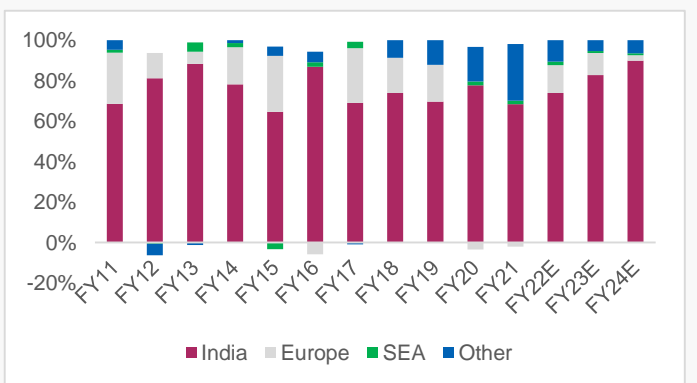
- **Indian operations have 100% integration in iron ore:** The company meets 100% of its iron ore requirements in India, through its captive iron ore mines and about a quarter of its coking coal requirements from its coal mines. These captive mines provide a structural hedge to the price risk of these commodities.
- **The company has ferroalloy production facilities in India at Orissa** at Joda, Bamnibal, and Gopalpur under Ferro Alloys and Minerals Division (FAMD). It has captive Chrome and manganese ores, which are used in the production of ferroalloys. Security in terms of steel raw materials, such as Iron ore and ferroalloys provides a cost advantage to Tata steel India as compared to other steel players.
- **Predominant sales from India and Europe:** In FY21, the company's 48% revenue came from India, 39% revenue from Europe, and 13% from Asia Excluding India.
- **Diversified product Mix:** Tata Steel is present in ~87% of the domestic carbon steel market, it caters to all major steel segments and particularly has a significant play in the automotive sector (21% sales in FY21).
- **Focus on branded products and retail:** Tata Steel India focuses on branded products to enhance margins from the B2C sales (14% in FY21) channel and also offers B2B automotive (16%) and B2ECA services and solutions (24%) to cater to MSME as against traditional B2B sales (47%).
- **Strong Distribution Network:** Tata Steel has designed multiple routes to market to connect, transact and engage with customer groups and enabled digitally. It has a direct route for B2B customer groups, distributors for B2ECA and distributors and dealers as channel partners for B2C.
- **Group structure simplification:** The company has completed the merger of Tata Steel BSL with Tata Steel.

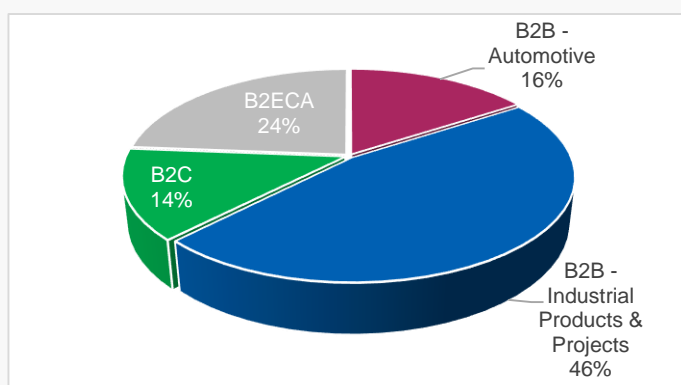
**Exhibit 9: Tata Steel Revenue Split (%) in FY21**



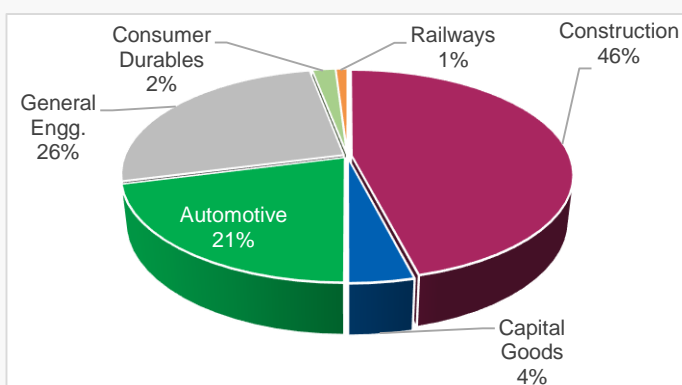
Source: company, Axis Securities

**Exhibit 10: Indian operations drive majority EBITDA%**



**Exhibit 11: Vertical - wise Tata Steel domestic sales (FY21)**


Source: company

**Exhibit 12: Sector - wise domestic sales (FY21, 13.7 Mn tons)**

**Exhibit 13: Tata Steel group facilities**

Steel Plant	Location	Existing Capacity (Mtpa)
Tata Steel Jamshedpur (TSJ)	Jamshedpur, India	11
Tata Steel Kalinganagar (TSK)	Kalinganagar, India	3
Tata Steel BSL (TSBSL)	Dhenkanal, India	5.6
<b>Tata Steel (India Standalone)</b>		<b>19.6</b>
Tata Steel Long Products Limited (TSLP)	Keonjhar, Odisha, India	1.2
Neelachal Ispat Nigam Ltd (NINL)	Jajpur, Odisha, India	1.1
Tata Steel Europe (TSE)	UK and Netherland	12.4
Tata Steel Thailand (TSTH)	Thailand	1.4
<b>Tata Steel Consolidated</b>		<b>35.7</b>

Source: company. Note –NINL Steel plant is currently not operational. NINL is a part of Tata Steel long products (TSLP)

**Exhibit 14: Tata Steel Key Assumptions**

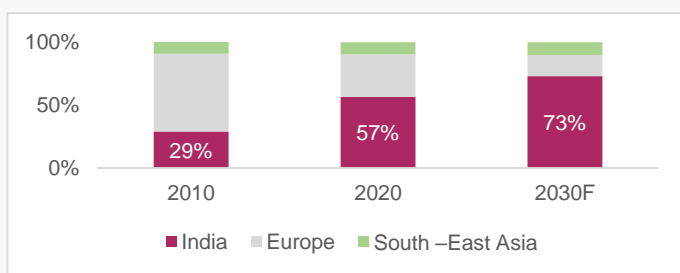
	FY16	FY17	FY18	FY19	FY20	FY21	FY22E	FY23E	FY24E
INR USD	65	67	64	70	71	74	74	75	75
HRC India (\$/t)	497	535	627	637	537	599	889	844	748
HRC Europe (\$/t)	357	509	616	615	511	611	1,153	1,085	956
62% Fe fines price (\$/t)	52	67	68	72	95	128	155	129	120
Coking Coal CNF India (\$/t)	98	170	205	208	174	125	324	331	278
India Steel sales - mtpa	9.5	11.0	12.2	16.3	17.0	17.3	18.3	19.2	19.4
TSE Steel sales mtpa	13.6	9.9	10.0	9.6	9.3	8.8	9.0	8.8	9.2
<b>Rs. Cr (Consolidated)</b>									
Revenue	1,06,340	1,17,420	1,24,110	1,57,669	1,48,972	1,56,294	2,29,106	2,29,124	2,03,410
EBITDA	7,968	17,008	21,433	29,383	17,828	30,504	66,202	49,504	41,327
PAT	(383)	(4,241)	13,434	10,218	1,557	7,490	33,691	23,043	17,854
Net Debt	71,137	72,420	69,300	94,950	1,04,842	75,500	63,141	47,289	33,144
Net Debt/EBITDA (x)	8.95	4.25	3.24	3.19	5.79	2.44	0.95	0.96	0.80
<b>EBITDA/tonne</b>									
Tata Steel Standalone (Rs/t)	7,976	10,823	12,986	16,201	12,061	17,610	28,606	22,679	20,329
TSE (Rs/t)	(468)	4,738	3,716	5,614	(715)	(701)	9,212	5,838	1,316
TSE (US\$/t)	(7)	71	58	80	(10)	(9)	124	78	18

Source: company, Axis Securities

### Strategy to capitalize on the Indian growth story

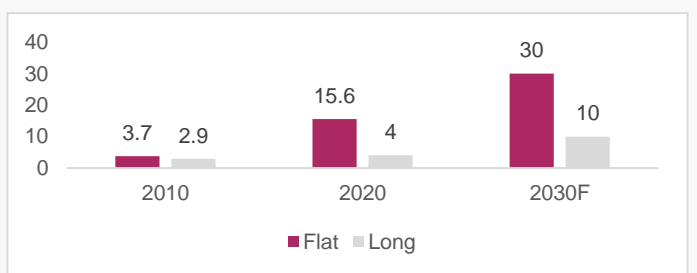
- **India to be a dominant manufacturing base:** Tata steel will be doubling its steel production capacity from ~20mtpa to 40mtpa in India. Its Indian operations have shown resilience through steel cycles due to the advantage of captive raw materials, as compared to non-integrated European operations. The company targets to increase the share of Indian steel production from 57% in 2020 to 73% by 2030.
- **Tata is pursuing inorganic growth for building up its long products portfolio** to capture the growth in construction demand in India. It acquired Neelachal Ispat Nigam on Jan'22. It will be spending a few 100 Crs Capex to operationalise its 1.1 mtpa idle steel plant. It plans to increase the contribution of the long product to 25% by 2030 from 20% currently.

**Exhibit 15: India to be the dominant manufacturing base for Tata Steel going forward (Production capacity share)**



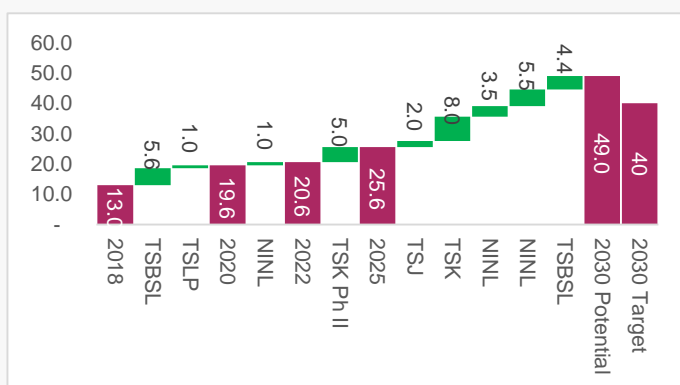
Source: company, Note: Capacity - 2010: 22mtpa, 2020: 34mtpa, 2030F: 55mtpa

**Exhibit 16: Optimizing product portfolio in India - production capacity (Mtpa)**



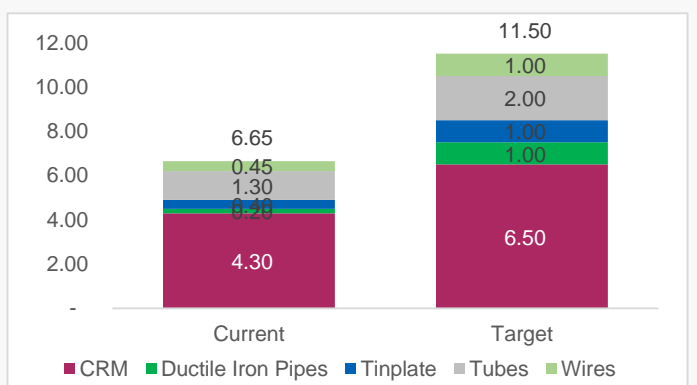
- **Tata maintained discipline in its capital allocation.** It allotted gradual phase-wise Capex for the TSK-Phase-II expansion announced in 2018 to factor in the weak steel cycle and match its Capex with its cash flows. With the onset of a strong steel cycle from Q4FY21 onwards, it resumed the work at TSK in Q4FY21 and expects project completion by the end of FY24.
- **Tata has brownfield sites** post-acquisition of Bhushan steel, NINL and Usha Martin steel business. The Capex intensity for expansion on brownfield sites will be much lower than developing greenfield plants.
- **The doubling of the steel production capacity from 20mtpa to 40mtpa** would be achieved in a phased manner. TSK-Phase-II for 5mtpa is already under operation which will take the steel capacity to ~25mtpa by the end of FY24. Post-2025, NINL offers a platform to ramp up the long products business from 1mtpa to 10mtpa (From 1 to 4.5mtpa and from 4.5 to 10mtpa in two phases), Bhushan steel from 5.6mtpa to 10mtpa, Kalingangar again from expanded 8mtpa to 16mtpa and Jamshedpur from 11mtpa to 12mtpa.
- **The company will also develop the downstream capacity from 6.6 to 11.5mtpa.** It has already put Capex on 2.2mtpa CRM and 6mtpa pellet plant at TSK-phase II (expected to be ready by FY23) which would drive cost-saving and add premium cold-rolled products to the portfolio.

**Exhibit 17: Indian steel capacity expansion potential to ~50mtpa**



Source: company

**Exhibit 18: Downstream capacity to increase from 6.6 to 11.5mtpa**



## 100% Captive Iron Ore Advantage

- **Captive iron ore advantage:** The proposed expansion to 40mtpa will require additional iron ore and its captive requirement will gradually increase from 36mtpa in 2021 to more than ~60mtpa by 2029-30. Currently, the company has environmental clearances (EC) up to 52 mtpa. Tata steel, through its acquisition of Bhushan Steel, Usha Martin and NINL, has got iron ore mines. The company won Gandhalpada Iron ore Block (315 mtpa reserves) and has paid a premium of 141.25% to secure its iron ore need beyond FY30.
- **The company got EC for 53mtpa iron ore from 40mtpa in FY20** and has earmarked a Capex of Rs 2,600/tonne to expand to 50 mtpa of iron ore.

### Exhibit 19: Tata Steel group Iron ore mines current EC limit

Iron ore Mines	State	Current EC limit (mt)	EC Applied for Expansion (mt)
Joda (E)	Keonjhar District, Orissa	12.00	19.50
Katamati	Keonjhar District, Orissa	13.50	
Khondbond Iron and Mn	Keonjhar District, Orissa	8.00	12.00
Naomundi	Singhbhum District, Jharkhand	19.00	
<b>Total</b>		<b>52.50</b>	<b>64.00</b>

Source: company.

- **Adequate land bank to increase the capacity to 40mtpa:** Tata Steel is housing 11mtpa of existing steel capacity at its 1,800 acre Jamshedpur facility. The management said that it can easily utilise the landbank available at its other locations to double its production in India. The acquisition of Bhushan Steel and NINL has given it enough landbank to expand those capacities to the target level.

### Exhibit 20: Tata Steel Group has sufficient land bank for expansion

Entity	Approx. Land Area (Acres)	Existing capacity (mtpa)	Tentative New Capacity (mtpa)
TSJ - Tata Steel Jamshedpur	1,800	11	13
TSK – Tata Steel Kalinganagar	3,475	3	16
Tata Steel BSL	1,700	5.6	10
Neelachal Ispat Nigam Ltd (NINL)	2,514	1.1	10
<b>Total</b>	<b>9,489</b>	<b>20.7</b>	<b>49</b>

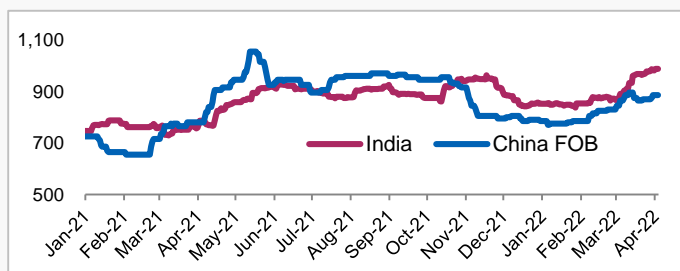
Source: company. Note – NINL Steel plant is currently not operational.

- **TSK Phase II:** Out of the total capacity expansion to 40mtpa, the company is currently expanding the Kalinganagar Phase II 5 mtpa project. The Capex was back-ended due to the weak steel cycle in 2018-19. The company prioritised CRM and pellet plant for premium products and cost-saving and has not laid out the Capex and funding plan for the rest of the projects.
- **The Phase II project** will be a brownfield project and will be completed with lower Capex intensity of \$723/tonne as against \$1,208/tonne for greenfield phase I.

## Regional steel prices have increased; we expect prices to remain resilient in short term

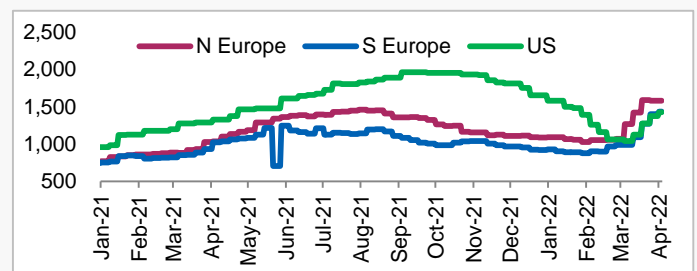
- **Domestic steel prices have bounced back by 14% since the start of the Ukraine war:** Despite sluggish domestic consumption, the steel mills increased prices in response to higher demand in Europe, supply concerns from China, and the rise in prices of Australian coking coal (up 30%).
- **Russia Ukraine conflict has disrupted steel supplies in the European market: Both countries account for ~9% of European Steel supply, 15% of global steel trade and ~17% of EU's steel imports:** The war has also impacted the iron ore, coking coal, and natural gas supply into EU. ~40% of steel is produced through the EAF route in the EU, which is energy-intensive, thereby affecting production. As a result, the European steel prices have jumped up 50% since the start of the conflict
- **With China disincentivising exports, the steel prices have decoupled and have become clearly more regionalised:** The price rise in HRC was lower in Asia, Indian HRC prices increased by 14%, while Chinese HRC prices increased by 7% since the conflict. The higher spot prices in Europe have made the export market to the EU more lucrative for Indian steel mills. However, import quota limits steel volumes (Q1FY23 HRC quota increased to 0.27mt from 0.17mt as EU redistributed steel quota from Russia and Belarus to other countries, Q2FY23 quota is at 0.28mt)
- **The Covid-19 outbreak in China led to a lockdown in the steel city of Tangshan in China (~13% of total Chinese production).** China's consumption and production both remained sluggish in Feb'22. The lockdown will further impact the steel demand putting pressure on prices in the short term. CISA (China Iron and Steel Association) expects Chinese steel prices to remain range-bound in the short term, as the steel mills will adjust production.
- Range-Bound Chinese steel prices would limit the upside on Indian prices, however, **we expect the Indian steel prices to remain elevated in the medium term, with limited downside from here as steel mills have hinted at further price hikes to pass on the higher coking coal and ferroalloy prices.**

**Exhibit 21: HRC Prices India and China FOB (\$/tonne) resilient**

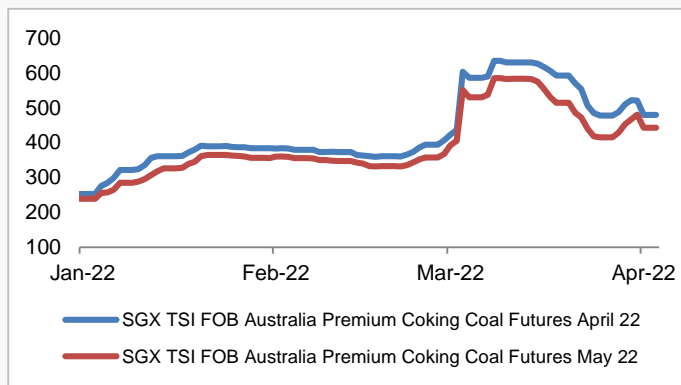


Source: Bloomberg

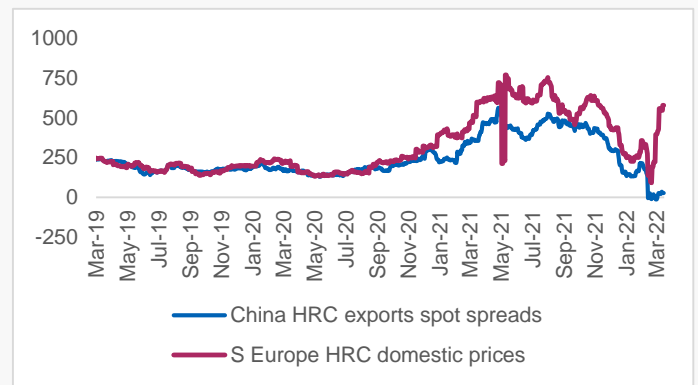
**Exhibit 22: Europe and US prices rising again post-conflict**



- **Steel spreads under stress with rising coking coal prices:** Coking coal prices have increased by 50% since the escalation of the Ukraine-Russia conflict. The SGX FOB Australian premium HCC prices peaked at \$635/tonne in early Mar'22, but have recently corrected from the peak and are currently trading at \$595/tonne. The Apr'22 contract is also showing correction with prices at \$478/tonne. As the wet season in Australia ends, the coking coal prices are expected to ease from their peak. The spot spreads in India and China have come under stress due to an increase in coking coal prices. However, the spread decline is more in China as against India and Europe. **Tata Steel has 100% iron ore and 25% coking coal integration, and with one-third of its shipments from Europe should be able to partially offset the impact of high coking coal prices.**

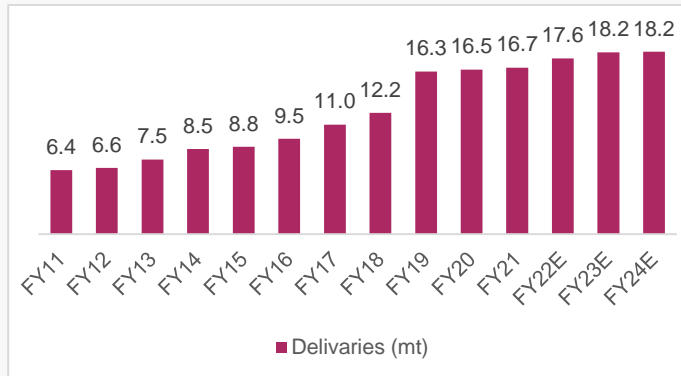
**Exhibit 23: Coking coal prices – futures contract shows correction**


Source: Bloomberg

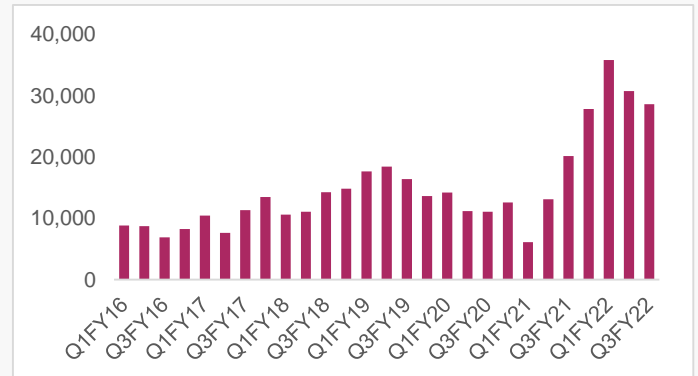
**Exhibit 24: European spreads have recovered, Chinese spreads weak due to lower steel prices**


### Indian operations to perform better

- Tata steel India volumes growth will be capped due to the capacity constraints as the Kalinganagar Phase II production is likely to start only post FY24. We expect a marginal increase in production in FY23E to 18.2mtpa from 17.6mtpa in FY22 (Company has reported provisional production on 5<sup>th</sup> Apr-22 for FY22, Tata Steel India including TSBSL and Tata steel long products production stood at record high at 19 mtpa up 13% YoY).

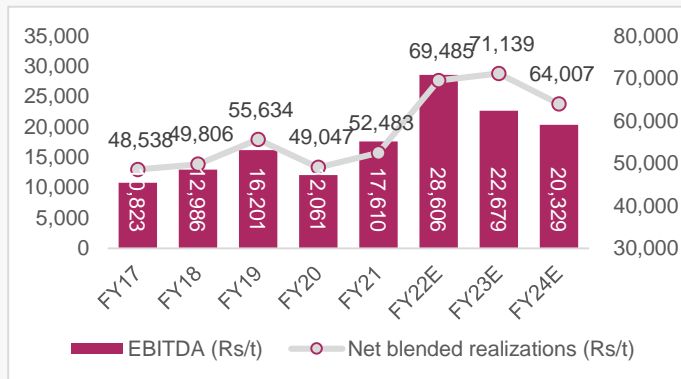
**Exhibit 25: Standalone Volume growth limited due to capacity constraint; Steel deliveries (mtpa)**


Source: Company, Axis Securities

**Exhibit 26: EBITDA/tonne peaked in Q1FY22**


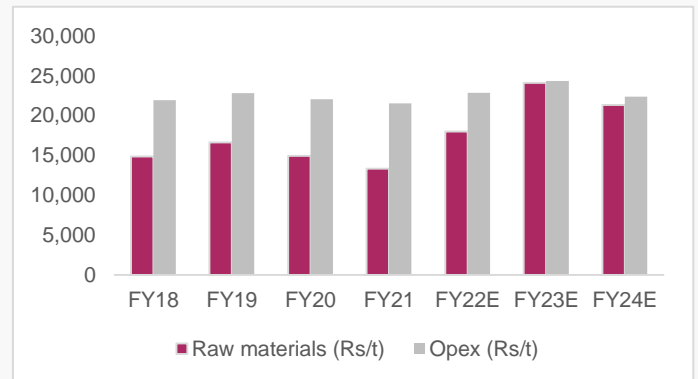
- Steel spreads stood above the cycle average in FY22** led by higher sales realisation of Rs 69,485/tonne from Rs 52,483/tonne in FY21. We expect steel spreads to moderate from the peak due to higher coking coal prices and energy prices in FY23.
- Indian operation's EBITDA/tonne peaked in Q1FY22** and stood at an all-time high of Rs 35,808/tonne. While we don't expect the repeat of the peak EBITDA/tonne in upcoming quarters, as coking coal prices are expected to remain high in Q4FY22 and Q1FY23, the EBITDA/tonne shall still average at ~Rs 28,606/tonne in FY23, much higher than the level of FY17-21. We expect the EBITDA/tonne to moderate further in FY24E based on our assumption of moderation in steel prices.

**Exhibit 27: EBITDA/tonne to peak in FY22E, driven by a higher realization**



Source: Company, Axis Securities

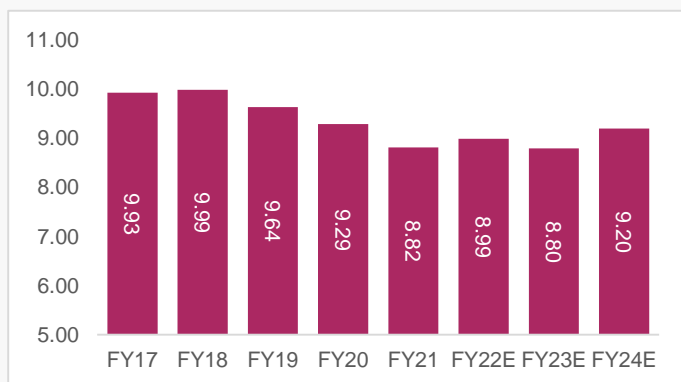
**Exhibit 28: Raw material cost and Opex to increase due to higher coking coal and energy prices**



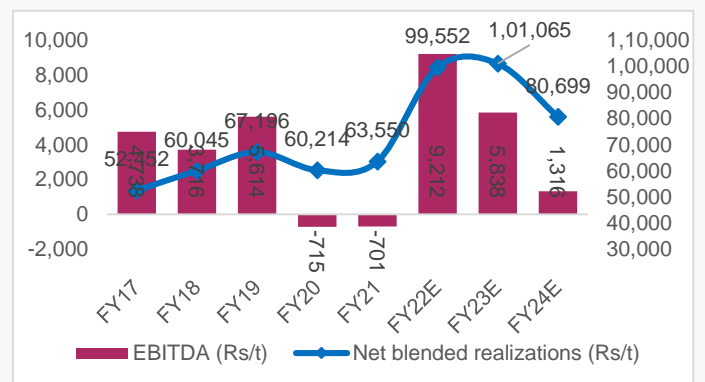
**TSE EBITDA/tonne to fall faster**

- Tata steel Europe's Netherland Ijmuiden has two furnaces of 2.5 and 3.5mtpa capacity. One of the furnaces is going for a relining in FY23 while the other will be due in the next 2-3 years. The Blast furnace will go on maintenance while relining. TSE plans to set up a buffer stock of 300-500kt slab stock in the meantime to fulfil customer orders. The stock will absorb higher working capital during the maintenance period.
- The management has said it's not going to allocate any capital into TSE from the parent, it expects the Netherland unit to generate sufficient cash flows to fund the BF maintenance work over the next 2-3 years along with the decarbonisation Capex needs.
- To meet the 2030 decarbonisation target in the Netherlands, management said the funding will be done through 1) Internal cash generation (the management is keeping tight control on the cash flows to keep it as capital to be allocated for decarbonization), 2) The government subsidies, and 3) High prices in Europe. It will be indirectly be paid by the customers.

**Exhibit 29: TSE steel deliveries (mtpa) to blip due to BF relining**



**Exhibit 30: EBITDA/tonne to drop due to higher cost sensitivity**

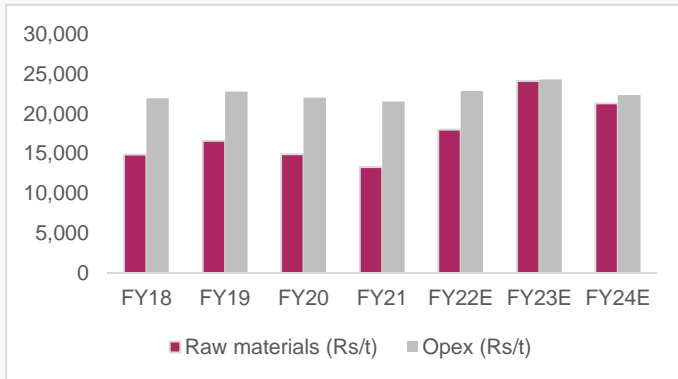


Source: company, Axis Securities, Company reported provisional steel deliveries at TSE at 8.99 mtpa for FY22 on 5<sup>th</sup> April.

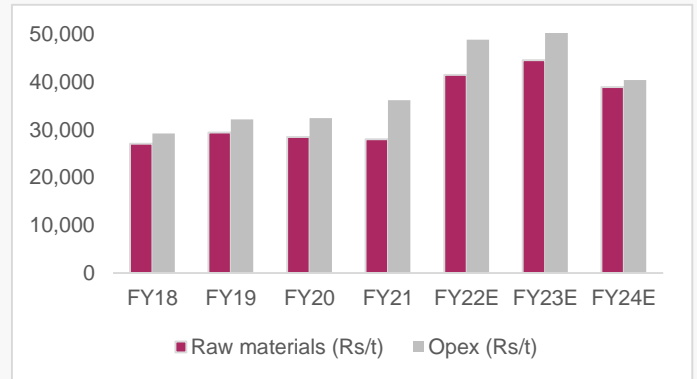
- European Steel peers like SSAB and Salzgitter have announced Capex of ~\$3-4 Bn for the transition towards green steel. TSE has not announced growth Capex towards green steel. The management pointed out that the technology for green steel production is currently not commercially viable and both the government and consumers have to partly fund the cost of the green steel transition.
- TSE has higher Opex and raw material costs on a per tonne basis as compared to the Indian operations. It has no raw material integration and has higher fixed costs. This coupled with higher sustaining Capex needed towards product quality and emission control in light of carbon control makes TSE sensitive to steel

cycles. Its EBITDA/tonne has been more volatile in the past, driven by higher steel prices; we expect the EBITDA/tonne to jump to Rs 9,212/tonne in FY22E from an EBITDA loss of Rs 701/tonne in FY21. The EBITDA/tonne is expected to fall to Rs 5,838/tonne due to higher coking coal, iron ore, and energy prices in FY23E.

**Exhibit 31: Tata Steel India Raw materials and Opex cost (Rs/t)**



**Exhibit 32: TSE Raw materials and Opex cost (Rs/t)**

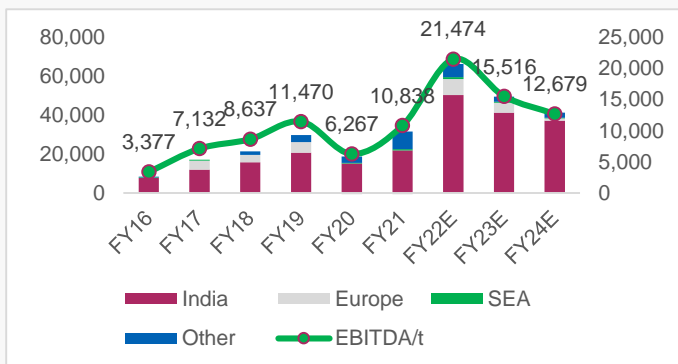


Source: company, Axis Securities

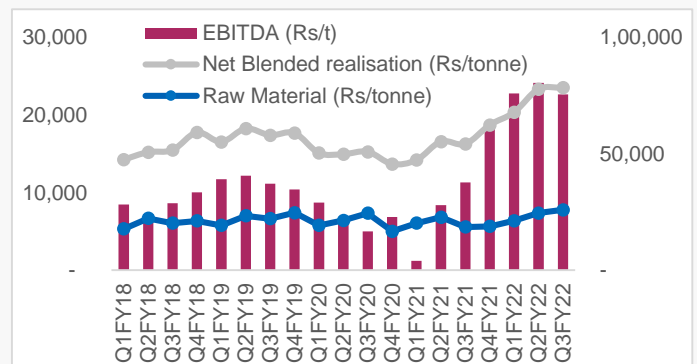
### Group EBITDA off the peak; Resilient steel prices to keep FY23 EBITDA elevated above cycle average

- Since Q1FY21, the consolidated spreads started rising and EBITDA/tonne peaked in Q2FY22 (see fig: 34). While we don't see the peak margins repeating any time soon, we don't see margins collapsing in FY23 either.
- In the Dec'21 quarter, when the Chinese steel demand stood sluggish due to lower offtake, Indian HRC prices bottomed near ~\$840/tonne level. Steel prices since Dec'21 lows have increased by 16% and spot domestic HRC prices are currently at ~\$980/tonne. Hence, **even with sharply higher coking coal prices, steel margins for the company are settling at a higher level than the historical average.**

**Exhibit 33: Consolidated EBITDA (Rs Cr) and EBITDA/tonne**



**Exhibit 34: Qrt Consolidated EBITDA per tonne (Rs/tonne)**



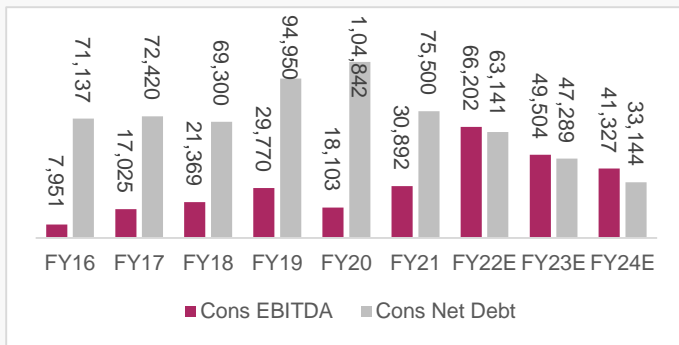
Source: company, Axis Securities

### Strong free cash flow to drive deleveraging despite ramp up in growth Capex

- **Massive deleveraging in FY21:** Tata Steel completed deleveraging and the company's net debt declined by 29,390Cr (~\$4Bn) in FY21, surpassing the annual deleveraging target of \$1Bn. Consequently, its net debt-to-EBITDA ratio in FY21 has dropped to a healthy level of 2.4x from 5.8x in FY20 and 3.2x in FY19. The deleveraging enabled the company to continue critical capital expenditure focused on India, including the ongoing Pellet plant and Cold Roll Mill commissioning at Tata Steel Kalinganagar.
- In FY21, the deleveraging was led by higher EBITDA, working capital release, and lower Capex. The cash inflow from working capital changes in FY21 was Rs 16,491 Cr primarily due to an increase in Non-

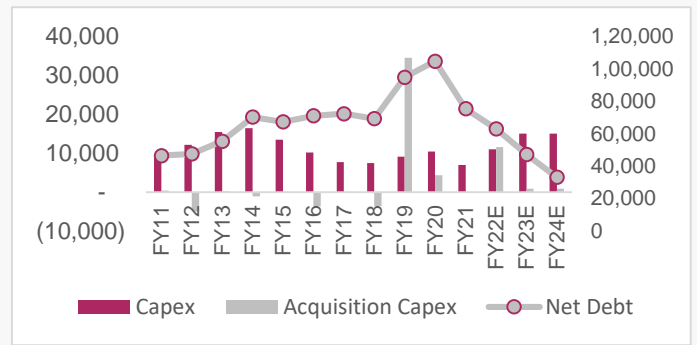
current/Current financial liabilities/provisions by Rs 16,267 Cr which includes advances from customers for long-term export orders at Tata Steel (Standalone).

**Exhibit 35: Consolidated Net Debt and EBITDA (Rs Cr)**



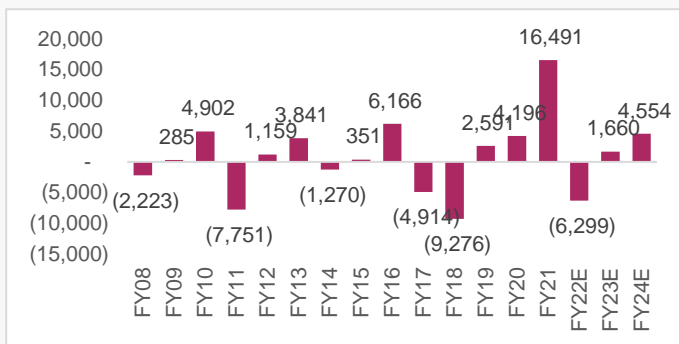
Source: company, Axis Securities

**Exhibit 36: Deleveraging along with increase in Capex spending**



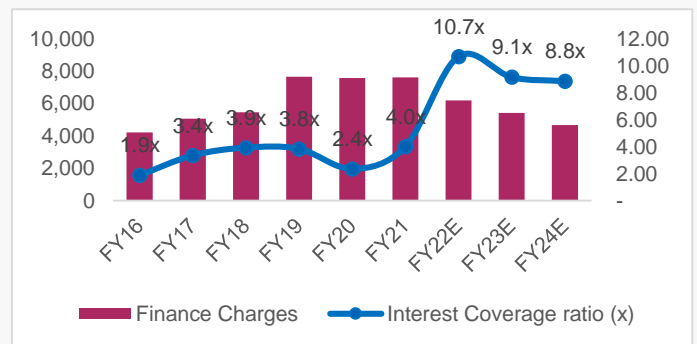
- We expect Group EBITDA to peak in FY22E and decline over the forecast period in FY23-24E, despite the EBITDA drop and increase in Capex spending the net debt shall continue to fall.
- The working capital requirement will increase in FY22E due to higher steel and raw material prices.
- Interest expense is expected to come down reflecting deleveraging. The interest coverage ratio is expected to improve much above the cycle average target of 4.0x.

**Exhibit 37: Working capital change: Higher prices and raw materials to absorb more working capital in FY22**

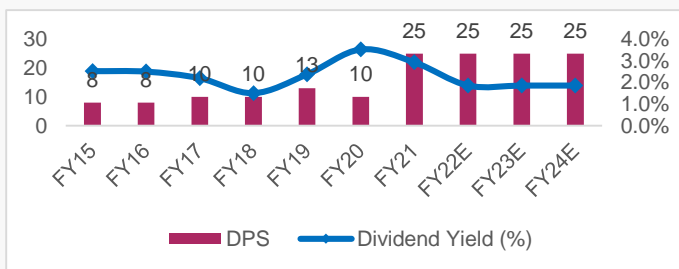


Source: company, Axis Securities

**Exhibit 38: Finance cost to come down; improving interest coverage ratio**

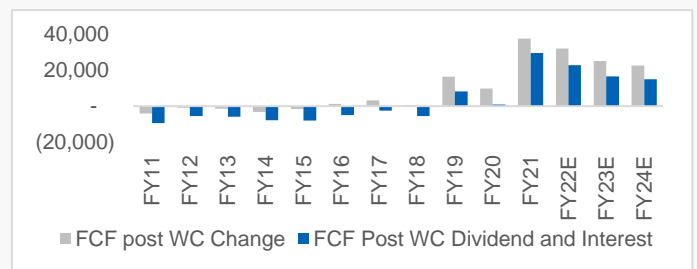


**Exhibit 39: Progressive dividend policy (up to 50% profit)**



Source: company, Axis Securities

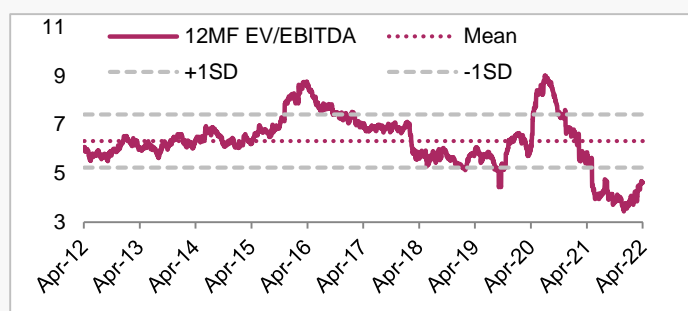
**Exhibit 40: FCF to remain positive post-WC, dividend and interest**



## Outlook & Valuation

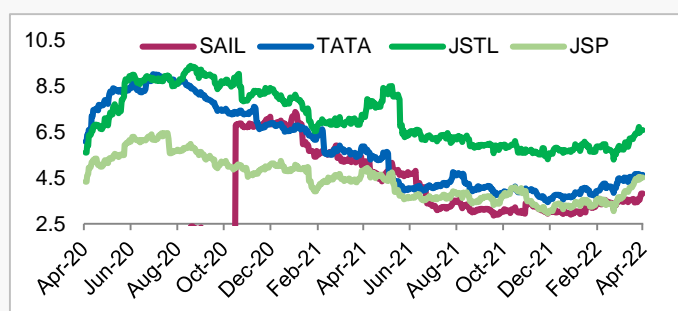
- Tata Steel is trading at 4.6x 12 MF EV/EBITDA, which is a ~27% discount from its 10 year average of 6.3x. The valuation of steel companies has recently corrected substantially over the steel cycle led by concerns on steel prices owing to uncertainty from weak chinese demand and domestic steel usage pick up, along with sharp jump in coking coal prices, however, the recent regional rise in steel prices due to the ongoing Russia Ukraine crisis have made the valuation troughed from the bottom and consensus is now reflecting some strength in steel prices and peaking of coking coal prices.
- We use SoTP and use 12MF EV/EBITDA consensus to value Tata steel based on the company's geographical segments. We value the standalone Indian business (including BSL) at 6.0x in line with the long term average of the group multiple. Captive iron ore, 25% coking coal, and the strength in steel prices warrant reversion of the multiple for the standalone operations to the long term average.
- We value TSE using 3.5x EV/EBITDA, lower than the sector average of 6.0x, due to its higher cost structure, higher maintenance Capex requirement and exposure to raw material prices. For the rest of the operations, we use 5.0x EV/EBITDA. Using the above multiples, we arrive at our 1-year forward TP of Rs 1,700/share on our FY24 EBITDA estimate and initiate the coverage with a BUY rating.
- Tata steel is sensitive to steel prices – every 5% increase in steel prices increases FY23 EBITDA by 11%. A 5% increase in coking coal prices decreases EBITDA by 4%

**Exhibit 41: Tata Steel 12MF EV-EBITDA multiple**



Source: Bloomberg

**Exhibit 42: 12MF EV-EBITDA sector valuation appears bottomed out**



**Exhibit 43: Tata Steel SoTP valuation**

	FY24E EBITDA	EV/EBITDA (x)	FY24 EV
India Standalone (Inc TSBSL)	37,096	6.0x	2,22,577
Europe	1,211	3.5x	4,237
Other Operations	3,020	5.0x	15,099
<b>Total EV</b>	<b>41,327</b>	<b>5.9x</b>	<b>2,41,913</b>
Less: Net Debt FY23E			47,289
Add: CWIP (0.5 x Book value)			12,942
<b>Equity Value</b>			<b>2,07,566</b>
No of Shares (Cr)			122
<b>Target Price (Rs/sh)</b>			<b>1,700</b>
CMP			1,344
<b>% Upside</b>			<b>26%</b>

Source: company, Axis Securities

**Exhibit 44: Tata steel sensitivity to steel prices**

	FY 23E Base Case	+5% scenario	Inc/(Dec) in EBITDA
Contract HRC Price (\$/t) India	844	886	11%
Spot HRC price (\$/t) Europe	1,085	1,139	
Coking Coal (\$/t) CFR India	331	347	-4%

**Exhibit 45: Peer Comparison, Tata steel FCF % remains strong**

Company	Price	Price	Mkt Cap	Mkt Cap	EV	PE (x)				EV EBITDA (x)				FCF Yield (%)			
	US\$	Local	US\$'Mn	Local Mn	US\$'Mn	2021	2022	2023	2024	2021	2022	2023	2024	2021	2022	2023	2024
STEEL AUTHORITY	1.34	102.15	5,555	4,21,933	8,753	3.4x	4.6x	4.6x	NA	3.6x	3.5x	3.3x	NA	31%	25%	20%	NA
TATA STEEL LTD	17.34	1,317.10	21,177	16,08,347	31,095	4.1x	5.3x	12.7x	9.7x	3.6x	NA	4.6x	NA	18%	14%	13%	NA
JSW STEEL LTD	9.64	732.20	23,304	17,69,889	30,736	7.8x	9.4x	9.2x	NA	6.0x	6.4x	6.1x	NA	1%	4%	8%	NA
JINDAL STEEL & POWER	6.99	530.85	7,130	5,41,514	8,703	6.0x	7.5x	7.7x	4.3x	3.7x	3.4x	2.9x	NA	17%	10%	9%	NA

Source: Bloomberg, Priced as of 4<sup>th</sup> Apr'22.

## Management Profile

As of 31<sup>st</sup> March 2021, Tata Steel's Board of Directors comprised ten members, two of whom are Executive Directors, three are Non-Executive Directors and five are Independent Directors including a Woman Director.

Key Management Personnel	Experience
<b>Mr T V Narendran</b> CEO & Managing Director Mechanical Engineer (NIT Trichy) MBA (IIM Calcutta)	Mr T V Narendran is the CEO & Managing Director of Tata Steel Limited. As the CEO & MD, he has overseen the organic and inorganic growth of Tata Steel over the last few years. This includes the Kalinganagar greenfield expansion and the acquisition of Bhushan steel and the steel business of Usha Martin. He has over 32 years of experience in the Mining and Metals industry.
<b>Mr Koushik Chatterjee</b> Executive Director and CFO Commerce Graduate (Calcutta University) Fellow Member of ICAI.	Mr. Chatterjee joined Tata Steel limited in 1995 in Jamshedpur. He was designated as Executive Director and Chief Financial Officer on November 9, 2017. During the last 15 years in the company, he has led the company's finance function and provided stewardship in the areas of financial strategy, M&A, risk management, reporting and controlling investor relations and taxation.
<b>Dr Henrik Adam</b> Vice President, European Corporate Affairs Mechanical engineer (Germany)	Dr Henrik Adam was appointed VP, European Corporate Affairs at Tata Steel Limited in January 2022, representing Tata Steel's European businesses. Previously, he held the role of CEO of Tata Steel in Europe from 2019. In addition, he took on the responsibilities of the Chief Technical Officer and the Chief Commercial Officer following a reorganization of the company's Executive Committee in early 2021. Before joining Tata Steel in 2011, Henrik was CEO of ThyssenKrupp Electrical Steel.
<b>Atrayee Sanyal</b> Vice President, Human Resource Management MBA (Calcutta University)	Ms. Atrayee Sanyal is the Vice President of HRM at Tata Steel. She joined Tata Steel in the year 1998. Joining Hindustan Unilever after a stint in Market Research in Mumbai, Atrayee joined Tata Steel, Kolkata in the Marketing function. She joined the Human Resource Division in 2017 and has handled multiple areas in this function involving white collared and blue collared employees.

Source: company

## Key Risk & Mitigation

- **Steel prices volatility:** Tata steel is exposed to market-determined regional steel prices. A fall in steel prices would directly impact the profitability of the company, putting strain on the company and can limit its expansion plans.
- **Dependencies on external markets for coking coal:** Tata steel has 100% iron ore integration but procures ~75-80% coking coal from the external market. Coking coal forms a significant portion of the steel production cost. Coking coal prices have increased recently due to supply disruptions from the Australia and Ukraine-Russia crisis affecting steel margins. We expect coking coal prices to correct from the peak. However, if the prices continue to remain elevated, it will impact our target price and rating.
- **Regulatory and environmental compliance risk:** The company is exposed to various regulatory and environmental compliances. The MMDR Act, March 2015, provides the captive mining leases to expire by March-2030. Company may need to pay a higher premium for the renewal of mining leases. To secure iron ore reserves, the company has acquired NINL having 100MnT iron ore reserves and won Gandhalpada iron ore block from auction having reserves of 315mt, but at a high bid premium of 141%.

*Collapse in steel prices and rise in coking coal prices will pose a downside risk to our target price and rating*

## Industry Overview

### Weakness in China's property sector a drag on steel prices, focus is now on China Stimulus

China's steel consumption has remained weak in Jan-Feb'22, with YTD consumption down 9% YoY. While China's infra and real estate FAI have remained sluggish until Feb'22, FAI manufacturing is the only bright spot. China's property sector, which is the major consumer of Steel (40%), is still affected with the land area purchased still in negative territory. The lower steel demand is also explained by degrowth in the building under construction, the leading indicators for steel consumption i.e. land area purchased and the new house starts both are contracting.

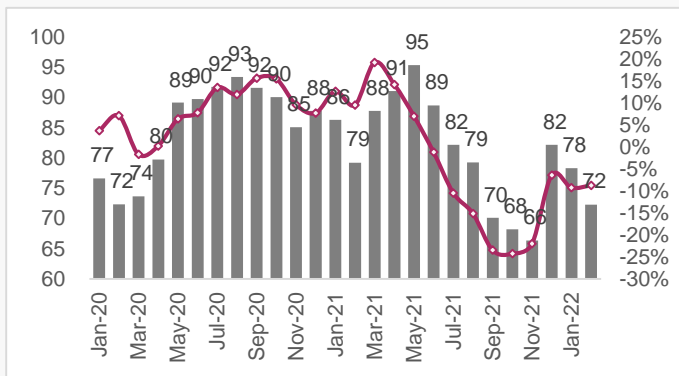
China's Zero Covid-19 strategy has disrupted the transportation of finished and raw materials. However, the impact would be temporary.

China has set a GDP growth target of 5.5% for 2022 and a deficit to GDP ratio of 2.8% for this year, lower than last year's 3.2%. China's economic growth softened in 4QCY21 to a 4% YoY increase, despite full-year growth of 8.1%. From the lower growth in Q4, the 2022 5.5% growth target is ambitious, but the narrowing of the fiscal deficit target to 2.8% from 3.2% last year is counter accommodative.

*China is once again turning to infrastructure spending to stimulate the economy in 2022. However, the focus of investment will be specific, with less rampant investment in speculative projects.*

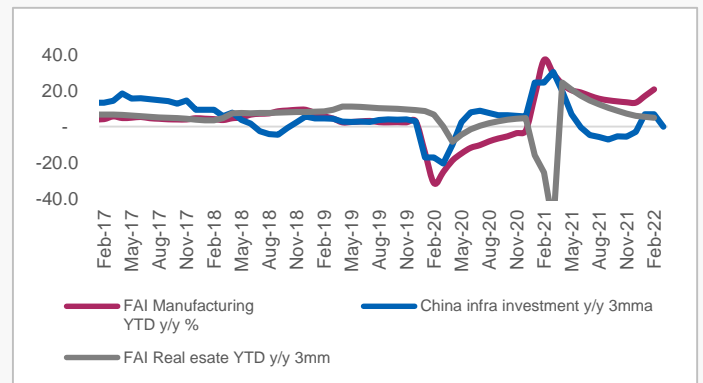
*China's steel consumption has remained weak in Jan-Feb'22, with YTD consumption down 9% YoY*

**Exhibit 46: China steel consumption (mt) down 9% YoY in Feb-2022**

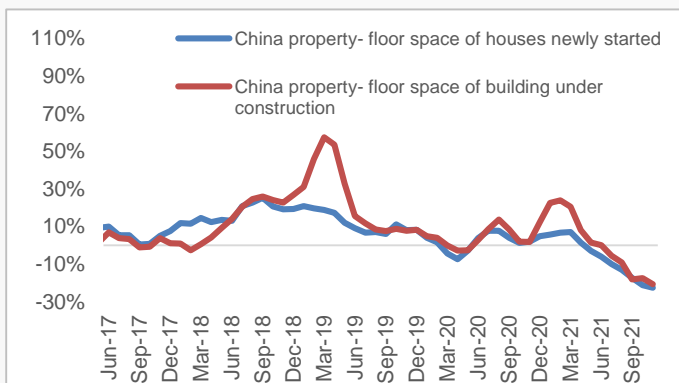


Source: Bloomberg

**Exhibit 47: FAI Real Estate continues to be weak**

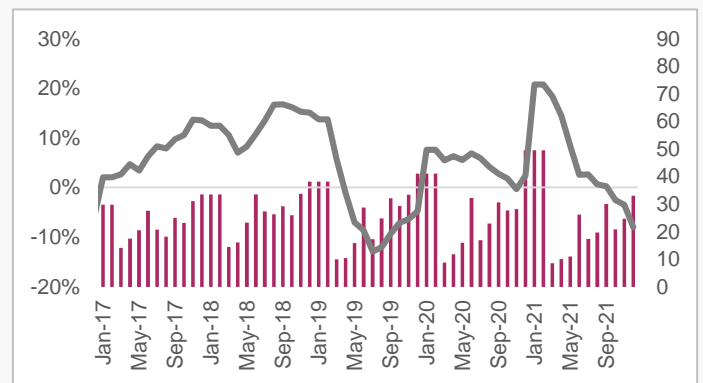


**Exhibit 48: Floor space under construction and new starts weak**



Source: Bloomberg

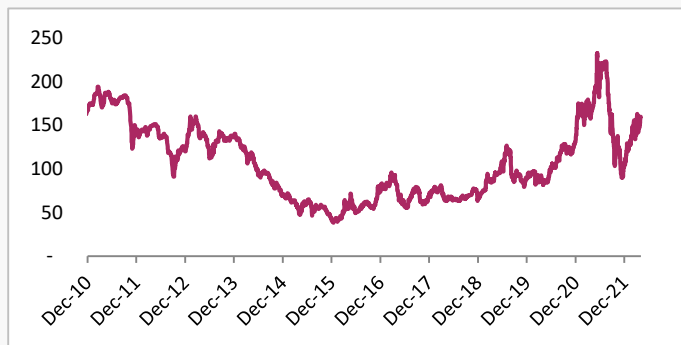
**Exhibit 49: China land area purchased and YTD % change**



Turning to stimulus, more importantly, for commodities, the local government special bond issuance is set at RMB3.65Tn which is flat YoY. With no growth in the special bond issuance market is expecting additional stimulus from the government going forward. The local governments have been struggling to find suitable projects

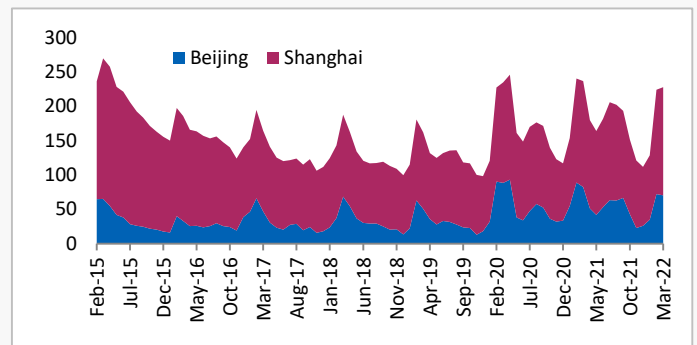
to fund with special bonds whose conditions stipulate that investments must generate enough income to repay the bond principal and interest.

**Exhibit 50: Iron ore prices rallying on China stimulus hope**



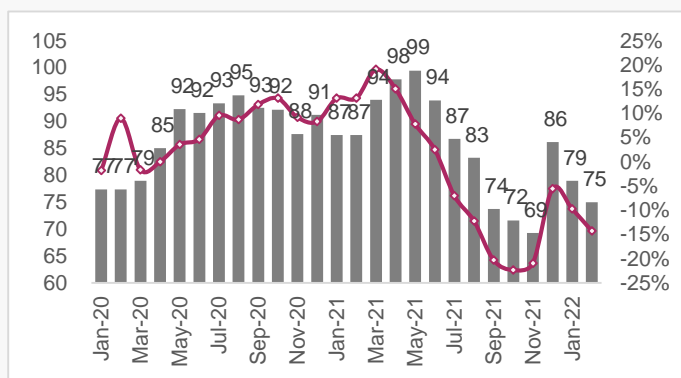
Source: Bloomberg

**Exhibit 51: China's steel inventory increased due to Covid led disruption**



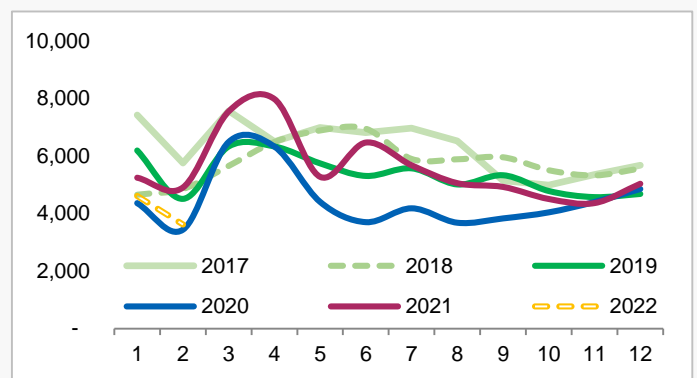
On the supply side, China's crude steel production fell by 3% YoY to 1.03Bnt in 2021, the first decrease since 2016, due to strict carbon emissions and energy controls ahead of the Beijing Winter Olympics. The country announced a five-year goal in March 2021 to cut energy intensity by 13.5% and reduce carbon intensity by 18% by 2025. Due to the winter Olympics, the Jan-Feb'22 steel production declined by 10% to 158mtpa.

**Exhibit 52: China's crude steel production and YoY growth**



Source: Bloomberg

**Exhibit 53: China steel exports declined by 19% YTD 2022**



However, the production curbs for steel have receded after the heating season ended in 15<sup>th</sup> March. To avoid damage to downstream industries by surging commodity prices, the central government is aiming to ensure supply from basic industries, including steel. However, an increase in steel production doesn't mean a boost in exports. China's tariff adjustment plan shows the government tends to buy more primary steel products and limit steel exports. An oversupply is less likely to happen because rising global energy prices and inflationary pressure would push up steelmakers' operational costs, which will dent their profitability and could limit production. **We don't see a supply glut coming out from China to depress international prices in the foreseeable future which is positive for Indian steel players.**

**Financials (Consolidated)**
**Profit & Loss**
**(Rs Cr)**

Y/E March	FY 21A	FY 22E	FY 23E	FY 24E
Total Operating income	1,56,294	2,29,106	2,29,124	2,03,410
Total Expenditure	1,25,790	1,62,904	1,79,620	1,62,083
<b>EBITDA</b>	<b>30,504</b>	<b>66,202</b>	<b>49,504</b>	<b>41,327</b>
Depreciation and Amortization	9,234	9,819	10,369	11,004
<b>EBIT</b>	<b>21,271</b>	<b>56,383</b>	<b>39,135</b>	<b>30,322</b>
Other Income	896	1,254	1,317	1,382
Share Of P/L Of Associates (Net of Tax)	327	393	412	433
Less: Interest & Fin Chg.	7,607	6,197	5,413	4,670
Less: Exceptional Items	1,043	-	-	-
<b>Profit before tax</b>	<b>13,844</b>	<b>51,832</b>	<b>35,451</b>	<b>27,468</b>
Provision for Tax	5,654	18,141	12,408	9,614
<b>Reported PAT</b>	<b>8,190</b>	<b>33,691</b>	<b>23,043</b>	<b>17,854</b>
Minority Interest	700	-	-	-
<b>Attributable PAT</b>	<b>7,490</b>	<b>33,691</b>	<b>23,043</b>	<b>17,854</b>
<b>EPS (Rs/sh) Basic</b>	<b>63.8</b>	<b>274.9</b>	<b>187.7</b>	<b>145.2</b>
<b>DPS (Rs/sh)</b>	<b>25.0</b>	<b>25.0</b>	<b>25.0</b>	<b>25.0</b>

Source: company, Axis Securities

**Balance Sheet**
**(Rs Cr)**

Y/E March	FY 21A	FY 22E	FY 23E	FY 24E
Net Block	1,19,004	1,18,535	1,20,915	1,22,661
Other Tangible assets	9,451	9,451	9,451	9,451
CWIP + ITUD + Other Intangible Assets	21,983	23,633	25,883	28,133
Goodwill	4,345	4,562	4,790	5,030
Investments	10,682	22,431	23,429	24,477
Inventories	33,276	48,779	48,783	43,308
Trade Receivables	9,540	13,984	13,985	12,416
Cash / Bank balance	5,532	7,407	11,880	16,627
Retirement Benefit Assets	20,020	20,420	20,829	21,245
Misc. Assets	11,655	12,105	12,577	13,071
<b>Total assets</b>	<b>2,45,487</b>	<b>2,81,307</b>	<b>2,92,521</b>	<b>2,96,418</b>
Equity capital	1,198	1,198	1,198	1,198
Hybrid Perpetual Securities/ Share warrants	775	775	775	775
Reserves	72,266	1,02,904	1,22,895	1,37,696
Minority Interests	3,270	3,270	3,270	3,270
Total Borrowings	87,378	78,378	67,378	58,378
Def tax Liabilities	9,241	9,241	9,241	9,241
Retirement Benefit Obligations	3,667	3,850	4,042	4,245
Provisions	9,417	9,888	10,383	10,902
Trade Payables	25,967	38,065	38,068	33,796
Other Liabilities and Provision	32,308	33,738	35,272	36,919
<b>Capital employed</b>	<b>2,45,487</b>	<b>2,81,307</b>	<b>2,92,521</b>	<b>2,96,418</b>

Source: company, Axis Securities

**Cash Flow**
**(Rs Cr)**

Y/E March	FY 21A	FY 22E	FY 23E	FY 24E
Profit before tax	13,844	51,832	35,451	27,468
Depreciation	9,234	9,819	10,369	11,004
Interest Expenses	7,607	6,197	5,413	4,670
Non-operating / EO item	(2,144)	(500)	(514)	(527)
Change in W/C	16,491	(6,299)	1,660	4,554
Income Tax	(704)	(18,141)	(12,408)	(9,614)
<b>Operating Cash Flow</b>	<b>44,327</b>	<b>42,908</b>	<b>39,972</b>	<b>37,556</b>
Capital Expenditure	(6,979)	(11,000)	(15,000)	(15,000)
<b>Free cash Flow</b>	<b>37,348</b>	<b>31,908</b>	<b>24,972</b>	<b>22,556</b>
Other Investments	(2,344)	(11,966)	(1,226)	(1,287)
<b>Investing Cash Flow</b>	<b>(9,323)</b>	<b>(22,966)</b>	<b>(16,226)</b>	<b>(16,287)</b>
Proceeds from issue of Equity shares	3,239	-	-	-
Proceeds / (Repayment) of Borrowings	(30,661)	(9,000)	(11,000)	(9,000)
Finance cost paid	(6,804)	(6,197)	(5,413)	(4,670)
Dividend paid	(1,151)	(3,053)	(3,053)	(3,053)
Other Financing activities	(1,714)	183	192	202
<b>Financing Cash Flow</b>	<b>(37,090)</b>	<b>(18,067)</b>	<b>(19,273)</b>	<b>(16,521)</b>
Change in Cash	(2,086)	1,875	4,473	4,747
Opening Cash	7,732	5,532	7,407	11,880
<b>Closing Cash</b>	<b>5,532</b>	<b>7,407</b>	<b>11,880</b>	<b>16,627</b>

Source: company, Axis Securities

**Ratio Analysis**
**(x) / (%)**

Y/E March	FY 21A	FY 22E	FY 23E	FY 24E
<b>Operational Ratios</b>				
Sales growth (% YoY)	5%	47%	0%	-11%
EBITDA growth (% YoY)	71%	117%	-25%	-17%
Op. profit growth (% YoY)	133%	165%	-31%	-23%
Net Profit growth (% YoY)	381%	350%	-32%	-23%
EBITDA Margin %	20%	29%	22%	20%
Net profit Margin %	5%	15%	10%	9%
EBITDA/t (Rs/tonne)	0%	0%	0%	0%
Tax Rate %	41%	35%	35%	35%
<b>Efficiency Ratios</b>				
Total Asset turnover (x)	0.63	0.87	0.80	0.69
Sales/Gross block (x)	0.84	1.16	1.10	0.92
Sales/Net block(x)	1.31	1.93	1.91	1.67
Working capital/Sales (x)	0.11	0.11	0.11	0.11
<b>Valuation Ratios</b>				
PER (x)	21.1x	4.9x	7.2x	9.3x
P/BV (x)	2.1x	1.6x	1.3x	1.2x
EV/Ebitda (x)	5.8x	3.5x	4.3x	4.9x
EV/Sales (x)	1.1x	1.0x	0.9x	1.0x
Dividend Yield (%)	2.9%	1.9%	1.9%	1.9%
<b>Return Ratios</b>				
ROE	0.11	0.36	0.20	0.13
ROCE	0.12	0.30	0.19	0.14
ROIC	0.08	0.22	0.15	0.11
<b>Leverage Ratios</b>				
Debt / equity (x)	1.19	0.75	0.54	0.42
Net debt/ Equity (x)	0.98	0.68	0.40	0.24
Net debt/Ebitda (x)	2.44	0.95	0.96	0.80
Interest Coverage ratio (x)	4.01	10.68	9.15	8.85

Source: company, Axis Securities

**Tata Steel Price Chart and Recommendation History**



Date	Reco	TP	Research
06-Apr-22	BUY	1,700	Initiating Coverage

Source: Axis Securities

**About the analyst**

Analyst: Aditya Welekar

Email: [aditya.welekar@axissecurities.in](mailto:aditya.welekar@axissecurities.in)

Sector: Metals & Mining

Analyst Bio: Aditya Welekar is PGDBM in Finance with 10 years of experience in Equity Market/Research.

**Disclosures:**

The following Disclosures are being made in compliance with the SEBI Research Analyst Regulations 2014 (herein after referred to as the Regulations).

1. Axis Securities Ltd. (ASL) is a SEBI Registered Research Analyst having registration no. INH000000297. ASL, the Research Entity (RE) as defined in the Regulations, is engaged in the business of providing Stock broking services, Depository participant services & distribution of various financial products. ASL is a subsidiary company of Axis Bank Ltd. Axis Bank Ltd. is a listed public company and one of India's largest private sector bank and has its various subsidiaries engaged in businesses of Asset management, NBFC, Merchant Banking, Trusteeship, Venture Capital, Stock Broking, the details in respect of which are available on [www.axisbank.com](http://www.axisbank.com).
2. ASL is registered with the Securities & Exchange Board of India (SEBI) for its stock broking & Depository participant business activities and with the Association of Mutual Funds of India (AMFI) for distribution of financial products and also registered with IRDA as a corporate agent for insurance business activity.
3. ASL has no material adverse disciplinary history as on the date of publication of this report.
4. I/We, AdityaWelekar, MBA-Finance, author/s and the name/s subscribed to this report, hereby certify that all of the views expressed in this research report accurately reflect my/our views about the subject issuer(s) or securities. I/We (Research Analyst) also certify that no part of my/our compensation was, is, or will be directly or indirectly related to the specific recommendation(s) or view(s) in this report. I/we or my/our relative or ASL does not have any financial interest in the subject company. Also I/we or my/our relative or ASL or its Associates may have beneficial ownership of 1% or more in the subject company at the end of the month immediately preceding the date of publication of the Research Report. Since associates of ASL are engaged in various financial service businesses, they might have financial interests or beneficial ownership in various companies including the subject company/companies mentioned in this report. I/we or my/our relative or ASL or its associate does not have any material conflict of interest. I/we have not served as director / officer, among others. in the subject company in the last 12-month period. Any holding in stock – No
5. ASL has not received any compensation from the subject company in the past twelve months. ASL has not been engaged in market making activity for the subject company.
6. In the last 12-month period ending on the last day of the month immediately preceding the date of publication of this research report, ASL or any of its associates may have:

Received compensation for investment banking, merchant banking or stock broking services or for any other services from the subject company of this research report and / or;

Managed or co-managed public offering of the securities from the subject company of this research report and / or;

Received compensation for products or services other than investment banking, merchant banking or stock broking services from the subject company of this research report;

ASL or any of its associates have not received compensation or other benefits from the subject company of this research report or any other third-party in connection with this report.

**Term& Conditions:**

This report has been prepared by ASL and is meant for sole use by the recipient and not for circulation. The report and information contained herein is strictly confidential and may not be altered in any way, transmitted to, copied or distributed, in part or in whole, to any other person or to the media or reproduced in any form, without prior written consent of ASL. The report is based on the facts, figures and information that are considered true, correct, reliable and accurate. The intent of this report is not recommendatory in nature. The information is obtained from publicly available media or other sources believed to be reliable. Such information has not been independently verified and no guaranty, representation of warranty, express or implied, is made as to its accuracy, completeness or correctness. All such information and opinions are subject to change without notice. The report is prepared solely for informational purpose and does not constitute an offer document or solicitation of offer to buy or sell or subscribe for securities or other financial instruments for the clients. Though disseminated to all the customers simultaneously, not all customers may receive this report at the same time. ASL will not treat recipients as customers by virtue of their receiving this report.

DEFINITION OF RATINGS	
Ratings	Expected absolute returns over 12-18 months
<b>BUY</b>	More than 10%
<b>HOLD</b>	Between 10% and -10%
<b>SELL</b>	Less than -10%
<b>NOT RATED</b>	We have forward looking estimates for the stock but we refrain from assigning valuation and recommendation
<b>UNDER REVIEW</b>	We will revisit our recommendation, valuation and estimates on the stock following recent events
<b>NO STANCE</b>	We do not have any forward looking estimates, valuation or recommendation for the stock

#### Disclaimer:

Nothing in this report constitutes investment, legal, accounting and tax advice or a representation that any investment or strategy is suitable or appropriate to the recipient's specific circumstances. The securities and strategies discussed and opinions expressed, if any, in this report may not be suitable for all investors, who must make their own investment decisions, based on their own investment objectives, financial positions and needs of specific recipient.

This report may not be taken in substitution for the exercise of independent judgment by any recipient. Each recipient of this report should make such investigations as it deems necessary to arrive at an independent evaluation of an investment in the securities of companies referred to in this report (including the merits and risks involved), and should consult its own advisors to determine the merits and risks of such an investment. Certain transactions, including those involving futures, options and other derivatives as well as non-investment grade securities involve substantial risk and are not suitable for all investors. ASL, its directors, analysts or employees do not take any responsibility, financial or otherwise, of the losses or the damages sustained due to the investments made or any action taken on basis of this report, including but not restricted to, fluctuation in the prices of shares and bonds, changes in the currency rates, diminution in the NAVs, reduction in the dividend or income, among others. Past performance is not necessarily a guide to future performance. Investors are advised necessarily a guide to future performance. Investors are advised to see Risk Disclosure Document to understand the risks associated before investing in the securities markets. Actual results may differ materially from those set forth in projections. Forward-looking statements are not predictions and may be subject to change without notice.

ASL and its affiliated companies, their directors and employees may; (a) from time to time, have long or short position(s) in, and buy or sell the securities of the company(ies) mentioned herein or (b) be engaged in any other transaction involving such securities or earn brokerage or other compensation or act as a market maker in the financial instruments of the company(ies) discussed herein or act as an advisor or investment banker, lender/borrower to such company(ies) or may have any other potential conflict of interests with respect to any recommendation and other related information and opinions. Each of these entities functions as a separate, distinct and independent of each other. The recipient should take this into account before interpreting this document.

ASL and / or its affiliates do and seek to do business including investment banking with companies covered in its research reports. As a result, the recipients of this report should be aware that ASL may have a potential conflict of interest that may affect the objectivity of this report. Compensation of Research Analysts is not based on any specific merchant banking, investment banking or brokerage service transactions. ASL may have issued other reports that are inconsistent with and reach different conclusion from the information presented in this report. The Research reports are also available & published on AxisDirect website.

Neither this report nor any copy of it may be taken or transmitted into the United State (to U.S. Persons), Canada, or Japan or distributed, directly or indirectly, in the United States or Canada or distributed or redistributed in Japan or to any resident thereof. If this report is inadvertently sent or has reached any individual in such country, especially, USA, the same may be ignored and brought to the attention of the sender. This report is not directed or intended for distribution to, or use by, any person or entity who is a citizen or resident of or located in any locality, state, country or other jurisdiction, where such distribution, publication, availability or use would be contrary to law, regulation or which would subject ASL to any registration or licensing requirement within such jurisdiction. The securities described herein may or may not be eligible for sale in all jurisdictions or to certain category of investors.

The Disclosures of Interest Statement incorporated in this document is provided solely to enhance the transparency and should not be treated as endorsement of the views expressed in the report. The company reserves the right to make modifications and alternations to this document as may be required from time to time without any prior notice. The views expressed are those of the analyst(s) and the company may or may not subscribe to all the views expressed therein.

#### Copyright in this document vests with Axis Securities Limited.

Axis Securities Limited, Dealing office: 1st Floor, I-Rise Building, Q Parc, Loma Park, Thane, Ghansoli, Navi Mumbai-400701, Regd. off.- Axis House,8th Floor, Wadia International Centre, Pandurang Budhkar Marg, Worli, Mumbai – 400 025. Compliance Officer: Anand Shaha, Email: compliance.officer@axisdirect.in, Tel No: 022-49212706