

# It's mine! Odisha auction in focus

Iron ore cost set to rise 30-40% for non-integrated players after the auction – in a Karnataka redux

January 2020



The steel sector, which had seen its fortunes revive in the last two fiscals, appears to be headed for a *sturm und drang* phase again.

Disruptions in mines, elevated inventory levels and high bid premiums in the recent auctions in Karnataka pose hiccups on the supply side even as dampeners abound on the demand side, too.

In the context, even the upcoming mine auctions in Odisha are expected to see high bid premiums.

The fallout – a mighty blow to non-integrated steelmakers. Indeed, around 76% of domestic crude steel capacity, which procures from the merchant iron ore market, is expected to be impacted directly.

In a possible scenario of downward rally of global iron ore prices, steelmakers (especially port-based) can potentially consider imports. However, given that domestic prices are typically at a 55-60% discount to imported prices, profitability of non-integrated steelmakers is expected to be under pressure in the two fiscals following the Odisha auctions.

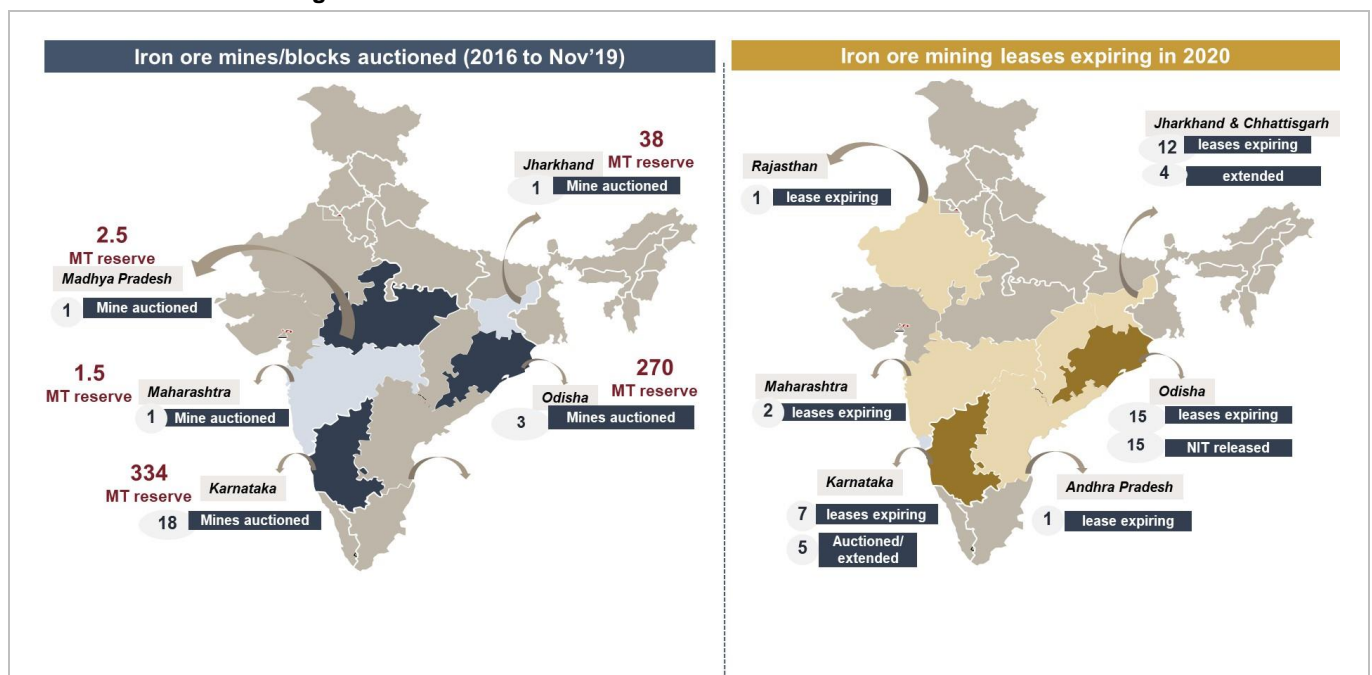
That said, improving realisations and declining coal prices should provide some relief.

## Leases for 30% of India's, and half of Odisha's production to expire soon

After the amendment of the Mines and Minerals (Development and Regulation) Act (MMDR Act), 24 iron ore blocks/mines with estimated reserves of ~640 million tonne of iron ore have been auctioned in the past three years (up to November 19). Of these, 18 in Karnataka with reserves of more than 330 million tonne of iron ore have already been auctioned. The leases on four of these were to expire in March 2020.

Overall, mining leases of more than 30 iron ore mines are set to expire in March 2020. Reason why the Odisha auction will be the most crucial for India's iron ore and steel industry.

### Profile of iron ore mining leases



Note: MT = million tonne

Source: Indian Bureau of Mines, Government documents, Industry

In fiscal 2019, India is estimated to have produced 207 million tonne of iron ore of which, more than two-thirds was by merchant miners and the rest by captive steel makers. Odisha alone is estimated to have produced 114 million tonne, or more than half of India's iron ore production.

Clearly, the Odisha auctions will be crucial for India's iron ore and steel industry as it would determine the cost structure for the players.

However, given initiation of the auction process in Odisha, extension of leases of NMDC and ramp-up of iron ore production by existing miners will substantially reduce the risk of supply disruption.

**Production profile of expiring iron ore mining leases (FY19)**



Source: Indian Bureau of Mines, Government documents, Industry

Note: Estimated numbers; mt = million tonne

**High bidding at Karnataka auction sets precedent for Odisha**

Of the mines auctioned in Karnataka, JSW Steel won half. The weighted average bid premium for the 18 auctioned mines was 93% with bids ranging from 37% to as high as 130%. The average bid premium was the highest for pellet makers. This would lead to a 25-30% rise in costs after operationalisation of these mines. For steel makers (newly integrated), cost would rise 5-7% after commencement of mining activities.

**Impact of high bid premiums on iron ore cost in Karnataka**

Bidder category	Number of bids won	Net reserves (in million tonnes)	Bid premium*	Rise in iron ore cost (post-auction)
Steelmaker	12	236	86%	5-7% (new captive steelmaker)
Pellet player	5	89	122%	25-30% (new captive pellet player)
Merchant miner	1	9	40%	17-19% (non-integrated steel player)
<b>Overall</b>	<b>18</b>	<b>334</b>	<b>93%</b>	

Note: \*Bid premiums are indicative of volume weighted averages

Rise in cost is benchmarked against existing cost of iron ore as per current procurement pattern (FY20P) and assumes no absorption of increase in costs by merchant miners i.e. the rise in cost is passed on to the non-integrated steel players. This excludes initial development capex incurred by the winning bidder.

Source: Indian Bureau of Mines, government documents, Industry, CRISIL Research

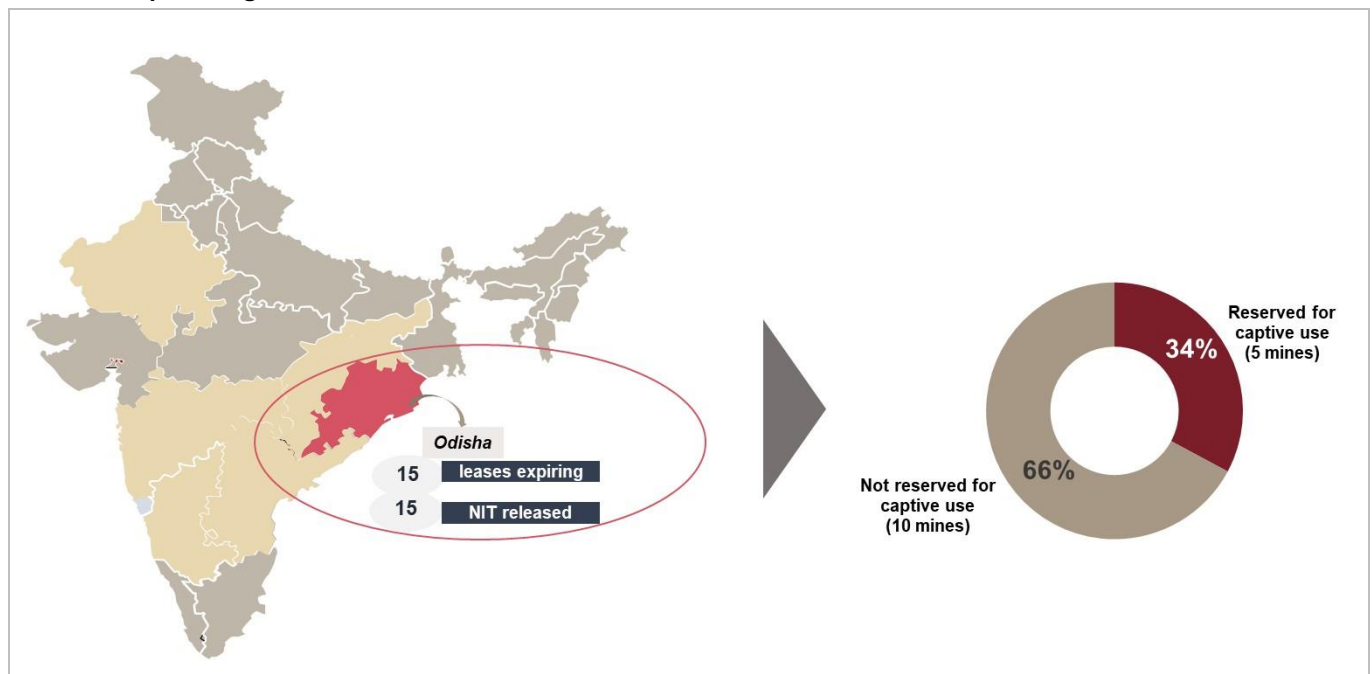
## A third of Odisha reserves set aside for captive end-users

After the annulment of three notices inviting tender (NIT) released in October for auction of iron ore and manganese blocks because of conflicts between participating bidders, the Odisha government released an NIT for 20 iron ore and manganese blocks on December 6, 2019.

A single bid clause was added in the document wherein bidders can make only one offer for one mineral block and no affiliate (subsidiary, parent, or joint venture) of theirs can bid for the same mineral block.

While 15 of the 20 mines to be auctioned predominantly have iron ore, three have both iron ore and manganese, while the remaining are primarily manganese reserves. The 18 mines containing iron ore reserves together hold ~1600 million tonne of which 33% (five mines) are reserved for specified end-use (captive usage). **These are old mines where leases are set to expire in March 2020.**

### Profile of upcoming iron ore auction in Odisha



Source: Indian Bureau of Mines, Government documents, Industry

Note: The above set includes 18 iron ore and manganese mines, 2 only manganese ore mines have been excluded

Estimated numbers; mt = million tonne

The reserve price has been set between 15% and 35% for most mines except for the Nuagaon iron ore block, where it has been kept higher at 50% because its net reserves are way more at ~790 million tonne.

Interestingly, 15 technical bids were received for the block, including from JSW, JSPL, TS Alloys, Vedanta, ArcelorMittal, Essel Mining and Rungta Mines, and their subsidiaries, before the bids were annulled.

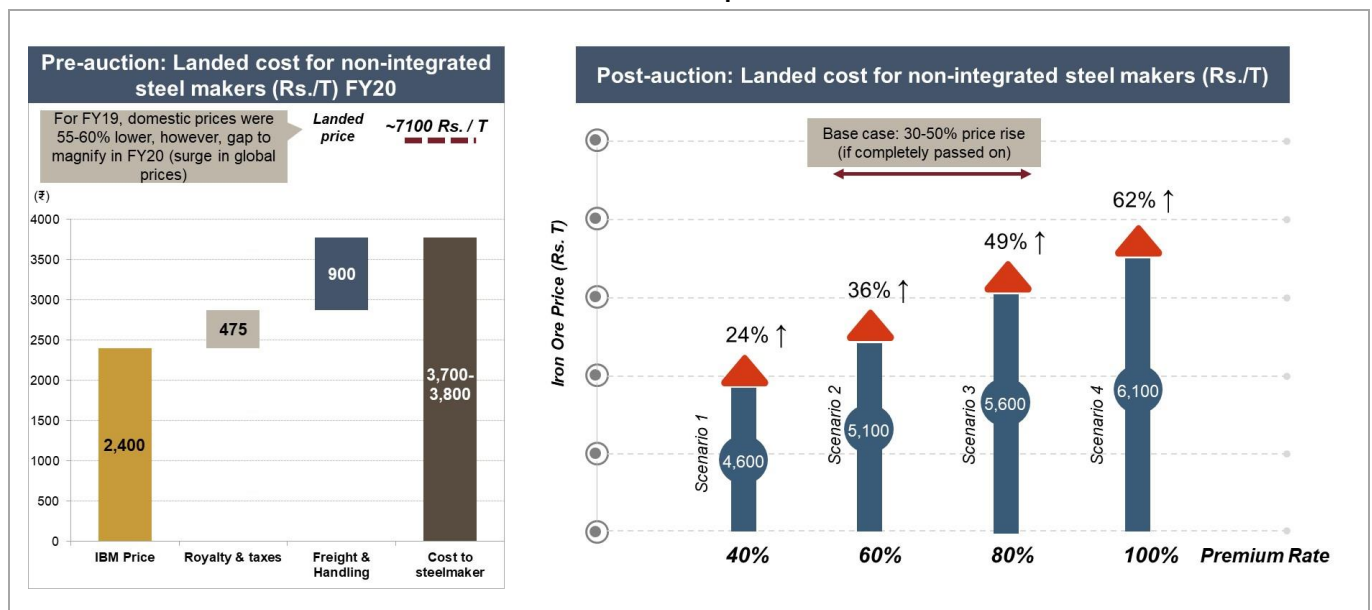
CRISIL Research expects bidding for the 20 Odisha mines – technical bids begin in the first week of January – to be aggressive. **That’s because the first lot of 10 mines where auction was later annulled had seen aggression, with 177 bids from a total of 58 companies.**

However, the imminent supply disruption would be limited as existing miners have been ramping up production given the upcoming lease expiries, and the auction process that has begun is scheduled to be completed by end-February. However, the government’s decision on extension/non-extension of environmental clearances during the transition period will be a key monitorable for any supply disruption.

## Iron ore prices set to rise for non-integrated steel makers

Iron ore prices are expected to rise depending on the bid premiums quoted in the auction. The following graph illustrates the potential rise in iron ore prices for non-integrated steel makers depending on bid premiums.

### Post-auction landed cost based on different auction bid premiums



Note: Freight refers to Odisha to Vizag, IBM Price for Fe 62% fines projected for FY20

Post-auction landed cost refers to cost post operation of auctioned mines (FY22P), Hike (%) does not assume absorption of price rise by merchant miners

Source: Industry, CRISIL Research

Non-integrated players contributed to nearly three-fourth of total production as of fiscal 2019.

In the current fiscal, CRISIL Research expects the landed price for a non-integrated steel maker on the eastern coast to be around Rs 3,700-3,800 per tonne (including royalty, other charges, and freight).

The increase in iron ore prices will depend largely on the auction premium.

Our base case is the premium would be more than 40% for most mines, based on the high reserve price already set. **That would potentially translate into a price hike of 30-40% after operations begin (assuming merchant miners will not pass the cost rise to steel makers).** Domestic iron ore prices were half the landed prices last year, giving merchant miners the latitude to increase prices.

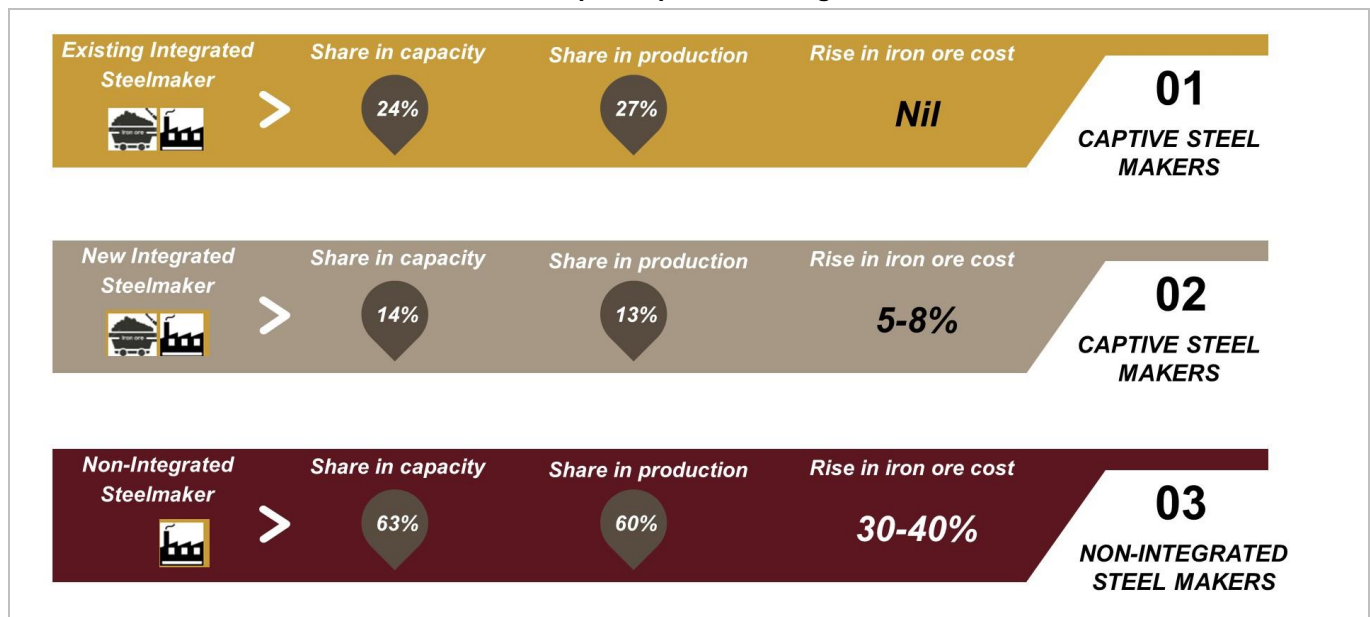
## Cost structures to recalibrate post-auction

After the auction, the difference in iron ore cost to various categories of steel makers is expected to widen:

- Existing captive steel makers will continue to enjoy lower iron ore cost as before
- New captive/ integrated steel makers, which had won new iron ore leases at high premiums in the past two fiscals, would witness a 5-8% rise in their iron ore cost compared with the merchant-procurement price earlier once the acquired mines begin operations. Bid premiums surged as players wanted to ensure long-term supply of iron ore and lower dependence on merchant procurement. And till operations begin, captive end-users will keep meeting their iron ore requirements from existing merchant miners.
- Non-integrated players are expected to cough up 30-40% more.

For new integrated steel makers, the mines won are expected to get operational only after 2-3 years.

### Difference in iron ore costs for steel makers post operations begin at auctioned mines



Note: Rise in iron ore cost for non-integrated players if completely passed on

Source: Industry, CRISIL Research

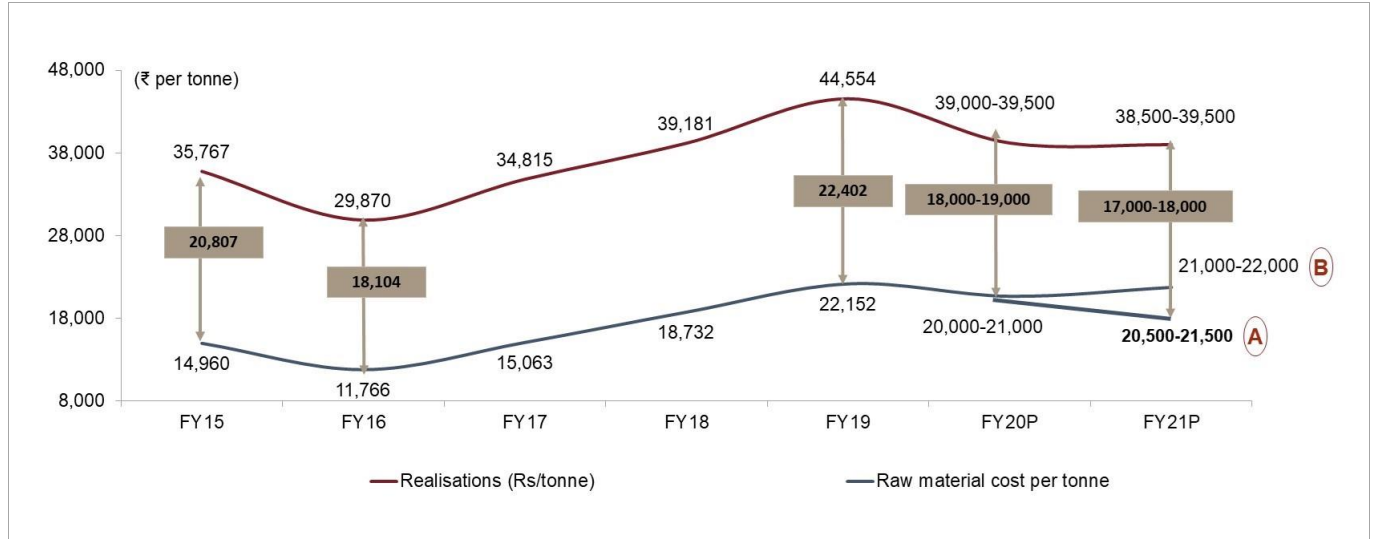
## Spreads to contract further in fiscal 2021

Profitability of steel makers is expected to weaken this fiscal (as already seen in the first half) because of lower steel prices and weak volumes despite softening coal prices. Next fiscal, we expect steel prices to be range-bound with a downward bias following global cues. While coking coal prices are expected to decline next fiscal, rising iron ore cost after auction will weigh on the spreads of non-integrated players. We see two scenarios emerging:

**Scenario A: The rise in iron ore cost is partly absorbed by merchant miners:** In our base case, merchant miners will potentially absorb 5-10% of the rise in iron ore cost as they operate at relatively healthy profitability margin of 25-35%. This would mean only a moderate decline of 100-200 basis points in gross margin for non-integrated players.

**Scenario B: Rise in iron ore cost is completely passed on by merchant mines** – In this scenario, the cost of iron ore would increase by more than 30% for non-integrated steel makers, which would lead to a 250-350 bps decline in their gross margins.

**Gross spreads of non-integrated players procuring from Odisha mines**



*Note: Under scenario 1, merchant miners pass on the entire increase in raw material cost to steel makers  
Under scenario 2, some of the rise in iron ore cost is absorbed by merchant miners.  
Raw material cost includes landed cost to steel maker of coking coal and iron ore per tonne of steel produced. It does not include other material such as scrap, ferro alloys, etc.  
Gross spreads will differ for each player depending upon their iron ore procurement mix  
Source: Industry, CRISIL Research*

**CRISIL Research’s ‘India Iron Ore and Steel Cost Curve’**

CRISIL Research has developed – ‘India Iron Ore and Steel Cost Curve’ – to help stakeholders understand the dynamics of Indian iron ore industry and its mill level impact.

The product offers possible scenarios that can influence steel players’ cost structure and helps monitor these on high frequency using state/ plant/ mine level iron ore assessment and analysing its likely impact on a steel plant’s cost structure for key technologies – basic oxygen furnace (BF-BOF) and electric arc furnace (EAF) players and regional-level induction furnace and EAF players.

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