

Methodology :
**Iron Ore Fines Export FOB
East Coast**

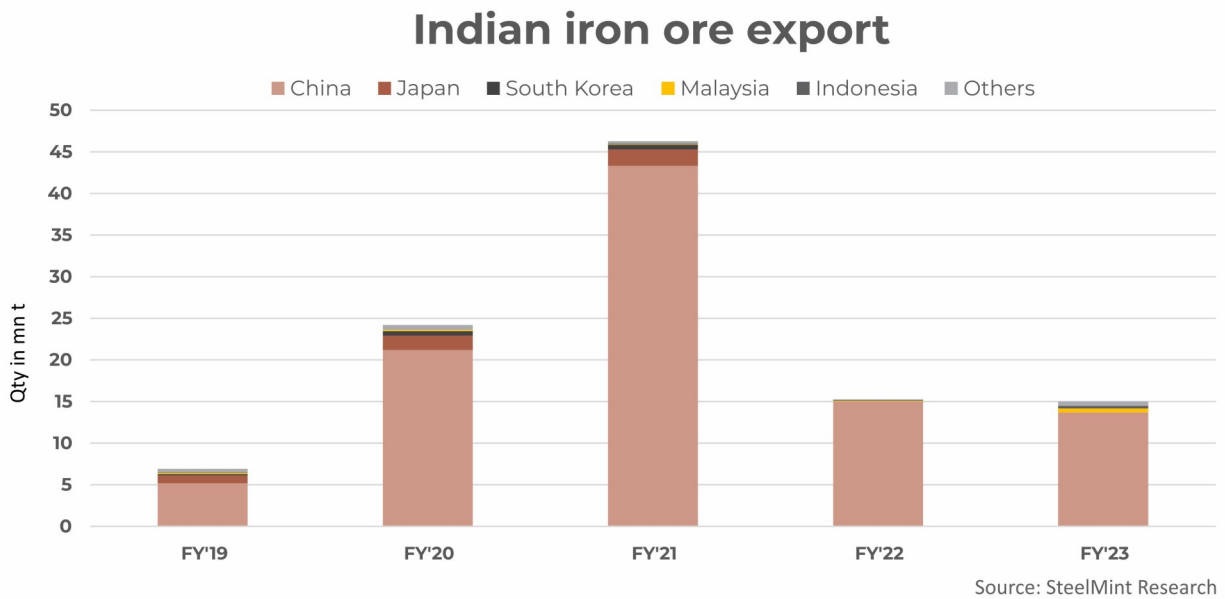
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Methodology : Iron Ore Fines Export FOB East Coast India

Introduction

India's iron ore export shipments were recorded at 15.01 million tonnes (mn t) in FY23, as per data maintained with SteelMint. The shipments inched down by 1.6% y-o-y compared to 15.25 mn t in FY22. China continued to remain the largest importer of Indian iron ore in FY23 at 13.7 mn t. Malaysia stood as the second-largest importer at 0.48 mn t followed by Indonesia at 0.32 mn t in FY23



Rungta Mines was the largest iron ore exporter in FY23 at 2.84 mn t, decreasing against 3.96 mn t in the previous financial year. Vedanta stood as the second-largest exporter at 2.24 mn t followed by Praful Enterprise at 2.20 mn t in FY23

Data collection

Our analysts contact the widest range of market participants, including all major iron ore producers and trading firms engaged in domestic trading. There is a continuous review of the credibility and timeliness of information provided by various market participants with unreliable information providers weeded out of the data collection process. Analysts reach out to contacts through a variety of means such as telephone calls, email and messenger platforms such as WhatsApp. Market participants are also encouraged to provide relevant trading information to Steelmint electronically or via a phone call.

Hierarchy of data

The highest importance in the price calculation process is assigned to confirmed deals where either a buyer or seller has provided details of the transaction. Deals of only reputed and trustworthy producers and trading firms are included in the price collection and calculation process. Confirmed bids and offers are also considered valuable for the pricing process. In periods when market activity is sluggish, analysts will poll market participants for indicative or tradable price levels for that day.

Transaction data threshold

Steelmint does not impose a minimum transaction threshold for arriving at an assessment as an arbitrary imposition of minimum market data may not truly reflect fundamentals due to the impact of seasonality on supply and demand conditions.

Frequency of assessments

The frequency varies with each assessment and is indicated against each. This has been derived after due deliberations with various stake holders and market participants. It is not sacrosanct and is subject to change based on market inputs as well as feedback from market participants.

Assessments

Country	Trade Type	Delivery Terms	Size, Grade & Chemical Composition	Min. Quantity (t)	Payment Terms	Delivery Period	Publication Frequency	Publication Date & Time
China	Import	CNF Qingdao	Fines Fe 57 %, Alumina 4.5-5.5 %, Silica 7-8%, P 0.07-.08%, S 0.05%	50,000	Against L/C	Within 45 Days	Weekly	Thursday at 18:30 IST
India	Export	FOB East Coast		50,000		Within 25-30 days	Weekly	Thursday at 18:30 IST

- Freight considered is on DMT basis

Price calculation method

Stage	Details
Data Collection	Based on the publishing date and time, data is collected prior to that from all market participants. The data is primarily collected through telephone calls, emails and messenger platforms such as WhatsApp etc.
	As per our Data Partner (DP) policy a broad mix of DPs from buyers, brokers, traders and manufacturers etc are approached so that the data collated gives us the correct picture of the market place.
	The export deals concluded above and below Fe 57 are not taken into consideration in the calculations considering the difference in prices for grade and involves normalisation as per grade.
	SteelMint's data collection for assessing export prices makes sure that all the prices and taken into consideration for east coast shipment only, and we do not consider south or west coast prices or deal in the calculation.
	Every effort is made to ensure that deals of only reputed and trustworthy producers and trading firms are included in the price development mechanism.
Data Arrangement	The collected data is subsequently arranged as per established hierarchies.
	Highest importance in the price calculation process is assigned to confirmed deals where either a buyer or seller has provided details of the transaction.
	Confirmed offers and bids as well are also considered valuable for the pricing process.
	In periods when market activity is sluggish, analysts will poll market participants for indicative or tradable price levels for that day.
	In case deals / offers are obtained which are on CNF terms, the same are converted to FOB terms by deducting freight charges.
	Deals / offers or prices obtained closer to the publishing date and time would be given preference over older deal(s) / offer(s), which may be discarded. Similarly deals with significantly large volumes or deals of major market participant vis a vis a smaller player would be given preference and the hierarchy would be established.
Normalisation	The normalisation would be carried out for four different categories of data i.e. confirmed transactions / deals, indicative prices, bids and offers.
	SteelMint then normalises the four groups of data based on the sample type, quantities and delivery & payment terms etc.
	If the normalised price of one submission in a group is significantly abnormal compared with the remaining post-normalisation group submissions, SteelMint will reconfirm the details of the sample.
	If the submission's data is incomplete, opaque, there is disagreement between the two parties to the transaction or the normalisation result significantly bias from market level, the submission sample will be removed.

Stage	Details
Data Outlier Elimination	SteelMint adopts 'standard deviation' approach to eliminate the outliers of data sets seen in price collection. The normalised values are collated and the mean value is determined.
	The values lying outside the Mean + Variance (upper limit) and Mean - Variance (lower limit) are discarded for the purpose of price discovery.
Price Finalisation	SteelMint uses volume weighted approach to arrive at final price index where the volume based deals are available in the data collated and that too in adequate number.
	Alternatively when volumes in a deal are not available a simple average calculation is done.
	In majority of the assessments the data is divided into two groups, group 1 being confirmed transaction and group 2 being offers, bids and indicative prices. The final price becomes average of each of the group averages.
	In case additional factors are considered for price discovery there could be group 3 or group 4 created and different weightage assigned to all the groups to derive the final price.
	During times of market stress, disruption or low market liquidity, SteelMint retains the right to use Expert Judgement where insufficient submissions have been received, including referring to other market information such as supply and demand fundamentals, and other factors that affect the iron ore price.
Example	For instance, we have data points - 101, 102, 110, 115 and 130. On computing standard deviation data point of 130 will be considered as outlier and hence will be removed from final index calculation. SteelMint shall compute index following similar methodology and concerned analyst shall have the final judgement of including/excluding a data set for computing final index.

Miscellaneous Aspects - All Assessments

Rationale publication

A rationale for the assessment which will include a summary of the type and number of data points considered for price calculation and reasons for exclusion of deals, if any, are published on the day of publication of prices to provide transparency to the assessment process.

Record keeping

Records of price sheets used in assessment, calculation, rationale and notes taken by reporters during the data collection and discussion process with contacts are stored securely in physical or electronic forms for a reasonable period of time.

Correction of assessments

Steelmint will publish corrections of assessments if an error has resulted due to faulty entry of data or an unintentional omission of data point in the price calculation process. However, prices will not be corrected or updated in any manner if new deals or bids/offers become available after the weekly timestamp.

Methodology review

The basic purpose of any pricing process is to accurately reflect market fundamentals and as such the methodology is open to review as market conditions and modes of trading and pricing contracts change. Noticeable changes in chemical specifications and price components of openly-traded fines and lump cargoes will also trigger a review in Steelmint's methodology. Once editors and the management decide to review the methodology, sufficient time will be provided to external stakeholders to comment on the proposed methodology changes via email or other appropriate communication tools. Any final change to the methodology will only be made after completing an external consultation process.

Similarly, any decision to add or cease an assessment will also be taken after due consultation with the external

Becoming a Data Submitter with SteelMint

SteelMint continually seeks to increase the number of market sources willing to take part in the price discovery process. The main condition is that contributors should be active participants in the market and have an in depth knowledge about market dynamics regarding that specific commodity.

SteelMint Data Partner Policy provides guidelines defining the high level of data quality and integrity that we expect from contributing organisation providing pricing data. Market participants that wish to provide pricing data and be part of the price discovery process should first read the Data Partner Policy. All data sources are subject to review before their data submitted is fully taken into account in the pricing process. If you want to become a data submitter / contributor to SteelMint pricing, or have questions or comments about the methodology and price specifications, please contact SteelMint's Audit and Compliance Officer at info@steelmint.com

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