

Global Barley



Methodology and price
specifications – March 2023

Mission statement

Fastmarkets is the leading commodity price reporting agency (PRA) covering the metals, mining, minerals, forest products and agriculture industries. Our products include Metal Bulletin, American Metal Market, RISI, FOEX, Random Lengths, AgriCensus, The Jacobsen and Industrial Minerals. For more than 100 years we have been providing commodities price reporting services for use by market participants in their day-to-day commercial activities. These services include assessments and indices of commodity prices as well as news, research and commentary on the underlying markets.

Our mission is to meet the market's data requirements honestly and independently, acting with integrity and care to ensure that the trust and confidence placed in the reliability of our pricing methodologies is maintained. We do not have a vested interest in the markets on which we report.

Introduction

Fastmarkets' reporters are required to abide by a code of conduct and clear pricing procedures during their market reporting and pricing activities. Fastmarkets is completely independent and has no vested commercial interest in any of the markets it prices.

We have the world's largest dedicated price reporting teams for metals, forest and agriculture products. We have offices in London, New York, Boston, San Francisco, Eugene, Charlottesville, Atlanta, Pittsburgh, Beijing, Shanghai, Hong Kong, Singapore, Melbourne, Sao Paolo, Mumbai, Brussels, Helsinki, Dnipro, Kyiv and Istanbul.

The aim of this document is to provide a clear overview of Fastmarkets' methodology and specifications for the prices it assesses.

If you have any questions, please contact Editorial Director for agriculture products Tim Worledge at tim.worledge@fastmarkets.com

Price discovery and methodology

Methodology rationale

Fastmarkets produces independent, fair and representative price assessments and indices of metals, forest and agriculture products prices on a daily, bi-weekly, weekly, monthly or quarterly basis. Fastmarkets' rationale for adopting the price-discovery process described in this methodology document is to produce consistent and representative indicators of value for specific markets over defined trading periods.

For agriculture products, Fastmarkets methodologies are designed to provide a fair end-of-day value for the underlying market they relate to. The published price reflects the price of a given product at a given time rather than a price range encompassing all trade done throughout the day.

While each market has its own individual characteristics, Fastmarkets Agriculture adheres to a set of key principles when assessing markets:

- To timestamp its prices;
- To ensure robust verification processes are followed to determine the quality of data;
- To normalize non-standard market data using six key criteria; and
- To evaluate whether the price information received is repeatable.

Timestamped prices

Fastmarkets Agriculture's barley assessments are timestamped daily at 4pm Kyiv(Ukraine) time and represent the fair value of the market at that time.

Fastmarkets canvasses market participants from across the market throughout the day to collect key pricing information.

These include bids, offers, confirmed trade levels, tender or other contract details, pricing information from related or similar products, freight information and costs, derivative or exchange-listed contracts and government information.

All input data is incorporated in the pricing process, with the most relevant bid, offer or trade information shared in pricing rationales and daily commentaries as part of the final publication process.

Fastmarkets aims to understand and highlight the factors

that underpin price movement and gather a compelling weight of evidence around the end-of-day price.

Data contribution

Fastmarkets reporters aim to collect data from a broad sample of market participants specifically involved in the buying and selling of vegoils, with a good representation of both sides of the market, including producers and consumers, as well as traders and brokers.

Data is collected from industry participants directly involved in the relevant market primarily by telephone but also by email, digital messaging or by direct submission. All data supplied to Fastmarkets is kept confidential and stored in our secure online pricing database system MInD (Market Information Database). Fastmarkets may sign a Data Submitter Agreement (DSA) with any data provider, if requested to do so, to maximize the number of data points collected for inclusion in the assessment process. Any data received subject to a DSA will be used in the pricing assessment but will not be commented on.

Market participants may contribute data following a review by Fastmarkets of their activities. The aim is to ensure that submitters have sufficient visibility and understanding of the market in question to be able to provide reliable price data. We expect that data submitters taking part in the pricing process are authorized to report market data on behalf of their organizations.

Fastmarkets encourages organizations to submit all their pricing data, especially all the concluded transactions. Fastmarkets also welcomes organizations to submit transaction data from authorized back-office functions.

Fastmarkets' Data Submitter Policy provides guidelines to ensure the high level of data quality and integrity we expect from contributing organizations providing pricing data. The policy can be found on Fastmarkets' website or is available on request.

Price specifications and reference units

Fastmarkets has clear specifications for all the price points that it covers. All the reference units, such as currency and volume, are in line with the trading conventions used in the recognized agriculture, metals and forest products markets.

Fastmarkets' specifications detail the material's characteristics or quality, location of delivery or loading port, incoterm, payment terms, laycan and the minimum volume accepted. Specifications should reflect typically traded grades. These specifications are determined in consultation with market participants and follow industry convention. Reporters ensure that the information they receive meet these specifications. Any data that does not fall within the stated ranges of the specification will not be eligible for consideration in the assessment.

Data analysis and producing the price assessment

Establishing a data hierarchy

Fastmarkets Agriculture seeks price information that is open and transparent in the marketplace. Price information that does not meet these criteria - such as private and confidential trades - will not be taken into account, unless provided under a DSA.

Generally, there are three levels of hierarchy of information:

1. Verified physical bids and offers at the close - these take precedence over any other pricing information and this information must be firm for a reasonable amount of time to be seen widely in the marketplace. What constitutes a reasonable amount of time is at the discretion of the market reporter.
2. In the absence of physical bids and offers for the exact product assessed, firm bids and offers for related products will be used to extrapolate value for the price assessments. Such related products could be the same commodity, but for a different delivery or loading location, different specification or indications for alternative volumes.
3. On the rare occasions where there are no physical indications at the close in either the assessed product

or a related product, Fastmarkets Agriculture will move the commodity in line with the delta movement of the closest exchange-traded contract to maintain the basis differential or use movements in other physical markets should they be more relevant.

Normalization

Fastmarkets reserves the right to normalize collected physical price indications or trades that differ to the standard and specifications stated in its methodologies.

Timing of price information

Fastmarkets Agriculture sets prices based on data that are the most relevant to determine end-of-day market values. However, in the absence of any firm bids, offers or trades, Fastmarkets reserves the right to normalize earlier price indications received throughout the day to the closing time by anchoring those price indications to more liquid contracts, such as those traded on exchange or other physical cash assessments.

Laycan

Fastmarkets defines the physical delivery or loading period that underpins each price assessment. In all cases, the laycan reflects a reasonable timeframe and is intended to prevent assessments being skewed by consideration of distressed or deferred cargoes.

In the absence of firm indications for the delivery or loading period of its agriculture assessments, Fastmarkets reserves the right to imply future value from forward curves of related products.

Typically, spot cargo assessments are for the first full calendar month on publication dates for 1-15 of each month and for the second full calendar month for publication dates from 16 to the end of the month. So, on December 15, the spot cargo assessment will reflect January shipment and on December 16, it will reflect February shipment.

For barges, the spot assessment refers to the next full calendar month, regardless of publication date.

Specification

Fastmarkets reserves the right to normalize firm, verified bids, offers or trades it receives for relevant, related products of a different specification to determine value for the primary assessment. Fastmarkets will canvass the market to determine the exact normalization factor for each product.

Quantity

Fastmarkets will consider a range of physical pricing

information when making its assessment. In all cases, indications that align with the defined basis quantity will be directly considered in the end-of-day assessment.

Fastmarkets reserves the right to normalize firm bids and offers it receives for cargoes that are of a larger or smaller size than the assessment to determine fair value. Fastmarkets will canvass the market to determine the normalization factor to be used and will publish that factor as part of its assessment process.

Incoterms, location and loading port

In all cases, Fastmarkets defines both the incoterms, such as fob, that indications used in the final assessment should conform to. The base delivery or loading location will also be defined as part of the assessment methodology.

Fastmarkets reserves the right to normalize incoterms or delivery ports that differ from the base methodology using freight differentials or transportation costs. Fastmarkets will canvass the market to determine the normalization factor to be used and will publish that factor as part of its service.

Minimum data threshold

Since commodity markets differ in liquidity levels at different periods, the methodology does not set any minimum number, or threshold, of transactions to be gathered on which to base the assessment.

In each pricing session, reporters aim to source data from a suitably diverse set of market participants. In the unlikely situation that more than half of the pricing data collected in a session is provided by a single source, the assessor may refer to data collected in the previous pricing session to avoid a dependency on a single entity providing an unacceptably significant (50% or more) proportion of data. In markets where, to satisfy their jurisdictional antitrust guidelines, certain companies require us to adhere to a maximum of 25% data concentration from a single entity, Fastmarkets will comply with this stricter threshold.

Criteria for discarding pricing data and the removal of outliers

Fastmarkets price assessments are intended to reflect the 'open and competitive' market level. Reporters therefore may apply expert judgment to exclude data deemed unrepresentative, questionable, or unreliable prior to consideration in the final assessment.

Fastmarkets takes all data into account when compiling an assessment. Where market data is conflicting,

reporters will apply a test of repeatability to determine whether a trade that has been executed in the day is repeatable. In this case, firm bids and offers take priority over previous trades executed as that trade is deemed no longer repeatable. Where two trades for the same volume are executed at the same time for the same loading/delivery ports and with the same specification but at different price levels, Fastmarkets will determine which one is more repeatable by examining outstanding bids and offers that match the time of the trades.

Data that falls outside of the respective assessment specifications, or which cannot be normalized to a base specification with sufficient confidence, is also discarded. Decisions to discard data points are recorded in the form of a written rationale in our internal pricing database, where they are reviewed and approved under the two-tier peer review process.

Data may be discarded as outliers based on the identification of external factors that may be distorting the price. Price-affecting side terms, inconsistencies in information reported, or suspected motivation to unfairly influence the price discovery process would typically be grounds for removal of data, as would activity not considered to have taken place at 'arm's length'. Outliers will be investigated; more detail may be requested to determine possible reasons behind an anomalous price, and efforts will be made to identify the counterparty to cross-verify information. Suspected attempts to influence the assessment unfairly may result in the data provider being warned or excluded.

Fastmarkets reserves the right to see contracts and signed paperwork before inclusion of the data in the assessment. If this is refused, the data supplied may be excluded from the assessment process.

Verification

Fastmarkets aims to bring transparency to the markets through an open approach to assessing markets. It makes every effort to verify credible information it receives with the broader marketplace through individual communication via email, instant messenger, app-based services and telephone.

However, Fastmarkets recognizes the challenges of verifying information individually and undertakes to publish such information through electronic means to as wide an audience as possible to allow market participants to challenge the authenticity of this information prior to the publication of the assessment. Such price alerts may be published online via the relevant Fastmarkets website, or through email, instant messenger, or social media.

Data publication

Peer review process

All Fastmarkets' price assessments are set by a first reporter who covers that specific market, peer reviewed by a second reporter, and always signed-off and approved by a senior reporter or editor prior to publication. This peer review process, which takes place in Fastmarkets' MInD system and is fully auditable, is in place to make sure that pricing procedures and methodologies are correctly and consistently applied and to ensure integrity and quality of the published prices. Relevant information, including all price inputs and editorial judgements, are securely retained in MInD for at least five years to maintain a full audit trail. Price reporters are formally trained in the price discovery process and must abide by a written Code of Conduct and Pricing Procedures.

For certain prices Fastmarkets also publishes pricing rationales to explain the assessment, describing why a particular price or range was determined based on the market information collected. These notes explain for instance whether any data has been excluded and why, information on the data collected and whether fallback procedures have been applied.

Publication

At the end of the peer review process, Fastmarkets publishes its price assessments via MInD and on the Fastmarkets Dashboard and on product-specific websites such as Agricensus.

Most Fastmarkets assessments (aside from a small number of single-figure assessments) are quoted as ranges reflecting Fastmarkets' evaluation of the market's prevailing tradeable level over the observation window. Fastmarkets' vegoil assessments are published as a single figure.

To enhance market transparency and to provide evidence of data inputs that support the price discovery process, Fastmarkets may publish trade logs in accordance with industry demand (while maintaining full counterparty confidentiality) detailing pricing data and volumes received from data contributors.

Fastmarkets' price assessments are published at the time and frequency stated under each individual specification. The pricing schedules vary according to markets and locations in which they are assessed.

For more details on the pricing holiday calendar and alternative pricing dates for each assessment or index,

refer to Fastmarkets' Pricing Holidays schedule on Fastmarkets.com or on the Agricensus [website](#).

See the publishing schedule for all agriculture products [here](#).

Corrections and delays

If an assessment is published incorrectly, it will be rectified and republished as soon as possible. A pricing notice explaining the reasons for the correction will also be published promptly.

Fastmarkets uses several procedures and measures to avoid delays in the publication of its assessments. In the event of a delay, however, Fastmarkets will inform subscribers as soon as possible.

In the event of late publication, only data that has been received within the correct standard timeframe will be included in the assessment. No assessment will be amended due to the emergence of new data or market activity after the initial publication. Retrospective changes to the published values will only be made in cases of technical, administrative or interpretation error in line with Fastmarkets' Correction Policy.

Methodology and price specification review process

Methodology review and pricing notices

Fastmarkets aims to continually develop and periodically review its methodologies in consultation with industry participants, with the objective to adopt product specifications, trading terms and conditions that reflect and are representative of typical working practices in the industries it serves.

Fastmarkets carries out a formal review and approval of its methodology and price specifications on an annual basis. The process is initiated by Fastmarkets publishing on its website an open consultation at least one month (or around 20 working days) before the annual methodology review is due, inviting market feedback over the duration of that period. The timeframe for the consultation and method of submission are both clearly stated.

Following a review of market participants' feedback, comments and suggestions, Fastmarkets concludes the consultation by publishing a notice stating whether or not any methodology changes are proposed. If suggested, changes are classified either as 'material' or 'immaterial'. Material changes are those that, once implemented, may result in fundamental changes to the published price. These include specification changes or structural changes to assessments. Immaterial changes are those that will not result in a different price level once they are implemented.

If a material change to the methodology is required, Fastmarkets includes in its pricing notice: the outline of the proposed change; the rationale or motivation for proposing such a change; and a proposed timetable for the date on which, if the change goes ahead, it would be implemented. If received feedback is considered insufficient to support a material change, Fastmarkets publishes a new notice extending the consultation and inviting comments on the new proposal.

All comments received from the market are assumed to be confidential and are treated as such unless stated otherwise.

When Fastmarkets proposes a change to the methodology, it should be understood that no decision has yet been made and that the proposal to make a change should not automatically be understood as confirmation that the change will happen.

For prices subject to EU Benchmark Regulation (BMR), any change to the methodology requires approval from the Managing Director of our benchmark administrator, Fastmarkets Benchmark Administration Oy.

Outside of the formal methodology review process, editors may from time to time suggest changes or additions to reflect market developments. As with the formal review, changes to the existing methodology will either be classed as 'material' or 'immaterial'. The process for implementing the change will be the same as outlined above for formal reviews. The minimum duration of one month (or around 20 working days) for the consultation process normally provides market participants sufficient opportunity to analyze and comment on the impact of the proposed change.

For more details on the formal review of the methodology and the consultation process to propose changes to the methodology, refer to Fastmarkets' Methodology Review and Change Consultation Process available on the Fastmarkets website on the Methodology and Compliance section.

Queries and complaints

Fastmarkets encourages engagement from the market on its pricing principles and methodology. The company promotes understanding of its pricing procedures and is committed to responding to requests for further information and clarification on a timely basis.

There are multiple channels for interaction with the pricing team including email, telephone and instant messenger services.

If a subscriber has an issue with the published prices, then they may contact the pricing team. In the event that the response is not satisfactory the issue may be escalated to the internal compliance department. For more details refer to Fastmarkets' Complaint Handling Policy available on Fastmarkets' website.

Fastmarkets takes all queries and complaints seriously and will seek to provide an explanation of the prices wherever possible. It is important to note, however, that input data remain confidential and cannot be provided to third parties.

Become a contributor to the price discovery process

Fastmarkets continually seeks to increase the number of market sources willing to take part in the price discovery process. The main condition Fastmarkets requires from contributors is for them to be active participants in the relevant market being priced.

Fastmarkets' Data Submitter Policy provides guidelines defining the high level of data quality and integrity that Fastmarkets expects from contributing organizations providing pricing data. Market participants that wish to provide pricing data and be part of the price discovery process should first read the Data Submitter Policy available on the Fastmarkets website. The Policy is communicated to all data submitters at least on an annual basis.

All data sources are subject to review before their data submitted is fully taken into account in the pricing process. Our Contributor Approval Policy (CAP) requires this review or probation period to last no more than three months. The aim is to make sure that submitters are trustworthy and have sufficient visibility and understanding of the market to be able to provide viable price data.

Price specifications

CABSP2

Barley FOB Australia Feed \$/mt
Quality: Australian origin barley. Maximum moisture 12.5%, F1
Quantity: 25,000-40,000 mt
Location: Western Australia, Kwinana, Geraldton, Albany and Esperance
Timing: Shipment is the next loading month from the assessment day for the first 15 days of the month, with the laycan rolling to the second calendar month on the 16th of each month
Unit: \$/mt
Payment terms: Irrevocable LC at sight
Publication: Daily, timestamped 4pm Kyiv time

CABSP1

Barley FOB Russia Feed \$/mt
Quality: Russian origin barley. Maximum moisture 14.5%, GOST 28672-90
Quantity: 25,000-40,000 mt
Location: Russia BS, Novorossiysk, Taman, Tuapse, Kavkaz
Timing: Shipment is the next loading month from the assessment day for the first 15 days of the month, with the laycan rolling to the second calendar month on the 16th of each month
Unit: \$/mt
Publication: Daily, timestamped 4pm Kyiv time

CABSP7

Barley FOB Ukraine Feed \$/mt
Quality: Ukrainian origin barley. Test weight minimum 62 kg/hl, moisture maximum 14%, foreign material maximum 2%
Quantity: 25,000-50,000 mt
Location: Ukraine, Pivdennyi, Odesa, Chornomorsk
Timing: Shipment is the next loading month from the assessment day for the first 15 days of the month, with the laycan rolling to the second calendar month on the 16th of each month
Unit: \$/mt
Timing: Daily, 4pm Kyiv time

CABSP10

Barley FOB Germany Feed \$/mt
Quality: German origin barley. Test weight minimum 62 kg/hl, moisture maximum 14%, foreign material maximum 2%
Quantity: 30,000-60,000 mt
Location: Germany, Hamburg, Rostock
Timing: Shipment is the next loading month from the assessment day for the first 15 days of the month, with the laycan rolling to the second calendar month on the 16th of each month
Unit: \$/mt
Timing: Daily, 4pm London time

CABSP11

Barley FOB Germany Feed Premium €/mt
Quality: German origin barley. Test weight minimum 62 kg/hl, moisture maximum 14%, foreign material maximum 2%
Quantity: 30,000-60,000 mt
Location: Germany, Hamburg, Rostock
Timing: Shipment is the next loading month from the assessment day for the first 15 days of the month, with the laycan rolling to the second calendar month on the 16th of each month
Currency/Unit: €/mt
Timing: Daily, 4pm London time

CABSP9

Barley FOB France Feed Premium €/mt
Quality: French origin barley. Test weight minimum 62 kg/hl, moisture maximum 14%, foreign material maximum 2%
Quantity: 25,000-50,000 mt
Location: France, Rouen
Timing: Shipment is the next loading month from the assessment day for the first 15 days of the month, with the laycan rolling to the second calendar month on the 16th of each month
Unit: €/mt
Timing: Daily, 4pm London time

CABSP8**Barley FOB France Feed \$/mt**

Quality:	French origin barley. Test weight minimum 62 kg/hl, moisture maximum 14%, foreign material maximum 2%
Quantity:	25,000-50,000 mt
Location:	France, Rouen
Timing:	Shipment is the next loading month from the assessment day for the first 15 days of the month, with the laycan rolling to the second calendar month on the 16th of each month
Unit:	\$/mt
Timing:	Daily, 4pm London time

CABSP6**Barley FOB Argentina Feed \$/mt**

Quality:	Argentinian origin barley. Test weight minimum 62 kg/hl, moisture maximum 14%, foreign material maximum 2%
Quantity:	25,000-50,000 mt
Location:	Argentina, Bahia Blanca, Necochea
Timing:	Shipment is the next loading month from the assessment day for the first 15 days of the month, with the laycan rolling to the second calendar month on the 16th of each month
Unit:	\$/mt
Timing:	Daily, 1pm NY time

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