

Price reporting methodology:

BY-PRODUCTS MARKET

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Introduction

Expana's goal is to provide timely, accurate and unbiased price assessments and market information to clients which are reliable indicators of market values, free from distortion and representative of the market that they relate to. This is an explanation of methods used by Expana to gather, evaluate and report market activity. This explanation will include necessary background information to provide a clear understanding of how Expana market quotations are established.

Timeframes of information collection

While trading information can be submitted to Expana reporting staff at any time, Expana's market reporting staff is actively soliciting information from approximately 8:45 a.m. to 5:00 p.m. E.S.T. or E.D.T., every business day, except as stated in individual methodology documents including imported beef and imported seafood items.

Publication dates

Expana publishes price quotations across a variety of commodities. Information on specific publication dates are included on market-specific methodology documents.

Establishment of quotations

Reporters start gathering information for their next report immediately after filing the closing quotations for the reporting period.

Information is collected via numerous channels including phone interviews, face-to-face meetings, email, instant messaging platforms, fax, and online through Expana's website. Submitters of market data are encouraged to provide transactional data from back office functions and to provide all of their market data that falls within Expana's criteria for the markets covered. Reporters contact stakeholders throughout the value chain, including processors, retailers, wholesalers, distributors, exporters, importers, traders, and brokers to keep current on present price levels and market conditions.

Information collected includes when a transaction was initiated, what products have been traded, what levels are being bid on each product, who is bidding or offering at said level, when the product will ship, and how the product is packed. Expana's market sources and information submitted remains confidential.

Expana follows a hierarchy of priority when establishing quotes based on information gathered as follows:

- *bona fide* trades
- offers and bids
- additional market information, including trading relationships to related items
- market participant assessments and indications of prevailing values

If higher bids or lower offerings come into the market after the last recorded trades, the final price assessment may be adjusted accordingly if the reporter finds sufficient justification for such an action. Offering prices cannot be used to move prices upward, nor can bid prices be used to move prices downward.

Expana takes care to be sure transactional data is *bona fide*, which indicates the transaction be either completed or prepared to be completed between two parties not influenced by a conflict of interest. Expana's reporters make it their goal to clearly identify factors and circumstances surrounding reported trade and will use available information and methods in their price assessment. The forthrightness of reports can be tested using other participants as a check and balance system.

Some transactions may receive additional scrutiny from market reporters to ensure that their inclusion in the final price assessment results in a quote that is a reliable indicator of commodity market values. Such transactions that can receive additional scrutiny include packaged transactions where it appears the price of one item is affecting the price of other items in the transaction; trades that occur as a transfer within the same company; transactions comprised of multiple deliveries where the entire delivery period does not fall into the stated guidelines reflected in the market report; conflicting or inconsistent information by the counterparty; transactions where buyers and sellers fail to act in a logical manner; transactional data that is significantly different from other data collected during that time period.

Market reporters

To ensure that a high quality is maintained in Expana's price assessments and market commentary, market reporters undergo rigorous training before they are eligible to engage with sources to collect information and develop Expana's proprietary price assessments. Rookie market reporters, called "market researchers" work closely under veteran market reporters and editors to become familiar with the methodologies listed here, supply and demand dynamics associated with the markets that they cover, and the parties submitting market information. For each market that Expana covers, there are multiple market reporters who are trained to conduct price assessments and commentary. Adherence to these reporting methodologies, oversight by senior reporters and editors and continued education across the market reporting staff results in consistency of price assessments across assessors reporting the same market.

Expana's reporters are trained to utilize judgment when gathering and reporting data. Judgment can be exercised during periods including but not limited to those where limited negotiations, low liquidity in the market, or anomalous transactions could otherwise lead to inaccurate or erroneous price reporting.

Acceptable products and market conditions

For a transaction to be considered for assessment, certain criteria must be met. With exceptions noted in market-specific documentation, product must:

- meet standard specifications for the industry unless otherwise indicated
- be in acceptable condition
- not be distressed, or offered or bought under distressed conditions
- be delivered in a timeframe considered standard for the market

Only trades and trading information from participants who are free to conduct business with a variety of market participants are acceptable. When trade that is or could be construed as a transfer between an individual company's divisions or departments occurs, it falls to a reporter's judgment to determine if the transaction is repeatable on the open market. Based upon this judgment, such transactions may or may not be considered in the final determination of Expana's quotes.

The volume basis for Expana's quotations varies and is generally the standard commercial quantity for a given item. These units are outlined in market-specific methodology documents.

Most of Expana's market quotations reflect spot negotiations and exceptions are indicated in market-specific methodology documents. Contractual or market-related transactions are not used in the final quote determination but rather as indicators of need and ability to sell at a predetermined level.

There is no minimum quota for the volume of transactional data needed to establish a market quotation, but rather a requirement for a preponderance of evidence that the bulk of trade is occurring at the new price. Where a small number of participants represent a significant percentage of the periods transactional data, market reporters will collaborate with senior reporting staff and/or editors to ensure the assessment for that period accurately reflects the market, otherwise the quotation can be paused or unquoted until transactional data from more participants becomes available.

Unquoted market listings

In some markets where trading is in limited volume, stagnant, or infrequent, an item may become unquoted. Unquoted markets in no way reflect prices moving higher or lower, but merely indicate that a closing price could not be determined.

In other cases, such as those markets that are ordinarily active on a seasonal basis, the last recorded trading information will persist in publication until trade resumes and new information becomes available.

Detailed information on situations where markets may become unquoted are available in market-specific methodology documents.

Changes to reporting methodology

Expana will provide advanced notice of potential changes in reporting methodologies and subscribers will be provided the opportunity to provide feedback during a comment period of at least 14 days. After reviewing client feedback Expana will enact the changes typically within no more than 30 days of the closing of the comment period or take a different action based on customer feedback. Subscribers comments and Expana's response to those comments will be published unless where the commenter has requested confidentiality.

Review of methodologies

Expana's Management, in consultation with clients from affected areas of the value chain, will review and evaluate current and proposed market reporting procedures and methodologies with the purpose of making recommendations on the following:

- A) To assess effectiveness, integrity and independence of the Expana methodologies used to establish quotations so that they best communicate the commodity values they are designed to reflect.
- B) To guide quality improvement of Expana market information and give guidance in developing implementation tactics or strategy.
- C) To ensure reporting methodology remains compliant with existing laws.
- D) To assess the effectiveness of suggested changes to quotations and/or other Expana benchmarks.

Market specific definitions, terms, and methodologies

Market coverage on by-products reflects wholesale negotiated trading activity on US-produced feather meal and red meat by-products for distribution through US domestic and export channels.

Acceptable origins

Category	Point of Origin
By-products	United States

Quotation period

Quotations are released twice a day; at 12:00 PM Eastern Time and 4:00 PM Eastern Time. The closing report released at 4:00 PM Eastern Time includes the trading information collected for both the morning and afternoon. Information collected after the closing report can be considered in the following day's market assessment.

Quotation format

Unit(s) of Measure for Quotation:

The following are the most commonly used units for price negotiation in this market and are the units of measurement reflected in the quote series for red meat by-products.

- Tallows and greases: \$/cwt.
- Dried Rendered Tankage \$/unit of protein/ton
- Proteins: \$/ton
- Packer Hides: \$/cwt.

Expana's by-products quotation series reflects trucklot or (truckload) quantities of material which is defined as lots of 40,000 pounds. Transactions involving rail car shipments (quantities up to 120,000 lbs.), are acceptable and can also be used in the assessment process.

The range of values reflected in a market assessment depends on the variance of market data collected during the reporting period. Where the market trades at a level and is also offered lower or bid higher during the reporting period, Expana will exercise professional judgment to determine how bids and offers may be reflected in the final quotation.

The quotation can continue to be published unchanged while evidence supports a steady market trend. When information suggests that the market has moved from the last quote, but new and/or reliable market data has not surfaced to reflect a new market value, the quotation will be removed from the sheet until a new quote can be established.

Terminology

Certain quotations may be appended by suffixes or other marks. These are as follows:

Term	Significance
A suffix of "ax"	New negotiations have not occurred, but the market is moving lower on the basis of bona fide asking prices.
A suffix of "b"	New negotiations have not occurred, but the market is advancing on bona fide bids.
A suffix of "r"	The quotation was previously unquoted and has been re-instated.
A suffix of "!"	Indicates that a correction has been made on this item.

Delivery basis

The Midwest River (Missouri River) area is a major meat production area in the central U.S. and, as such, is used as a basis (basing point) for many price quotes in the red meat report, including many by product items. If shipment is made by a producer located outside the river area, Expana normalizes the trade to an FOB River basis by taking the delivered price and deducting a standard freight rate back to the river, as though shipment had been made from there. If shipment is from one point in the river area to another, market reporters deduct standard freight charges to adjust the price from C.A.F. to River basis. Certain items are also quoted on a C.A.F. Chicago and surrounding areas basis as this is a major delivery point for Oleo Chemical sector. Export items are quoted at Gulf Ports, which is a major port of departure for by-products being exported to other countries.

Delivery period

In order to be considered for inclusion in the final market assessment, delivery must be executed within 21 days from date of negotiation to be considered a spot transaction for domestically delivered material or be shipped within 21 days for an export transaction.

Product specifications

<i>Product name</i>	<i>Specifications</i>
DRT	Dried Rendered Tankage



Contact us

For more information on Expana's market quotations,
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