LME Insight

SETTING THE GLOBAL STANDARD

The role of premiums and discounts in pricing of industrial metals contracts

In the previous LME Insight we looked at how and why metal prices discovered on the London Metal Exchange (LME) are referenced in physical contracts all along the value chain. In this piece we consider another element in the pricing and sourcing of industrial metals: “premiums” and “discounts” (and associated “basis risk”). If you are relatively new to risk-management, then this piece is for you.

Why do premiums and discounts exist in metals markets?

Premiums and discounts are the difference a buyer will pay for metal compared to the global reference price. They are negotiated in order to account for the specific characteristics of what metal is being delivered and where.

They exist in metals markets because the global reference price, discovered on the LME, is based on a standardised metal grade and shape. Deviations from this standard of metal need to be reflected in the final price that is paid in the physical market. When negotiating the price of a contract to take delivery of physical metal, buyers and sellers will usually start by referencing the LME price for the underlying material and then negotiate discounts and premiums based on the various factors affecting delivery as well as the type (brand, shape or quality) of metal being bought or sold.

A bit like buying and selling a house. You start with an underlying price based on the overall level of the housing market at that moment in time (in metals this is the LME reference price) then the buyer and seller may negotiate the price up or down based on a number of key factors like:

- the area the house is located in (regional factors of taking delivery of metal)
- whether the house needs renovation work (grade of metal and refinement stage)
- if the buyer needs to wait for the house to be built or if it is ready to move into straight away (availability of metal).

Once these, plus other relevant factors, have been negotiated, the buyer and seller end up with an “all-in” price - the base price adjusted for all the premiums and discounts.

Basis risk

As we have seen, the non-ferrous metals market will negotiate a price that includes 1) a base reference price and 2) a premium or discount portion. And while hedging the base reference price portion on the LME is relatively straightforward, not all of the premium or discount portion can be hedged. The

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"unhedegable" portion is called basis risk. Depending on what factors contribute to the all-in price and on which of these can be risk-managed (with the financial tools currently available), there is an impact on how much basis risk the buyer and seller may take on (see fig 1).

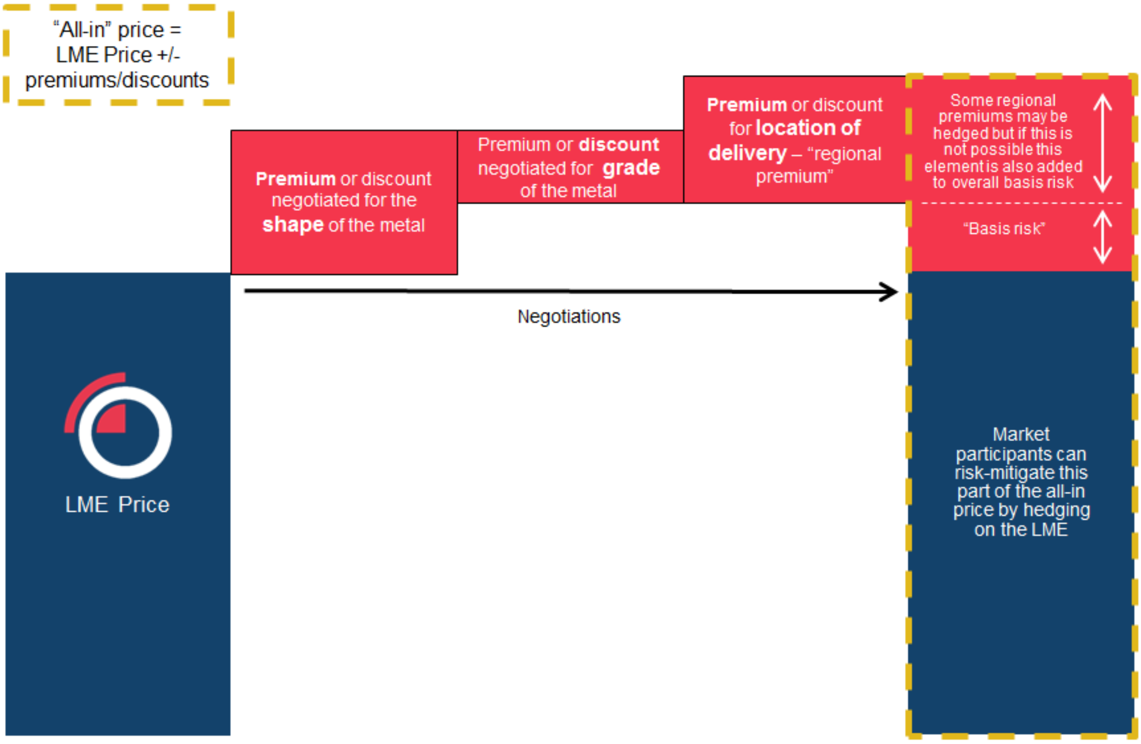

Fig 1. The "all-in" price is comprised of the underlying metals LME reference price plus or minus negotiations based on various factors including location, grade, shape and so on.

What factors might affect the premium/discounts negotiations?

There are a number of factors that are considered during the negotiation of a metal contract that will lead to premiums and discount. These include, but are not limited to:

- metal specifications, grade and impurities
- cost, insurance and freight, based on the location the metal is being shipped from/to
- currency conversion, usually based on a specified foreign exchange index agreed by both parties
- refinement stage of the material: usually ores, concentrates, semi-refined products and scrap attract a discount, while more finished products (compared to the LME specifications) achieve a premium
- shipment month flexibility – consumers may opt to pay for added flexibility on when they choose to take delivery of the material depending on market conditions. This tends to be more frequent in contracts for metal concentrates.

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A simplified typical transaction for LME-grade copper in Europe could be priced along these lines:

Delivery-month average of the LME Official Settlement Price for copper	+	Producer / regional premiums	×	GBP/EUR (Bloomberg fix 13:00 UK time)	=	All in price	×	Actual weight

Some markets announce premiums once a year during "mating season" – the period between LME Week in autumn and the New Year (e.g. copper producer premiums), whilst other industries negotiate once every three months (e.g. aluminium Japanese premiums). Market participants can often directly reference premium prices from price reporting agency (PRAs) who themselves survey a broad sample of both buyers and sellers of metal to come up with an independent price index for the market.

In the copper market, where producers may offer fixed annual premiums, the annual premium may be priced higher than a day-to-day premium, given the higher price-risk exposure of the producer offering an annual fixed price. In times of copper oversupply, when premiums may be expected to decrease, customers will typically buy 20-30% of the physical metal they need on an annual basis and over 75% in times of undersupply when premiums are at risk of moving higher.

Where does a "regional premium" price come from?

The non-ferrous metals industry has evolved to carefully risk-manage most aspects of a physical contract by splitting out the elements that create the all-in price. For example, the underlying metal's reference price can be hedged on the LME or over the counter (OTC). This differs to the steel industry which still heavily relies on bilateral negotiations of an all-in price for a specific product and inclusive of all fees, premiums, discounts, allowances for VAT and other charges. These bilateral negotiations are often informed by referencing index prices for very specific material types published by PRAs.

For some non-ferrous metals, the regional part of a premium, i.e. where the buyer wants to take delivery, has evolved into a market that is traded daily. Regional premium price levels are often agreed during bilateral physical contract negotiations, often referencing or contributing to a PRA premium benchmark.

Pricing of regional premiums can be affected by a number of factors relating specifically to the region in question ranging from: geopolitics and the weather through to insurance and freight-rate fluctuations. In 2005 for example, hurricane Katrina effectively reduced the regional premium for zinc in New Orleans to $0 overnight thanks to difficulties in getting metal out of New Orleans as well as the metal becoming contaminated.

Politics and local policy also play a role. Currently the global aluminium market is responding to President Trump's update to the US Department of Commerce's Section 232 policy - where a 10% tariff will now be applied to US aluminium imports – by pricing this in to the regional premium. The effects of this are complicated by the fact that certain countries and trading blocs are exempt from paying the tariffs.

Risk-managing your regional aluminium premium exposure

As part of the LME Strategic Pathway, and to complement our existing suite of physically-settled aluminium premium products, the LME is looking to launch a number of cash-settled contracts allowing market participants to hedge and trade the regional premium part of the all-in aluminium price. On-exchange contracts have the added benefit of transparency and liquidity.

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Supporting market evolution and management of basis risk

In some markets the basis risk between stages of production and the historical reference price has increased to levels where the benefits of hedging may be outweighed by the remaining basis-risk exposure. An example of this is the alumina market, which has been slowly moving away from pricing alumina basis the LME's primary aluminium price. To support companies along the alumina value chain, the LME is planning to launch a cash-settled alumina contract. This will allow producers, consumers and traders of alumina to hedge their exposure with minimal residual exposure to basis risk.

The steel industry is facing a similar problem. There has never been a globally accepted central reference price for all steel products. However, the market is evolving and employing more hedging strategies thus requiring more financial instruments to do so. To complement the success of the LME Steel Scrap and LME Rebar and of iron ore contracts on other exchanges - including the Q4 2017 launch of a iron ore future contract on HKEX - the LME has announced a suite of hot rolled coil (HRC) contracts to allow companies in the flat steel value chain to hedge the bulk of their price risk exposure.

Premiums have evolved to reflect the physical nature of metals markets. The way in which they are discovered and used varies between different metals markets based on how participants wish to mitigate their price risk. For more information on premiums, discounts and managing basis risk, please contact the Sales team.

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