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The "Game of Spreads" — Part 3

Unusually wide gaps between various steel mill prices and their raw materials cost.

Usually, there's a widening of "spreads" in the global steel business during steel shortage conditions. These widened spreads, in fact, contain the price/cost relationships that have created the current steel mills' "Golden Profit Age."

In previous Strategic Insight reports, titled "The Game of Spreads: Part 1 and Part 2," WSD examined the price spreads since 2010 for:

- 1. The Chinese home market steel price versus the iron ore plus coking coal cost.
- 2. Turkey rebar export price versus Turkey HMS 1 and 2 80/20 import scrap price.
- 3. The U.S. hot-rolled band (HRB) price versus the shredded steel scrap price for Part 1.
- 4. U.S. hot-rolled band price versus Chinese steel mill ex-works HRB price.
- 5. The HRB export price versus the iron ore and coking coal cost per metric ton.
- 6. The China HRB price versus the TSI Iron Ore price delivered to China for Part 2.

This report presents three more relationships:

- Spread 1: U.S. HRB versus Western Europe HRB spot price. The price of U.S. HRBis currently about US\$2,124/metric ton, with the Western Europe HRB spot price at about US\$1,190/ metric ton — or, an amazing US\$934/metric ton spread. The typical spread is generally between US\$100 and US\$200 per metric ton.
- Spread 2: Brazilian pig iron versus U.S. prime industrial scrap. Since early 2010, the spread has often been at an average of about US\$50-100/metric ton. It has since spiked to about US\$200+ per metric ton in recent months. The current price of prime scrap is about US\$581/metric ton compared to Brazilian pig iron price of US\$495 for a spread of US\$86/ metric ton.
- Spread 3: The U.S. prime industrial scrap and the price of shredded steel scrap delivered to the steel mill. Over the years, the typical spread has been about



is a leading steel information service in Englewood Cliffs, N.J., USA

WSD's steel experience, steel database and availability of steel statistics are the principles for performing steel forecasts, studies and analysis for international clients. WSD seeks to understand how the "pricing power" of steel companies the world over will be impacted by changes in the steel industry's structure. The views and opinions expressed in this article are solely those of World Steel Dynamics and not necessarily those of AIST.

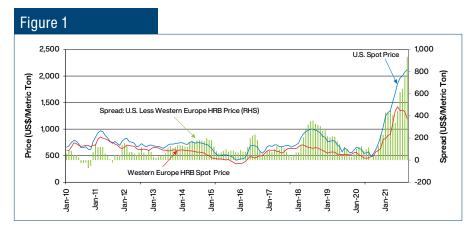




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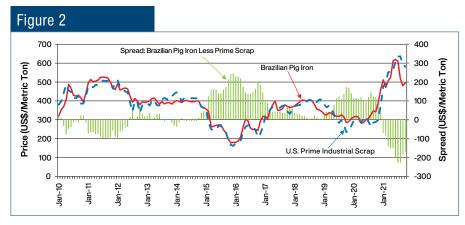


U.S. and Western Europe hot-rolled band spot prices and spread. Source: WSD PriceTracker and SteelBenchmarker™.

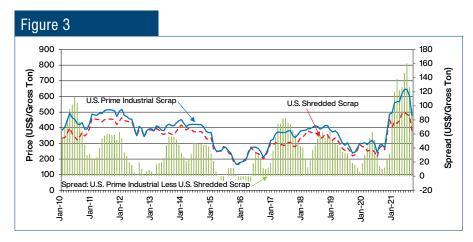
Strategic Insights From WSD

US\$40-60/ton. It has surged to about US\$160/ton. Prime industrial scrap is currently about US\$590/ton versus shredded scrap at about US\$468/ton for a spread of US\$122/gross ton.

This report includes forward-looking statements that are based on current expectations about future events and are subject to uncertainties and factors relating to operations and the business environment, all of which are difficult to predict. Although WSD believes that the expectations reflected in its forwardlooking statements are reasonable, they can be affected by inaccurate assumptions made or by known or unknown risks and uncertainties, including, among other things, changes in prices, shifts in demand, variations in supply, movements in international currency, developments in technology, actions by governments and/or other factors.



Brazilian pig iron and U.S. prime industrial scrap price and spread. Source: WSD estimates, Metal Expert, SBB and AMM.



U.S. prime industrial scrap and U.S. shredded scrap and spread. Source: WSD estimates, AMM and SteelBenchmarker™.

Did You Know?

Researchers Find Way to Improve Steel's Wear Resistance in Seawater

Working within the framework of a Russian Science Foundation project, scientists have proposed a method of enhancing the protection of steel surfaces within marine and coastal infrastructure.

Industries that involve contact with saltwater often use components and equipment made of corrosion-resistant steels, which is achieved through a fine coating. This coating will wear if exposed to friction.

The coating developed by researchers from Russia's National University of Science and Technology (NUST MISIS), along with counterparts from the Czech Republic, can provide protection to the surface through a combination of its adhesion, hardness and thickness.

According to Sputnik News, the scientists believe that the coverage they have developed can reduce the risk of accidents and breakdowns of equipment.

"The coating is being developed mainly for marine and coastal infrastructure. However, these coatings can be used in other areas, such as the urban environment and transport, which face significant challenges due to corrosion caused by ice-melting products," said senior researcher in the Department of Powder Metallurgy and Performance Coatings at NUST MISIS, Konstantin Kuptsov.

The study was published in the journal Wear.