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.

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 forward-looking 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.

How has the drop in global cost to produce pig iron affected the World Cost Curves?

The operating cost to produce pig iron, excluding plant overhead expense, has plummeted since April 2011 for plants that also include steelmaking facilities. For the world ex-China, the operating cost for the producer at the 50th percentile position on the WSD monthly World Cost Curve fell from US$525 per tonne in April 2011 to about US$325 per tonne in October 2012 (Figure 1). For China, the cost for the median-cost mill fell from about US$465 per tonne to US$325 per tonne. As of December 2012, the pig iron price, FOB port of export, was about US$380 per tonne — or, perhaps US$10 per tonne lower for pig iron suppliers in southern Brazil and at some other locations. The price was above the operating cost of all Chinese producers, and for the world ex-China, the price is above 88% of the pig iron producers on the curve. The marginal cost to produce pig iron was about US$15 per tonne below the average operating cost for the median-cost producer.

World pig iron cost curve. Source: WSD’s World Cost Curve.

Figure 1

As of December 2012, the pig iron price, FOB port of export, was about US$380 per tonne — or, perhaps US$10 per tonne lower for pig iron suppliers in southern Brazil and at some other locations. The price was above the operating cost of all Chinese producers, and for the world ex-China, the price is above 88% of the pig iron producers on the curve. The marginal cost to produce pig iron was about US$15 per tonne below the average operating cost for the median-cost producer.
The World Cost Curve for Wire Rod and Billet provides insights into the economics of long products. World Steel Dynamics has just released its World Cost Curve for Wire Rod and Billet (Figure 2).

For December 2012, the median cost to produce billet was US$507 per tonne, including plant overhead. The difference in cost from the first to the fourth quartile is US$152 per tonne. The cost curve for billet includes 86 million tonnes of capacity in China and 130 million tonnes elsewhere.

The median cost to produce wire rod is estimated at US$547 per tonne. The difference in cost from the first to the fourth quartile is US$158 per tonne. The data includes 51 million tonnes of capacity in China and 70 million tonnes elsewhere.