## Steel's Industrial Structure

# Changes by 2030 to add to industry competitiveness

The bad news for the steel mills is that, looking ahead to 2030, the global business environment will become even be more competitive; and, this development, along with steel industry changes, will add to the profit margin pressures on many steel companies. A fair number of the companies will not survive. The good news is that the steel industry is sufficiently dynamic and complex for astutely managed steel companies to "kill and win."

The following is WSD's listing of positives, hopes, discordant opportunities and threats that will impact steel mills the world over:

### **Positives**

- · Liquid steel futures curves outside of China will permit steel mills and their customers to effectively hedge the price risk in steel scrap, rebar, hot-rolled band (HRB), coking coal, metallurgical coke and iron ore.
- Steelmakers' raw materials iron ore, coking coal and obsolete steel scrap — will be lower priced. The "Age of Lofty Iron Ore and Coking Coal Prices" has ended. Given the reduced negotiating power of steelworkers, inflation in steelmakers' costs in the future will be minor.
- Mergers and acquisitions activity in some cases — including China - will augment steel mills' pricing power. Mergers and acquisitions are a permanent element of the "game of steel" - it resembles chess without checkmate.
- Steel's new "Age of Protectionism" came into effect in the fall of 2016 reflecting the avalanche of trade suits filed by many countries against the Chinese and

- other steel mills in response to the devastating decline in steel export prices at the end of 2015 and early 2016. Steel prices in more home markets will lag behind price changes on the world market.
- Steel is a management business. Astute steel managers will operate successfully within the many deep fissures and cracks in the steel industry's industrial structure.

### Hopes

- The formation of truly massive steel mills - including Baowu, which is on the path to becoming a 250-million-ton goliath — may lead to fewer pricing "death spirals" in the future - that is, if the mills are quick to reduce output when prices initially weaken.
- Steel demand outside of China will be stronger than expected as policymakers in more countries, in order to create jobs, boost steel-intensive fixed asset investment as a share of GDP.

# Discordant Opportunities

• Lower steel scrap prices will bring down the production cost of electric arc furnace (EAF)based steel mills. Of course, this development reduces the "economic rent" of the integrated steel mills unless iron ore and coking coal prices decline as much. The EAF-based "minisheet" mills will increasingly match the product quality of the integrated mills.



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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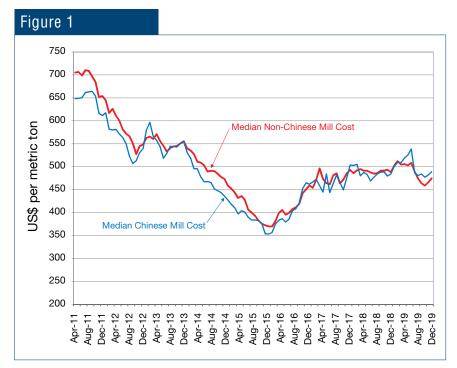
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# Strategic Insights From World Steel Dynamics

 New technologies will attract new investment into the steel industry like the moth to the flame. We are witnessing a reduction in the steel industry's barriers to entry.

### **Threats**

- Chinese steel demand in 2021 is likely entering a period of long-term decline. Hence, steel mills in the next decade are facing more years of sizable oversupply.
- Chinese steel mills once again, unlike the case in 2018, will be exporting HRB at a price that's at the lower end of the price range.
- More stringent air pollution, water pollution and CO<sub>2</sub> emission standards by 2030 will add to the mills' production costs.
- An increasing number of mega-sized steel mills will be sitting at coastal locations in the Pacific Basin — which adds to price competition. And, another 70 million tons of capacity is under construction in China.
- Steel price volatility destabilizes the steel industry and worries those providing funds to the industry
  — including banks offering inventory loans. Price volatility contributes to many mills' low enterprise values relative to their cash flows.
- The hot-rolled band World Cost Curve will resemble the tracks of a roller coaster given the swings in the prices of steelmakers' raw materials and, at times, sizable foreign exchange rate shifts (Fig. 1).
- Much domestic pricing in the U.S. and Europe, and elsewhere, will remain tied to the ubiquitous weekly or monthly steel price indices.



The steel cost rollercoaster. Source: WSD's World Cost Curve for Flat-Rolled Sheet and SteelBenchmarker™.

- China's steel industry will continue to "drive the steel industry's bus." Given that China's "command" economy has far different characteristics than most economies elsewhere in the world, this situation will cause unexpected steel industry developments. In mid-2017, Chinese policymakers' 100-plus-millionton reduction in rebar capacity, in order to curb air pollution, created a steel shortage that boosted the country's steel prices for a number of products, relative to export prices, through 2019.
- Automotive sheet market competition will become even more intense as more steel mills seek to produce this product. Higher-strength and thinner products will reduce tonnage deliveries of automotive sheet.

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