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Downstream demand

U.S. Downstream producers: Will they suffer the same fate as U.S. primary aluminium producers?

By **Robert E. DeFrancesco***, III, and **Adam M. Teslik****

After several years of declining aluminium prices due to massive amounts of excess global supply, continuing capacity rationalisations by western producers have led many analysts to predict a supply deficit and a price recovery of as much as eight percent this yearⁱ.

This price recovery, however, comes on the backs of the many primary aluminium producers outside of China that have been forced to slash production and capacity despite growing demand from the auto, aerospace, and other industries. Hoping to capitalise on thriving downstream demand, some major producers have decided to invest. Traditional primary aluminium powerhouses like Alcoa have moved away from their upstream businesses to focus on the potential they see in midstream and downstream segmentsⁱⁱ. In November 2014, American Specialty Alloys announced plans for a \$1.2 billion, 600,000 ton-per-year facility in Mississippi to supply flat-rolled

aluminium to car manufacturers. Likewise, Novelis plans to ramp up North American production of automotive aluminium to around 365,000 metric tons (mt) in 2015, from just 50,000 mt in 2013^{iv}.

Producers planning to set up shop in the United States to take advantage of strong downstream demand, however, must be prepared to confront a looming threat that has devastated primary aluminium producers and against which the U.S. steel industry has been struggling for decades. Specifically, global manufacturers do not all follow the same rules. Private companies have to take the market as it comes to them, in good times and in bad. But when the industry is guided by the strategic interests of the state, bad times are good, and good times are even better.

The performance of China's aluminium industry after the financial crisis is telling in this regard. While primary aluminium producers elsewhere have cut production to mitigate the effects of excess supply and

uncertain demand, Chinese production has continued to soar (Fig 1). China now produces as much primary aluminium as the rest of the world combined^v. Since 2000, when the country provided only 12.5% of global output, its annual production has grown by around 800%. This accounts for nearly the entire increase in global supply since then and has thrown the market into chronic surplus, causing prices to crash.

Elsewhere, producers have curtailed output as the supply glut has pushed prices below cost for many smelters. Alcoa, for example, has cut, closed, or sold more than 1.3 million mt of production capacity since 2007^{vi}, including its 125,000 ton-per-year Massena East smelter in New York^{vii}; its 270,000 ton-per-year smelter in Rockdale, Texas^{viii}; and its 229,000 ton-per-year smelter in Mount Holly, South Carolina^{ix}. In late 2013, Ormet closed its 270,000 ton smelter in Ohio and has since auctioned its assets in bankruptcy^x. Other

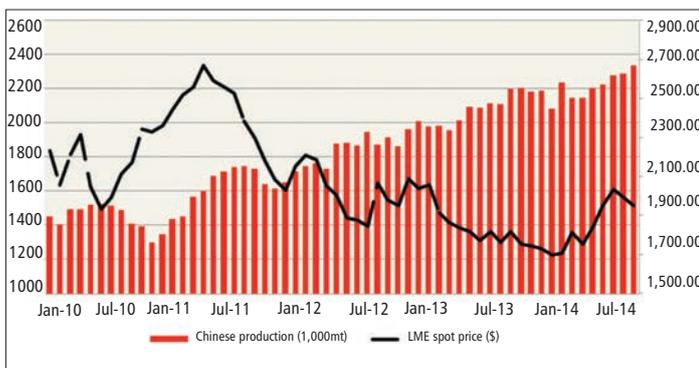


Fig 1. Monthly Chinese primary aluminium production & LME spot price. Source: International Aluminium Institute

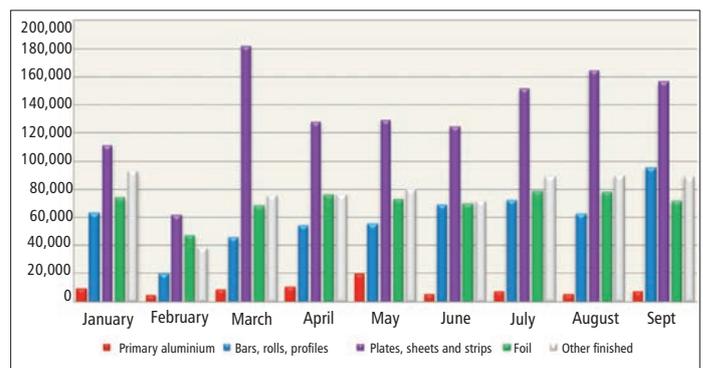


Fig 2. Chinese aluminium exports Q1-Q3 2014 (mt). Source: China Ministry of Customs Statistics

*Partner, Wiley Rein LLP, **Associate, Wiley Rein LLP

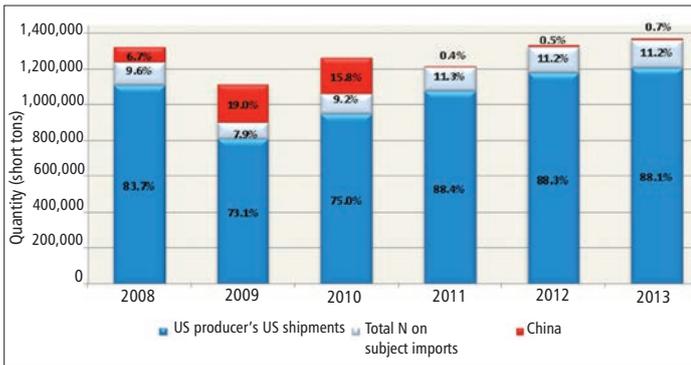


Fig 3. Aluminium extrusions in the US market: US producers, China and total impor supply, 2008-2013 (short tons). Source: Internal Industry Data

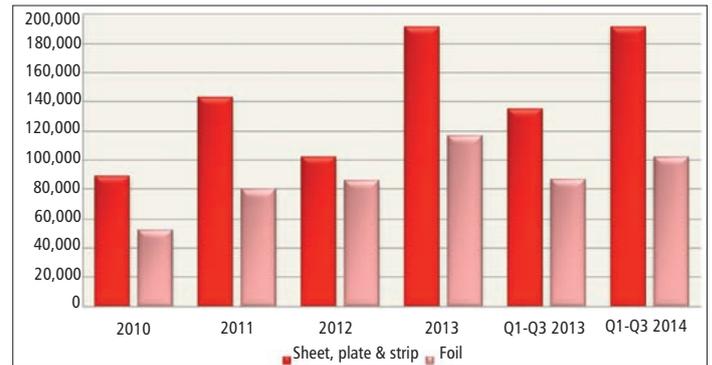


Fig 4. Source: U.S. Import Statistics

major U.S. consolidations include:

- Rio Tinto Alcan's 205,000 ton-per-year smelter in Seabee, Kentucky^{xi};
- Columbia Falls Aluminum Company's 180,000 ton-per-year smelter in Columbia, Montana^{xii}; and
- Goldendale's 172,000 ton-per-year smelter in Goldendale, Washington^{xiii}.

In total, the U.S. primary aluminium industry has contracted by around 30% since 2009, with similar consolidations occurring almost everywhere except China. Rusal, for example, has also shuttered approximately 650,000 mt of capacity since 2012. After posting losses in 2013 and being removed from the Dow Jones Industrial Average, Alcoa returned to the black in full-year 2014, primarily by shifting its focus to downstream and midstream segments. Alcoa's primary aluminium "rationalisation" is set to continue, as the company plans to emphasise a single, joint-venture smelting operation in Saudi-Arabia^{xiv}.

Despite talk of shuttering capacity in China, closures in the eastern part of the country have been offset elsewhere, as generous subsidies encourage new capacity in the northwest regions^{xv}. In 2014, Xinjiang province became China's largest aluminium producing province, as output reached 2.99 million mt from January through September^{xvi}. The province's total capacity is expected to increase from 4.37 million mt in 2014 to 6.5 million mt by the end of this year. A single smelter, Xinjiang Qiya Aluminium Electricity Co., plans to double its capacity to a massive 800,000 mt per year in 2015^{xvii}. Given the overwhelming share of electricity in aluminium production costs, such relentless expansions are driven largely by massive power subsidies at the provincial level. They bear no relationship to actual demand in China, where economic growth is slowing and is unlikely to return to the torrid 10% rates of the past.

Taken at its word, the central government in China may in good faith mean to resolve overcapacity, but local and provincial

governments that depend on these industries for jobs and economic growth are loathe to see producers fail. Central government consolidation measures that adopt a "survival of the largest" approach further incentivise local support for expanding production. For example, central government industry standards published in 2013 consider production capacity as a key characteristic and require certain types of new capacity additions to be at least 100,000 mt per year in scale, and existing facilities to be at least 50,000 mt per year to avoid consolidation^{xviii}. While the objective of these requirements is to limit the number of production facilities going forward, the result may ultimately be to exacerbate overcapacity. Primary aluminium producers in the United States and elsewhere have been injured by the Chinese government's subsidisation of primary aluminium production and the resulting distortions in global prices. To this point, however, primary aluminium producers have not sought relief from such practices. The question is whether the downstream producers who are now threatened will follow a similar approach.

Very little primary aluminium physically leaves China as primary aluminium. China's government actively discourages primary aluminium exports through a 15% export duty and uses industrial policy to encourage the production and export of higher value-added, downstream products. As a result, primary aluminium accounts for a tiny portion of Chinese aluminium exports by volume. While some analysts speculate that at least some of China's finished and semi-finished exports are actually primary aluminium in disguise, the vast majority of the country's aluminium exports are of downstream products for sale in foreign markets. In fact, despite producing more than half of the world's supply, China is actually a net importer of primary aluminium. According to Chinese Customs statistics, from Q1-Q3 2014, the country imported more than three times the volume of its primary aluminium exports. Based on production data from the International Aluminium

Institute, China's apparent consumption of primary aluminium reached nearly 45 million mt in Q1-Q3 2014.

Fig 2 shows that a significant portion of the 45 million mt of primary aluminium consumed in China is ultimately exported as downstream aluminium products. According to Ministry of Customs data, only 82,000 mt of primary aluminium left China in the first three quarters of 2014, while the country exported more than three million mt of finished aluminium products in the same period.

Thus, surplus primary aluminium production has not only driven down global primary aluminium prices, but export restraints on primary aluminium and other industrial policies in China have channelled it into downstream manufacturing, so that it ultimately leaves the country in the form of low-priced extrusions, flats, wire, and other finished products that compete in overseas markets. As a result, downstream industries are not immune to the negative effects of subsidised, excess capacity in China. Going forward, this trend will likely persist, as Chinese primary aluminium capacity is projected to expand while economic growth slows.

The U.S. steel industry is all too familiar with this phenomenon, as subsidised Chinese steel producers have flooded global markets with low-priced products that capture market share at the expense of domestic producers. Aluminium producers hoping to take advantage of growing demand for downstream products would be wise to look to the steel industry as a potential sign of things to come, and as evidence of the tools at the industry's disposal to address the impact of unfair trade. As of 2014, there were U.S. antidumping or countervailing duty orders in place against unfairly traded Chinese imports of 25 steel products, from upstream products like plate and hot-rolled coil, to downstream products like steel grating and oil country tubular goods. In contrast, there is only one order in place against imports of aluminium products from China: Extrusions.

The Aluminium Extrusions case is a

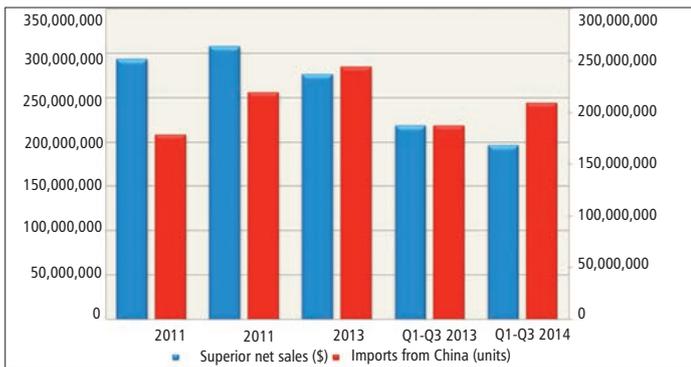


Fig 5. Superior industries net sales & imports from China.

Source: Superior Industries International Financial Statements; U.S. Import Statistics

classic example of the way that China's aggressive expansion of its aluminium industry against all market signals can imperil manufacturers of downstream aluminium products. As such, it serves as a cautionary tale for other downstream industries. In just three years, from 2008 to 2010, Chinese shipments of aluminium extrusions to the United States grew from around 90,000 tons to more than 200,000 thousand tons, more than doubling their share of the U.S. market. Over this period, the average unit value of Chinese shipments fell by more than \$1,000 per ton, dragging U.S. prices down with them. This was not a case of more competitive producers beating out rivals for sales. The U.S. Department of Commerce (Commerce) concluded that Chinese producers benefitted from subsidies including preferential policy loans, development grants, tax exemptions, and the provision of primary aluminium by state-owned or controlled suppliers for less than market value. Commerce also found that the Chinese producers were selling into the U.S. market at more than 30% below the cost of production for market-oriented producers. These findings led to antidumping and countervailing duty orders in 2011 ranging from 32.79% to 374.15%.

After these orders went into effect, the performance of U.S. producers of extrusions improved markedly. As the unfair imports from China have been removed from the market, U.S. producers have regained market share at a rate that represents an additional \$685 million in revenue, even based on the depressed 2010 average unit values (Fig 3).

For producers of other downstream aluminium products, the question remains: Who will gain the most from rising demand? In the last few years, U.S. imports of downstream aluminium products from China have jumped. While Chinese imports still make up a relatively small portion of the overall market for these products, the trends are ominous for U.S. producers (Fig 4).

As representative examples, U.S. imports of aluminium foil from China have grown by approximately 123% since 2010, and U.S. imports of aluminium sheet and plate

have grown by approximately 115% over the same period. As economic growth in China slows, and as the European Union continues to suffer from the effects of the global financial crisis, exporters are likely to target the U.S. market even more aggressively in the coming years. Some major U.S. producers of downstream goods may already be feeling the impact of rising imports from China. The following chart shows the net sales value of Superior Industries International's U.S. operations, based on the company's financial statements, against the quantity of U.S. imports of aluminium wheels from China (Fig 5).

Major U.S. aluminium wheel producers like Superior should be reaping the benefits of a rebound in auto production and sales. Instead, Superior's net sales value has declined by more than 5% from 2011 through 2013 and by more than 10% year-on-year through the first three quarters of 2014. At the same time, the volume of wheels entering the market from China has grown by nearly 38% from 2010 through 2013 and by more than 11% year-on-year through the first three quarters of 2014.

For U.S. aluminium producers, including those that have been forced into downstream segments by the primary aluminium surplus, these trends are likely to intensify as the U.S. economy outperforms other global markets and as Chinese policymakers continue to promote the development of downstream aluminium industries. Migrating into different market segments can provide only limited and temporary relief from unfair trade practices. U.S. manufacturers, however, do not need to lose sales and cede market share until it is too late to recover. The trade laws exist to address the effects of unfair imports and provide relief to U.S. industries. Many of the subsidies that Commerce found to confer an unfair advantage on Chinese producers of aluminium extrusions are enjoyed equally by Chinese producers of other downstream aluminium products, and effective use of the U.S. trade laws can help to level the playing field for producers who must compete according to the rules of the market.

The question remains whether other U.S. downstream aluminium producers will profit from improving market conditions or whether highly subsidised competitors with a history of unfair trade practices will reap all of the benefits. ■

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