



## Inequalities within the International Steel Markets

The global steel industry is structurally oversupplied due to certain geographies that produce far more of the man-made material than demand in those regions warrants. While we acknowledge some regions are supported by production in nearby geographies, we believe this analysis provides some useful insight into the global supply glut and the relevant geographies that such excess steel originates in. In Figure 22 below, positive figures reflect an excess of supply (highlighted in red), whereas negative numbers indicate a production deficit.

Based on our analysis of supply and demand by geography, while the market in 2016 appears to be at a deficit (shown in Figure 22), a number of meaningful dislocations exist across the spectrum. According to the data, Asia and CIS collectively manufactured a surplus of 111mn mtpa of steel while every other region experienced a deficit in 2016. Considering steel is a global commodity, excess steel manufactured in China and CIS likely satisfies demand for steel in alternative regions of the world that may lack the capacity to manufacture adequate steel to meet their needs, such as the Middle East and Africa. Other worldwide regions such as the European Union, Other Europe, South America and Oceania are comparatively self-sufficient, for the most part producing the supply of steel that each of their markets necessitate in a given year. In yet another example, historically North America (NA) has required steel imports to satisfy some portion of its apparent demand. However, in recent years foreign manufacturers have begun targeting NA as an alternative market to their own respective domestic markets and shipping their excess steel to NA considering that NA benefits from a stronger pricing environment than the rest of the world.

Figure 22: Geographical Dislocations in Supply / Demand (000's of metric tonnes)

Global Steel Supply / Demand (000's)	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
ASIA	42,190	36,373	(1,928)	27,964	31,892	33,669	42,516	65,100	74,994	63,516
EUROPEAN UNION	(13,375)	(6,514)	9,488	10,498	5,172	14,476	9,354	6,984	(1,753)	(10,084)
NORTH AMERICA	(34,589)	(29,442)	(15,428)	(19,741)	(23,777)	(31,879)	(30,525)	(48,481)	(44,438)	(41,402)
CIS	58,911	57,310	56,939	52,724	49,425	45,059	41,970	42,727	44,847	47,673
OTHER EUROPE	(1,570)	2,180	4,445	3,024	4,426	3,792	(516)	(902)	(6,673)	(5,539)
SOUTH AMERICA	4,928	846	2,330	(3,860)	(2,406)	(5,344)	(8,604)	(6,172)	(3,524)	(398)
MIDDLE EAST	(31,926)	(37,618)	(32,330)	(32,671)	(32,889)	(30,682)	(30,543)	(29,218)	(29,054)	(26,247)
AFRICA	(6,317)	(12,657)	(12,266)	(13,606)	(16,372)	(20,524)	(23,714)	(25,622)	(28,331)	(27,786)
OCEANIA	(651)	(1,121)	(768)	(689)	(497)	(2,466)	(1,939)	(2,931)	(2,507)	(1,874)
Global Steel Surplus / (Deficit)	17,801	7,357	5,482	23,443	14,980	6,101	(2,091)	1,285	3,561	(2,141)

Source: Deutsche Bank, Bloomberg Finance LP, the World Steel Association

### Arbitraging the North American and European steel markets

While NA and the EU both require a portion of their steel needs imported, a different phenomenon has taken shape in these regions. Formerly captive markets, NA and EU had historically succeeded in largely achieving equilibrium between supply and demand given their solid manufacturing platforms in each region that could ramp up and fulfill incremental demand. However, the onset of globalization marked an end to their steel independence. Since steel prices in NA and EU tend to be higher than in other regions that generate surpluses, offshore steelmakers (particularly in China) have begun shipping excess steel to territories with higher prevailing selling prices to the detriment of domestic manufacturers. This influx of cheaper (and likely government-subsidized) steel into NA and the EU has pressured pricing, forcing producers to reduce selling prices to maintain volumes with customers. More, we question whether some foreign steelmakers are benefitting from subsidies on exports, affording them the ability to sell their products at lower prices than they otherwise could and still realize a profit. Unfortunately, over time such competitive advantages over domestic steel producers has led to bankruptcies and the closure of thousands of insolvent steelmaking facilities unable to compete against cheaper imports. Consequently, this inequality has caused the remaining steel manufacturers to appeal to their respective governments to put in place protective tariffs on unfairly "dumped" steel imports in order to achieve a fair and level playing field.