

# **Global Steel Trade Monitor**

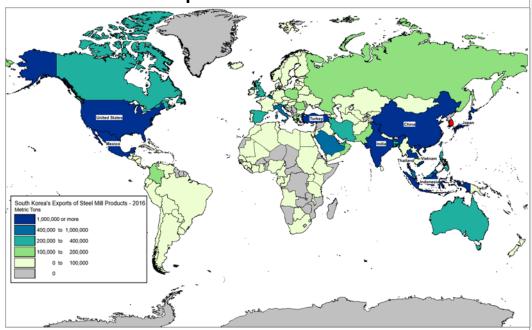
## Steel Exports Report: **South Korea**

Background December 2017

South Korea is the world's fourth-largest steel exporter. In year-to-date 2017 (through September), further referred to as YTD 2017, South Korea exported 23.7 million metric tons — a 5 percent increase from 22.5 million metric tons in YTD 2016. South Korea's exports represented about 7 percent of all steel exported globally in 2016. The volume of South Korea's 2016 steel exports was less than a third of the world's largest exporter, China, and just behind the third-largest exporter, Russia. In value terms, steel represented just 4 percent of the total amount of goods South Korea exported in 2016.

South Korea exports steel to more than 200 countries and territories. The nine countries labeled in the map below represent the top destinations for South Korea's exports of steel, receiving more than 1 million metric tons each and accounting for 71 percent of South Korea's steel exports in 2016.

#### South Korea's Exports of Steel Mill Products - 2016



Data Source: Global Trade Atlas; Copyright © IHS Global Inc. 2017. All rights reserved.

### **Quick Facts:**

- World's fourth-largest steel exporter: 23.7 million metric tons (YTD 2017)
- 53% steel export growth since Q1 2010
- Exports as a share of production at 44.9% in YTD 2017
- YTD export volume up5% while export value up26%
- Top three export markets: China, Japan, United States
- Largest producers:
   POSCO and Hyundai
   Steel Co.
- 53 trade remedies in effect in 12 countries involving steel mill imports from South Korea

#### **Steel Trade Balance**

Prior to 2009, South Korea had a trade deficit in steel products. The deficit peaked in 2008 at 8.2 million metric tons. In 2009, imports began to fall and exports were on the rise. South Korea has consistently had an annual steel trade surplus since mid-2010 with exports rising 53 percent and imports falling 30 percent between Q1 2010 and Q3 2017. In YTD 2017, South Korea's steel trade surplus sits at Source: IHS Global Trade Atlas 8.3 million metric tons, up 80

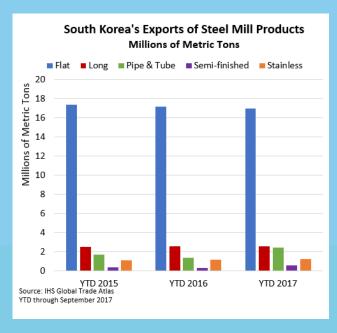


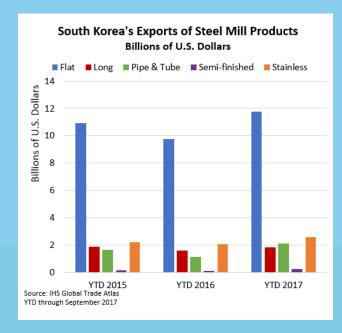
percent from 4.6 million metric tons in YTD 2016.

#### **Export Volume, Value, and Product**

In 2014, South Korea's steel exports reached a record high of 31.6 million metric tons. Since then, exports have been on a decline, falling slightly by 2 percent to 30.9 million metric tons in 2015 and by another 2 percent to 30.3 million in 2016. In YTD 2017, South Korea exported 23.7 million metric tons of steel, up 5 percent from YTD 2016. The value of South Korea's YTD 2017 exports also increased — up 26 percent to \$18.5 billion from \$14.6 billion in YTD 2016.

Flat products account for a significant share of South Korea's steel exports. In YTD 2017, 72 percent, or 17 million metric tons, of South Korea's steel exports consisted of flat products. Long products accounted for 11 percent, or 2.6 million metric tons, followed by pipe & tube products at 10 percent (2.4 million metric tons), stainless products at 5 percent (1.2 million metric tons), and semi-finished steel at 2 percent (550 thousand metric tons).





#### **Exports by Top Market**

Exports to South Korea's top 10 steel markets represented percent of South Korea's steel export volume in YTD 2017 at 17.5 million metric tons (mmt). China was the largest market for South Korea's exports capturing a 13 percent share (3.1 mmt), followed by Japan at 13 percent (3 mmt), the United States at 12 percent (2.8 mmt), India at 9 percent (2.1 mmt), Mexico at 6 percent (1.5 mmt), and Vietnam at 6 percent (1.3 mmt) in YTD 2017.



#### Trends in Exports to Top Markets

The volume of South Korea's steel exports decreased to the majority of its top 10 markets in YTD 2017, declining in 6 of 10 markets. South Korea's exports declined to Turkey (down 20%), Italy (down 12%), Thailand (down 8%), China (down 4%), the United States (down 3%), and Vietnam (down 2%). South Korea's exports increased the most by volume to Mexico, up 33 percent from YTD

2016, followed by Indonesia (up 29%), India (up 21%) and Japan (up 16%).

The overall value of South Korea's steel exports increased to all of the top 10 markets, and all but two with double digit growth, suggesting an increase in prices. Markets that saw an increase in steel value between YTD 2016 and YTD 2017 included exports to Mexico (up 52%), Indonesia (up 49%), India (up 43%), Japan (up 39%), Vietnam (up 27%), the United States (up 26%), Thailand



(up 14%), China (up 11%), Italy (up 7%), and Turkey (up 2%).

Outside the top 10 markets, other notable changes in South Korea's YTD 2017 export volume included exports to 13th-ranked Iran (up 102%), 25th-ranked Kuwait (up 309%), and 28th-ranked Germany (up 126%).

#### **Top Markets by Steel Product Category**

South Korea's top export markets by volume vary across types of steel products; however, China captured the top spot in two product categories in YTD 2017. China accounted for the largest share of South Korea's exports of flat products at 16 percent (2.6 million metric tons), and stainless steel products, at 15 percent (187 thousand metric tons).

Japan was the largest destination for South Korea's long product exports at 12 percent (318 thousand metric tons), followed by the United States at 9 percent (227 thousand metric tons). Indonesia received the most exports of semi-finished products at 32 percent (175 thousand metric tons).

The United States accounted for the largest share of South Korea's pipe and tube exports at 66 percent (1.6 million metric tons).



#### **South Korea's Import Market Share in Top Destinations**

In 2016, the import market share for South Korea's steel products increased in the majority of South Korea's top export markets. The share of imports from South Korea in India increased the most — up percentage points followed closely by shares in Japan (up 2.1 percentage points) and China (up 1.9 percentage points). South Korea's import share in both **Turkey** and Italy increased by a little over 1 percentage point. Mexico had

| South Korea's Steel Import Market Share |                 |               |                 |               |  |  |  |
|-----------------------------------------|-----------------|---------------|-----------------|---------------|--|--|--|
| Top 10 Export Share of                  |                 | S. Korea Rank | Share of        | S. Korea Rank |  |  |  |
| Markets                                 | Imports from S. | in 2015       | imports from S. | in 2016       |  |  |  |
|                                         | Korea - 2015    |               | Korea - 2016    |               |  |  |  |
| China                                   | 30.9%           | 2             | 32.8%           | 2             |  |  |  |
| United States                           | 12.5%           | 3             | 11.6%           | 3             |  |  |  |
| Japan                                   | 58.5%           | 1             | 60.6%           | 1             |  |  |  |
| India                                   | 22.4%           | 2             | 24.7%           | 2             |  |  |  |
| Thailand                                | 11.7%           | 3             | 10.2%           | 3             |  |  |  |
| Vietnam                                 | 11.8%           | 3             | N/A             | N/A           |  |  |  |
| Mexico                                  | 13.5%           | 3             | 11.1%           | 3             |  |  |  |
| Indonesia                               | 11.2%           | 3             | 9.4%            | 3             |  |  |  |
| Turkey                                  | 6.4%            | 4             | 7.6%            | 4             |  |  |  |
| Italy                                   | 3.1%            | 9             | 4.6%            | 6             |  |  |  |

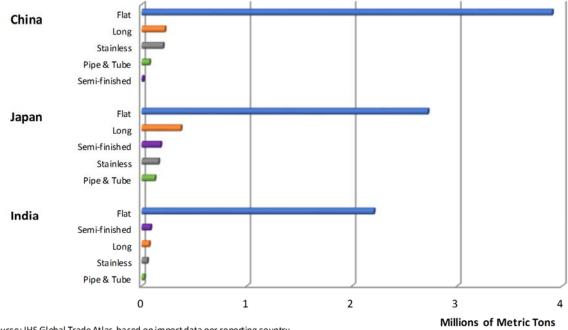
Source: IHS Global Trade Atlas, based on Import data per reporting country

Note: 2016 data for Vietnam not available

the largest decrease in import share from South Korea in 2016, down 2.4 percentage points, followed by Indonesia (down 1.8 percentage points) and Thailand (down 1.5 percentage points).

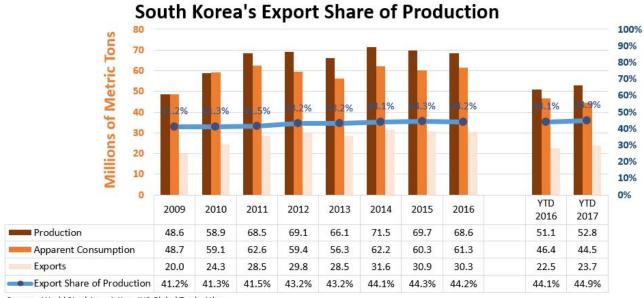
Among South Korea's top export markets, China, Japan, and India received more than 20 percent of their total steel imports from South Korea at 32.8 percent, 60.6 percent, and 24.7 percent, respectively. In 2016, flat products accounted overwhelmingly for the largest share of steel imports from South Korea in each China (88% or 3.9 million metric tons), Japan (77% or 2.7 million metric tons), and India (91% or 2.2 million metric tons).

#### Steel Import Composition of Top Market-Share Countries - 2016



Source: IHS Global Trade Atlas, based on import data per reporting country

#### **Overall Production and Export Share of Production**



Sources: World Steel Association; IHS Global Trade Atlas YTD through September 2017

Between 2009 and 2012, South Korea's crude steel production grew by 42 percent. Since then, production has fluctuated and averaged 69 million metric tons per year through 2016. In YTD 2017, production totaled 52.8 million metric tons, up 3.5 percent from 51.1 million metric tons in YTD 2016. Apparent consumption (a measure of steel demand) went from being in balance with production in 2009 and 2010 to falling behind production. In YTD 2017, apparent consumption decreased 4 percent to 44.5 million metric tons, down from 46.4 million metric tons in YTD 2016. The gap between production and apparent consumption was the widest in 2012 and 2013 when it reached 9.7 million metric tons. It has since declined, registering 7.2 million metric tons in 2016. In YTD 2017, the gap was at 8.3 million metric tons. Exports as a share of production gradually increased from 41.2 percent in 2009 to 44.2 percent in 2016, a change of 7 percent. In YTD 2017, exports as a share of production increased 1.8 percent from YTD 2016, up to 44.9%.

#### **Top Producers**

South Korea's steel production is concentrated among a small number of companies, with the country's top 3 producers accounting for 65.5 million metric tons, or 96 percent, of total 2016 production, based on available data.

|                                                      | South Korea' s Top Steel Producers in 2016 |                  |                                                                        |  |  |
|------------------------------------------------------|--------------------------------------------|------------------|------------------------------------------------------------------------|--|--|
| Rank                                                 | Company                                    | Production (mmt) | Main Products                                                          |  |  |
| 1                                                    | POSCO                                      | 41.6             | Hot-rolled, cold-rolled,<br>plate, stainless, electrical,<br>wire rods |  |  |
| 2                                                    | HYUNDAI Steel Company                      | 20               | Beams, reinforcing bars, hot-rolled, plates                            |  |  |
| 3                                                    | Dongkuk Steel Mill Co, Ltd                 | 3.3              | Plates, sections, bars                                                 |  |  |
| Source: World Steel Association; Hoovers; MarketLine |                                            |                  |                                                                        |  |  |

#### **Trade Remedies in the Steel Sector**

Antidumping duties (AD), countervailing duties (CVD), associated suspension agreements, and safeguards are often referred to collectively as trade remedies. These are internationally agreed upon mechanisms to address the market-distorting effects of unfair trade, or serious injury or threat of serious injury caused by a surge in imports. Unlike anti-dumping and countervailing measures, safeguards do not require a finding of an "unfair" practice. Before applying these duties or measures, countries investigate allegations and can remedy or provide relief for the injury caused to a domestic industry. The tables below provide statistics on the current number of trade remedies various countries have against steel mill products from South Korea.

| Steel Mill Trade Remedies in Effect Against South Korea |    |     |                                        |       |
|---------------------------------------------------------|----|-----|----------------------------------------|-------|
| Country                                                 | AD | CVD | Suspension Agreements and Undertakings | Total |
| Australia                                               | 7  |     |                                        | 7     |
| Brazil                                                  | 3  |     |                                        | 3     |
| Canada                                                  | 5  |     |                                        | 5     |
| China                                                   | 1  |     |                                        | 1     |
| European Union                                          | 1  |     | 1                                      | 2     |
| India                                                   | 4  |     |                                        | 4     |
| Indonesia                                               | 3  |     |                                        | 3     |
| Malaysia                                                | 3  |     |                                        | 3     |
| Mexico                                                  |    |     | 1                                      | 1     |
| Taiwan                                                  | 1  |     |                                        | 1     |
| Thailand                                                | 5  |     |                                        | 5     |
| United States                                           | 13 | 5   |                                        | 18    |
| TOTAL                                                   | 46 | 5   | 2                                      | 53    |
| Source: World Trade Organization, through June 1, 2017  |    |     |                                        |       |

| Global Steel Mill Safeguards in Effect                 |                                                                                                                |  |  |
|--------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|--|--|
| Country                                                | Product(s)                                                                                                     |  |  |
| Egypt                                                  | Steel rebar                                                                                                    |  |  |
| India                                                  | 1) Hot-rolled steel in coils; 2) Hot-rolled steel flat sheets and plates                                       |  |  |
|                                                        | 1) Articles of finished casing and tubing; 2) Flat-rolled products of iron or non-alloy steel; 3) I and H sec- |  |  |
| Indonesia                                              | tions of other alloy steel; 4) Bars and rods, hot-rolled, in irregularly wound coils                           |  |  |
| Malaysia                                               | 1) Hot-rolled steel plate; 2) Steel concrete reinforcing bar; 3) Steel wire rod and deformed bar-in-coil       |  |  |
| Morocco                                                | 1) Cold-rolled sheets and plated or coated sheets; 2) Reinforcing bars and wire rods                           |  |  |
| Philippines                                            | Steel angle bars                                                                                               |  |  |
|                                                        | 1) Hot-rolled steel flat products with certain amounts of alloying elements; 2) Unalloyed hot-rolled steel     |  |  |
| Thailand                                               | flat products in coils and not in coils; 3) Structural hot-rolled H-beams with alloy                           |  |  |
| Vietnam                                                | Semi-finished and certain finished products of alloy and non-alloy steel                                       |  |  |
| Source: World Trade Organization, through May 22, 2017 |                                                                                                                |  |  |

## **Steel Exports Report: Glossary**

**Apparent Consumption:** Domestic crude steel production plus steel imports minus steel exports. Shipment data are not available for all countries, therefore crude steel production is used as a proxy.

**Export Market:** Destination of a country's exports.

**Flat Products:** Produced by rolling semi-finished steel through varying sets of rolls. Includes sheets, strips, and plates. Used most often in the automotive, tubing, appliance, and machinery manufacturing sectors.

**Import Penetration:** Ratio of imports to apparent consumption.

**Import Source:** Source of a country's imports.

**Long Products:** Steel products that fall outside the flat products category. Includes bars, rails, rods, and beams. Used in many sectors but most commonly in construction.

**Pipe and Tube Products:** Either seamless or welded pipe and tube products. Used in many sectors but most commonly in construction and energy sectors.

**Semi-finished Products:** The initial, intermediate solid forms of molten steel, to be re-heated and further forged, rolled, shaped, or otherwise worked into finished steel products. Includes blooms, billets, slabs, ingots, and steel for castings.

**Stainless Products:** Steel products containing at minimum 10.5% chromium (Cr) offering better corrosion resistance than regular steel.

**Steel Mill Products:** Carbon, alloy, or stainless steel produced by either a basic oxygen furnace or an electric arc furnace. Includes semi-finished steel products and finished steel products. For trade data purposes, steel mill products are defined at the Harmonized System (HS) 6-digit level as: 720610 through 721650, 721699 through 730110, 730210, 730240 through 730290, and 730410 through 730690. The following discontinued HS codes have been included for purposes of reporting historical data (prior to 2007): 722520, 722693, 722694, 722910, 730410, 730421, 730610, 730620, and 730660.

Global Steel Trade Monitor: The monitor provides global import and export trends for the top countries trading in steel products. The current reports expand upon the early release information already provided by the Steel Import Monitoring and Analysis (SIMA) system that collects and publishes data on U.S. imports of steel mill products. Complementing the SIMA data, these reports provide objective and current global steel industry information about the top countries that play an essential role in the global steel trade. Information in these reports includes global exports and import trends, production and consumption data and, where available, information regarding trade remedy actions taken on steel products. The reports will be updated quarterly.

**Steel Import Monitoring and Analysis (SIMA) System:** The Department of Commerce uses a steel import licensing program to collect and publish aggregate data on near real-time steel mill imports into the United States. SIMA incorporates information collected from steel license applications with publicly released data from the U.S. Census Bureau. By design, this information provides stakeholders with valuable information on the steel trade with the United States. For more information about SIMA, please go to http://enforcement.trade.gov/steel/license/.



TRADE
ADMINISTRATION

**Steel Import Monitoring and Analysis** 1401 Constitution Ave., NW, Room 21006 Washington, D.C. 20230

**T** 202.482.2105 **F** 202.501.1377

Email ECGlobalSteelStats@trade.gov

trade.gov/steel