

# **Global Steel Trade Monitor**

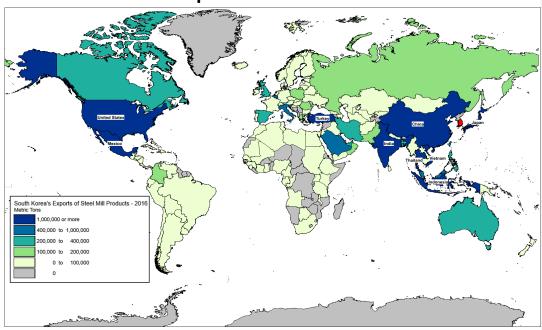
## Steel Exports Report: **South Korea**

Background March 2017

South Korea is the world's fourth-largest steel exporter. In 2016, South Korea exported 30.3 million metric tons — a 2 percent decrease from 30.9 million metric tons in 2015. South Korea's exports represented about 7 percent of all steel exported globally in 2015, based on available data. 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: 30.3 million metric tons in 2016
- 25% steel export growth since 2010
- Exports as a share of production at 44.2% in 2016
- Year-on-year export volume down 2% while export value down 8%
- Top three export markets: China, United States, Japan
- Largest producers:
   POSCO and Hyundai
   Steel Co.
- 42 trade remedies in effect in 11 countries involving steel mill imports from South Korea

#### **Steel Trade Balance**

Prior to 2009, South Korea had a trade deficit in steel Imports fell in products. 2009, bringing steel exports imports closer into balance. Beginning in 2010, however, South Korea's exports outpaced imports, growing 25 percent between 2010 and 2016. Over the same period, annual imports fell, decreasing by 6 percent from 2010. As such, South

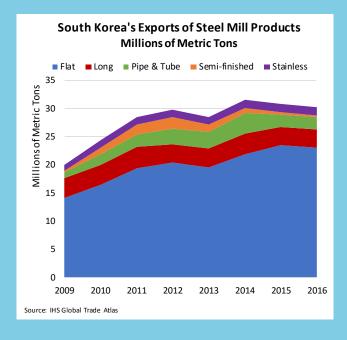


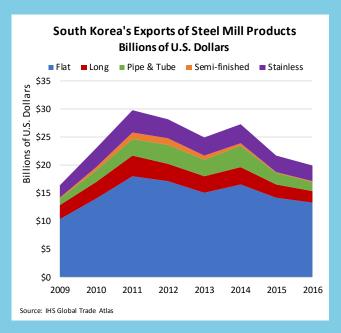
Korea has posted a steel trade surplus since mid-2010. In 2016, the surplus amounted to 7.2 million metric tons — a 23 percent decrease from 9.3 million metric tons in 2015.

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

In 2014, South Korea's steel exports reached a record high of 31.6 million metric tons before declining slightly by 2 percent to 30.9 million metric tons in 2015. In 2016, South Korea exported 30.3 million metric tons of steel, down 2 percent from 2015. By contrast, the value of South Korea's 2016 exports declined by 8 percent to \$19.9 billion from \$21.7 billion in 2015, which can be attributed to a significant drop in global steel prices.

Flat products account for a significant share of South Korea's steel exports. In 2016, 76 percent, or 23 million metric tons, of South Korea's steel exports were of flat products. Long products accounted for 11 percent, or 3.3 million metric tons, followed by pipe and tube products (7% or 2 million metric tons), stainless products (5% or 1.6 million metric tons), and semi-finished steel (1% or 350 thousand metric tons).

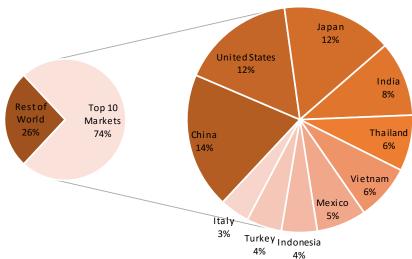




#### **Exports by Top Market**

Exports to South Korea's top 10 steel markets represented 74 percent of South Korea's steel export volume in 2016 at 22.4 million metric tons (mmt). China surpassed the United States in 2016 as the largest market for South Korea's exports with a 14 percent share (4.4) mmt). The United States, which ranked first in 2015, received the second-largest share of South Korea's exports at 12 percent (3.7 mmt), followed by Japan at 12 percent (3.5 mmt), India at 8 Source: IHS Global Trade Atlas percent (2.4 mmt), and Thailand at 6 percent (1.8 mmt).

#### South Korea's Steel Exports - Top 10 Markets 2016 - Millions of Metric Tons



#### **Trends in Exports to Top Markets**

The volume of South Korea's steel exports increased to half of South Korea's top 10 steel export

markets between 2015 and 2016. Exports to Italy showed the largest increase in volume, up 33 percent from 2015, followed by China (up 14.7%), Thailand (up 12.6%), and Turkey (up 6.4%). Large volume decreases included South Korea's exports India (down 20.4%), to Indonesia (down 7.8%), the United States (down 5.4%), Vietnam (down 4.4%), Mexico (down 2.8%).

The overall value of South Korea's steel exports decreased Source: IHS Global Trade Atlas in seven of the top 10 markets,

## ■ Volume ■ Value 40% 30% 20% 10% 0% -10% -20% -30%

Percent Change in Exports to Top 10 Markets (2015 to 2016)

reflecting declining global steel prices. Markets with considerable decreases in steel value between 2015 and 2016 included Indonesia (down 15.6%), the United States (down 14.2%), India (down 11.1%), Mexico (down 8.9%), Vietnam (down 7.2%), Turkey (down 4.5%), and Thailand (down 4.2%). Only China, Japan, and Italy saw increases in the value of South Korea's steel exports in 2016 — up 4.9 percent, 1.7 percent, and 0.7 percent respectively.

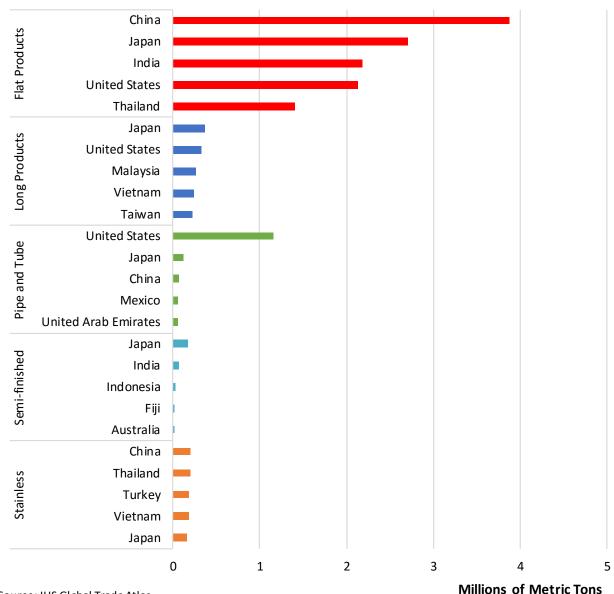
#### Top Markets by Steel Product Category

South Korea's top export markets by volume vary across types of steel products. In 2016, China accounted for the largest share of South Korea's exports of flat products at 17 percent (3.9 million metric tons).

The United States received the second largest share of South Korea's long product exports at 10 percent (327 thousand metric tons) and the largest share of South Korea's pipe and tube exports at 56 percent (1.2 million metric tons).

Japan received the largest share of South Korea's long product exports at 11 percent (373 thousand metric tons) and semi-finished exports at 50 percent (174 thousand metric tons). The top five markets for South Korea's stainless exports all received roughly equal shares at around 10 to 13 percent each.

## South Korea's Top 5 Export Markets by Product - 2016



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

In 2015, the import market share for South Korea's steel products increased in all of South Korea's top export destinations except China, Japan, Indonesia, and Malaysia. The share of both China's and Japan's steel imports from South Korea decreased marginally in 2015, by 0.3 and 0.1 percentage

points, respectively. The share of Indonesia's and Malaysia's steel imports from South Korea decreased by slightly larger margins, down 3 and 1.5 percentage points, respectively.

Countries with notable increases in their share of steel imports from South Korea included Mexico (up 4.7 percentage points from 2014) and Turkey (up 2.5 percentage points), while Thailand, India, and the U.S. saw marginal increases (less than one percentage point).

South Korea's Steel Import Market Share						
Top 10 Export Share of		South Korea's Share of		South Korea's		
Destinations	Imports from	Rank in 2014	Imports from	Rank in 2015		
	S. Korea - 2014		S. Korea - 2015			
United States	12.3%	2	12.5%	3		
China	31.2%	2	30.9%	2		
Japan	58.6%	1	58.5%	1		
India	22.0%	2	22.4%	2		
Vietnam	12.5%	3	N/A	N/A		
Mexico	8.8%	3	13.5%	3		
Thailand	10.9%	3	11.7%	3		
Indonesia	14.2%	3	11.2%	3		
Turkey	3.9%	8	6.4%	4		
Malaysia	13.8%	3	12.3%	3		

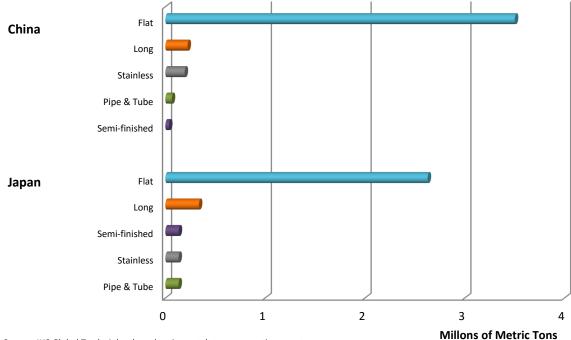
Source: IHS Global Trade Atlas, based on import data per reporting country

Note: 2015 import data for Vietnam not available

#### Among South Korea's top export

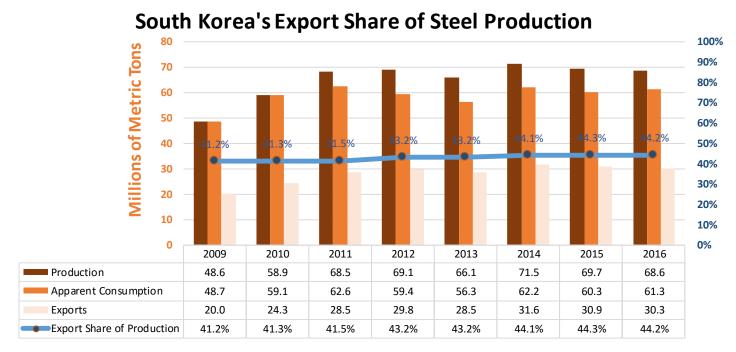
markets, China and Japan received more than 30 percent of their total steel imports from South Korea. In 2015, flat products accounted overwhelmingly for the largest share of steel imports from South Korea in each China (87% or 3.5 million metric tons) and Japan (78% or 2.6 million metric tons).

#### Steel Import Composition of Top Market-Share Countries - 2015



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

Between 2009 and 2012, South Korea's crude steel production grew by 42 percent. Production fluctuated after that but grew overall by 1 percent to 69.7 million metric tons in 2015. 2016 production totaled 68.6 million metric tons — down 1.6 percent from 2015. Apparent consumption (a measure of steel demand) went from being in balance with production in 2009 and 2010 to falling behind production by 9.4 million metric tons in 2015. The gap between production and apparent consumption narrowed to 7.2 million metric tons in 2016. Steel exports followed a similar growth trend as production, increasing 49 percent between 2009 and 2012 before maintaining a rough, though slightly upward-trending, average from 2012 to 2014. South Korea's steel exports as a share of production amounted to 44.2 percent in 2016 — nearly on par with the 2015 level as production and exports decreased in tandem.

## **Top Producers**

South Korea's steel production is concentrated among a small number of companies, with the country's top 3 producers accounting for 65.8 million metric tons, or 94 percent, of total 2015 production, based on available data.

	South Korea's Top Steel Producers in 2015				
Rank	Company	Production (mmt)	Main Products		
1	POSCO	42	Hot-rolled, cold-rolled, plate, stainless, electrical, wire rods		
2	HYUNDAI Steel Company	20.5	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				
	Suspension Agreements			
Country	AD	CVD	and Undertakings	Total
Australia	7			7
Brazil	3			3
Canada	5			5
European Union	1			1
India	3			3
Indonesia	3			3
Malaysia	3			3
Mexico			1	1
Taiwan	1			1
Thailand	4			4
United States	9	2		11
TOTAL	39	2	1	42
Source: World Trade Organization, through December 1, 2016				

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		
Indonesia	1) Articles of finished casing and tubing; 2) Flat-rolled products of iron or non-alloy steel; 3) I and H sections of other alloy steel; 4) Bars and rods, hot-rolled, in irregularly wound coils		
Malaysia	Hot-rolled steel plate		
Morocco	1) Cold-rolled sheets and plated or coated sheets; 2) Reinforcing bars and wire rods		
Philippines	Steel angle bars		
Thailand	1) Hot-rolled steel flat products with certain amounts of alloying elements; 2) Unalloyed hot-rolled steel 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 February 24, 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/.



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