Global Steel Trade Monitor

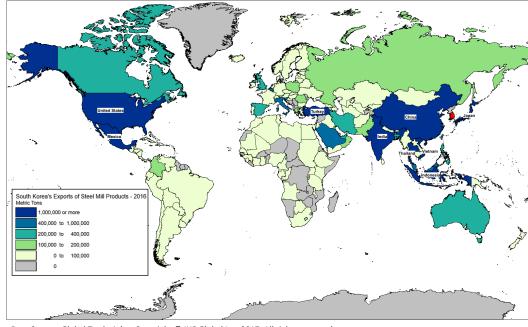
Steel Exports Report: South Korea

Background

NTERNATIONAL

South Korea is the world's fourth-largest steel exporter. In year-to-date 2017 (through June), further referred to as YTD 2017, South Korea exported 15.7 million metric tons — a 6 percent increase from 14.7 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

July 2017

Quick Facts:

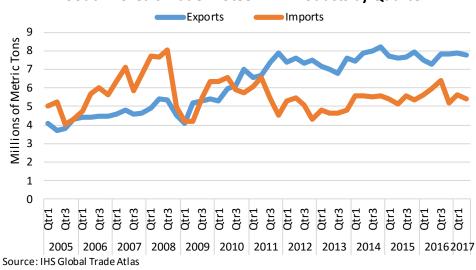
- World's fourth-largest steel exporter: 15.7 million metric tons (YTD 2017)
- 47% steel export growth since Q1 2010
- Exports as a share of production at 45.1% in YTD 2017
- YTD export volume up
 6% while export value up
 29%
- Top three export markets: China, Japan, United States
- Largest producers: POSCO and Hyundai Steel Co.
- 53 trade remedies in effect in 12 countries involving steel mill imports from South Korea

Data Source: Global Trade Atlas; Copyright $\ensuremath{\mathbb{C}}$ IHS Global Inc. 2017. All rights reserved.

Steel Exports Report: 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 47 percent and imports falling 15 percent between Q1 2010 to YTD 2017. In YTD 2017, South Korea's steel trade



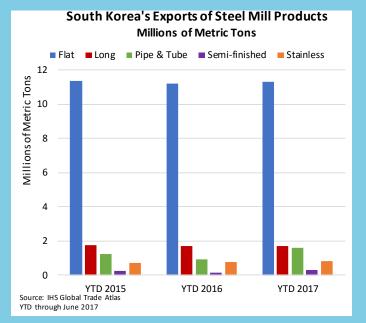
South Korea's Trade in Steel Mill Products by Quarter

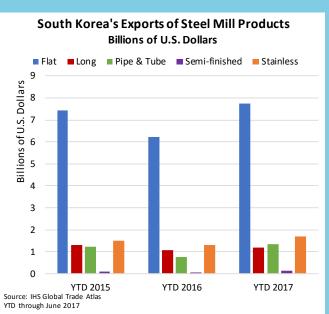
surplus sits at 4.6 million metric tons, up 46 percent from 3.2 million metric tons in YTD 2016.

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 15.7 million metric tons of steel, up 6 percent from YTD 2016. The value of South Korea's YTD 2017 exports also increased — up 29 percent to \$12.1 billion from \$9.4 billion in YTD 2016.

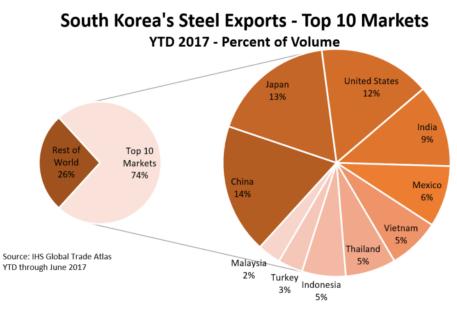
Flat products account for a significant share of South Korea's steel exports. In YTD 2017, 72 percent, or 11.3 million metric tons, of South Korea's steel exports consisted of flat products. Long products accounted for 11 percent, or 1.7 million metric tons, followed by pipe & tube products at 10 percent (1.6 million metric tons), stainless products at 5 percent (800 thousand metric tons), and semi-finished steel at 2 percent (311 thousand metric tons).





Exports by Top Market

Exports to South Korea's top 10 steel markets represented 73 percent of South Korea's steel export volume in YTD 2017 at 11.5 million metric tons (mmt). China was the largest market for South Korea's exports capturing a 14 percent share (2.1 mmt), followed by Japan at 13 percent (2 mmt), the United States at 12 percent (1.8 mmt), India at 9 percent (1.3 mmt), Mexico at 6 percent (1



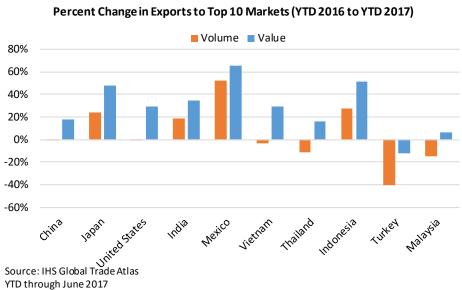
mmt), and Vietnam at 5 percent (0.85 mmt) in YTD 2017.

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 41%), Malaysia (down 15%), Thailand (down 12%), Vietnam (down 4%), the United States (down 1%), and China (down 0.3%). South Korea's exports increased the most by volume to Mexico, up 53 percent from

YTD 2016, followed by Indonesia (up 27%), Japan (up 24%) and India (up 18%).

The overall value of South Korea's steel exports increased to nine of the top 10 markets, and all but one with double digit growth, suggesting an increase in prices. Markets that saw an increase in steel value between 2016 and YTD YTD 2017 included exports to Mexico (up Indonesia (up 52%), 65%), Japan (up 48%), India (up 35%), Vietnam (up 30%), the



United States (up 29%), China (up 18%), Thailand (up 16%) and Malaysia (up 6%). Turkey was the only top 10 export market that saw a decline in the value of South Korea's steel exports down 12 percent in YTD 2017.

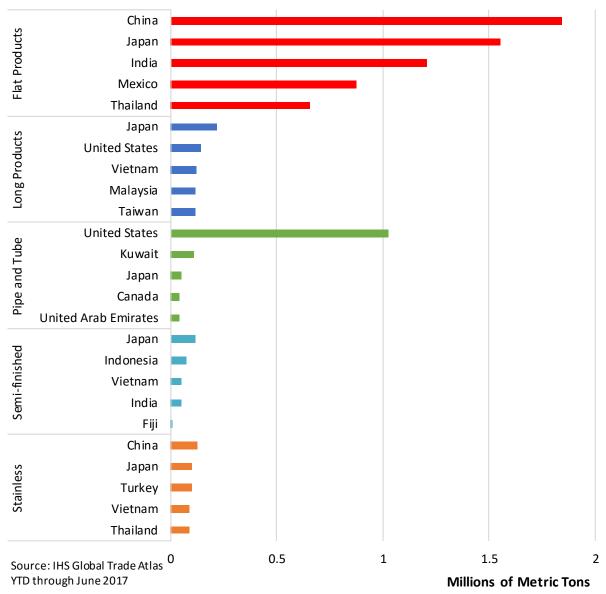
Outside the top 10 markets, other notable changes in South Korea's YTD 2017 export volume included exports to 14th ranked Iran (up 159%), 21st ranked the United Kingdom (up 102%), 23rd ranked Kuwait (up 324%), and 27th ranked Germany (up 168%).

Top Markets by Steel Product Category

South Korea's top export markets by volume vary across types of steel products however China and Japan each 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 (1.8 million metric tons), and stainless steel products, also at 16 percent (125 thousand metric tons).

Japan was the largest destination for South Korea's long product exports at 13 percent (216 thousand metric tons), followed by the United States at 9 percent (143 thousand metric tons). Japan was also received the most exports of semi-finished products at 37 percent (114 thousand metric tons).

The United States also accounted for the largest share of South Korea's pipe and tube exports at 64 percent (1 million metric tons).



South Korea's Top 5 Export Markets by Product - YTD 2017

Steel Exports Report: South Korea

percentage point. Mexico had

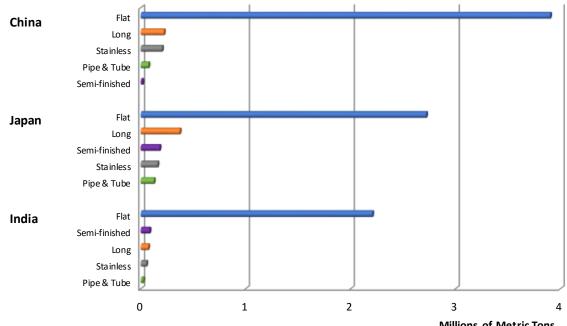
In 2016, the import market	South Korea's Steel Import Market Share				
share for South Korea's steel	Top 10 Export	Share of	S. Korea Rank	Share of	S. Korea Rank
products increased in the	Markets	Imports from S.	in 2015	Imports from S.	in 2016
majority of South Korea's top		Korea - 2015		Korea - 2016	
export markets. The share of	China	30.9%	2	32.8%	2
imports from South Korea in	United States	12.5%	3	11.6%	3
India increased the most — up	Japan	58.5%	1	60.6%	1
2.4 percentage points –	India	22.4%	2	24.7%	2
followed closely by shares in	Thailand	11.7%	3	10.2%	3
Japan (up 2.1 percentage	Vietnam	11.8%	3	N/A	N/A
points) and China (up 1.9	Mexico	13.5%	3	11.1%	3
percentage points). South	Indonesia	11.2%	3	9.4%	3
Korea's import share in	Turkey	6.4%	4	7.6%	4
Turkey and Italy both	Italy	3.1%	9	4.6%	6
increased by a little over 1	Source: IHS Global Tra	ade Atlas, based on im	port data per repor	tingcountry	

South Korea's Import Market Share in Top Destinations

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).

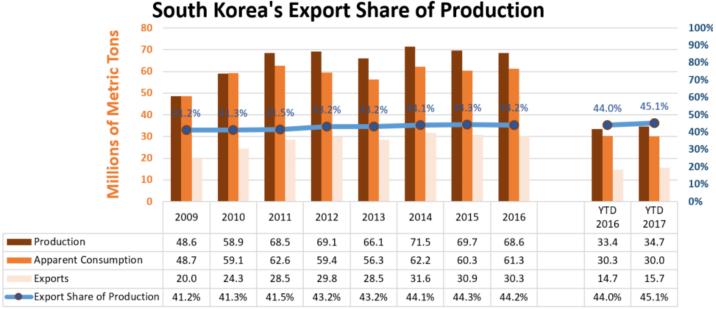
Among South Korea's top export markets, China, Japan, and India received more than 20 percent of their total steel imports from South Korea at 32.8 percent, 60.6 percent, and 24.7 percent, respectively. In 2016, flat products accounted overwhelmingly for the largest share of steel imports from South 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

Millions of Metric Tons



Overall Production and Export Share of Production

Sources: World Steel Association; IHS Global Trade Atlas YTD through June 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 34.7 million metric tons, up 3.6 percent from 33.4 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 0.7 percent to 30 million metric tons, down from 30.3 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 7.3 million metric tons in 2016. In YTD 2017, the gap was at 4.6 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 2.7 percent from YTD 2016, up to 45.1%.

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, plate, stainless, electrical, wire rods		
2	HYUNDAI Steel Company	20	Beams, reinforcing bars, hot-rolled, plates		
3	Dongkuk Steel Mill Co, Ltd	3.3	Plates, sections, bars		
G		1			

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
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/.



INTERNATIONAL 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