

Global Steel Trade Monitor

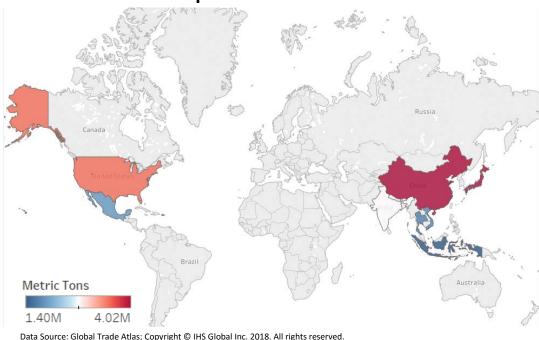
Steel Exports Report: **South Korea**

Background March 2018

South Korea is the world's fourth-largest steel exporter. In 2017, South Korea exported 31 million metric tons — a 2 percent increase from 30.3 million metric tons in 2016. South Korea's exports represented about 7 percent of all steel exported globally in 2016, based on available data. The volume of South Korea's 2017 steel exports was less than half of the world's largest exporter, China, and just behind the third-largest exporter, Russia. In value terms, steel represented just 4.3 percent of the total amount of goods South Korea exported in 2017.

South Korea exports steel to more than 150 countries and territories. The eight countries highlighted 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 68 percent of South Korea's steel exports in 2017.

South Korea's Exports of Steel Mill Products - 2017

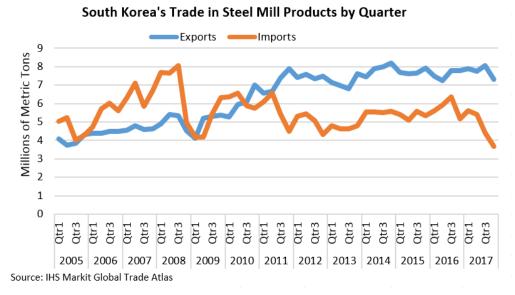


Quick Facts:

- World's fourth-largest steel exporter: 31 million metric tons in 2017
- 28% steel export growth since 2010
- Exports as a share of production at 43.7% in 2017
- Year-on-year export volume up 2% while export value up 23%
- Top three export markets: China, Japan, United States
- Largest producers: POSCO and Hyundai Steel Co.
- 61 trade remedies in effect in 13 countries involving steel mill imports from South Korea

Steel Trade Balance

Prior to 2009, South Korea had a trade deficit in steel products. Imports fell in 2009, bringing steel exports imports closer into balance. Beginning in 2010, however, South Korea's exports outpaced imports, growing 28 percent between 2010 and 2017. Over the same period, annual imports fell, decreasing by 22 percent from 2010. As such, South

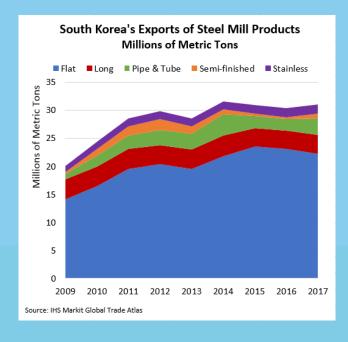


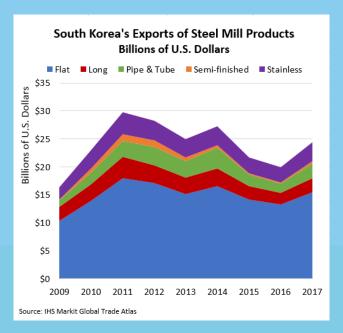
Korea has posted a steel trade surplus since mid-2010. In 2017, the surplus amounted to 11.9 million metric tons — a 65 percent increase from 7.2 million metric tons in 2016.

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 2017, South Korea exported 31 million metric tons of steel, up 2 percent from 2016. The value of South Korea's 2017 exports increased by 23 percent to \$24.4 billion from \$19.9 billion in 2016, which can be attributed to an increase in global steel prices.

Flat products account for a significant share of South Korea's steel exports. In 2017, 71 percent, or 22.2 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 (10% or 3 million metric tons), stainless products (5% or 1.6 million metric tons), and semi-finished steel (3% or 885 thousand metric tons).

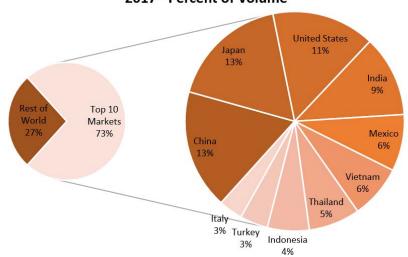




Exports by Top Market

Exports to South Korea's top 10 steel markets represented 73 percent of South Korea's steel export volume in 2017 at 22.8 million metric tons (mmt). 2016. China surpassed the United States as the largest South market for Korea's exports. In 2017, China received 13 percent South Korea's exports (4 mmt). Japan surpassed the United States as the second largest market for South Korea's exports in 2017, at 13 percent (3.98 mmt). The United States,

South Korea's Steel Exports - Top 10 Markets 2017 - Percent of Volume



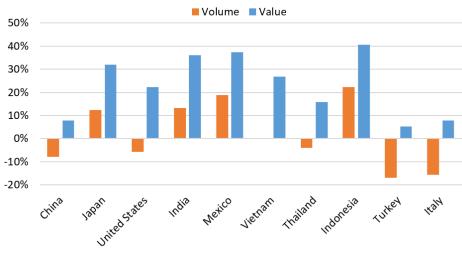
Source: IHS Markit Global Trade Atlas

which ranked first in 2015, received the third-largest share of South Korea's exports at 11 percent (3.5 mmt), followed by India at 9 percent (2.7 mmt), Mexico at 6 percent (1.9 mmt), and Vietnam at 6 percent (1.8 mmt).

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 2016 and 2017. Exports to Indonesia showed the largest increase in volume, up 22 percent from 2016, followed by India (up Mexico (up 19%), 13%), and Japan (up 12%). volume Large decreases included South Korea's exports to Turkey (down 17%), Italy (down 16%), China (down 8%), the United States (down 6%), and Thailand (down 4%).

Percent Change in Exports to Top 10 Markets (2016 to 2017)



Source: IHS Markit Global Trade Atlas

The overall value of South

Korea's steel exports increased to all of the top 10 markets, reflecting increasing global steel prices. Markets with considerable increases in steel value between 2016 and 2017 included Indonesia (up 41%), Mexico (up 37%), India (up 36%), Japan (up 32%), Vietnam (up 27%), the United States (22%), and Thailand (up 16%).

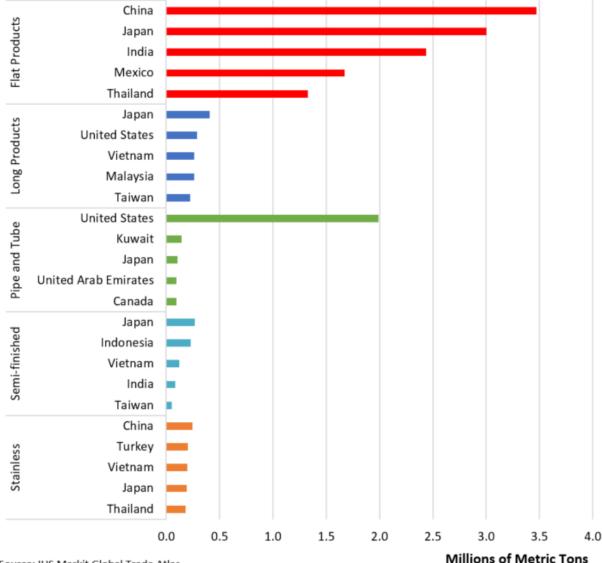
Top Markets by Steel Product Category

South Korea's top export markets by volume vary across types of steel products. In 2017, China accounted for the largest share of South Korea's exports of flat products at 16 percent (3.5 million metric tons).

Japan received the largest share of South Korea's long product exports at 12 percent (409 thousand metric tons), while the United States received the second largest share of South Korea's long product exports at 9 percent (287 thousand metric tons). The United States also had the largest share of South Korea's pipe and tube exports at 66 percent (2 million metric tons).

Japan received the largest share of South Korea's semi-finished exports at 30 percent (266) thousand metric tons). China also received the largest share of South Korea's stainless exports at 15 percent (247 thousand metric tons).

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



South Korea's Import Market Share in Top Destinations

In 2017, the import market share for South Korea's steel products increased in all of South Korea's top export destinations except China, the United States, Italy, Vietnam, and Indonesia. of China's and the United States' steel imports from South Korea decreased by slightly larger

margins, down 2.4 and 1.7 percentage points, respectively.

Countries with notable increases in their share of steel imports from South Korea included India (up 4.9 percentage points from 2016), Japan (up 4.1 percentage points), and Mexico 2.6 percentage points), while Thailand and Turkey saw more marginal increases (less than two percentage points).

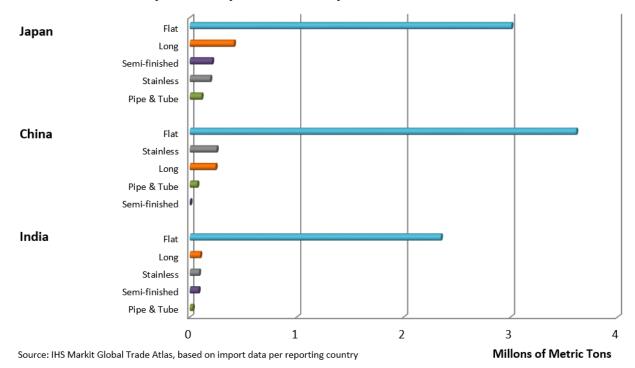
Among South Korea's top export markets, Japan, China, India received 30 percent or more of their total steel imports *2017 Import data for Vietnam and Indonesia is not available

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 2016	Imports from	Rank in 2017	
	South Korea -		South Korea -		
	2016		2017		
China	32.8%	2	30.4%	2	
Japan	60.6%	1	64.6%	1	
United States	11.6%	3	9.8%	3	
India	24.7%	2	29.7%	1	
Mexico	11.1%	3	13.7%	3	
Vietnam*	10.0%	3	N/A	NA	
Thailand	10.2%	3	12.2%	3	
Indonesia*	9.4%	3	N/A	0	
Turkey	7.6%	4	8.7%	3	
Italy	4.6%	6	4.2%	9	

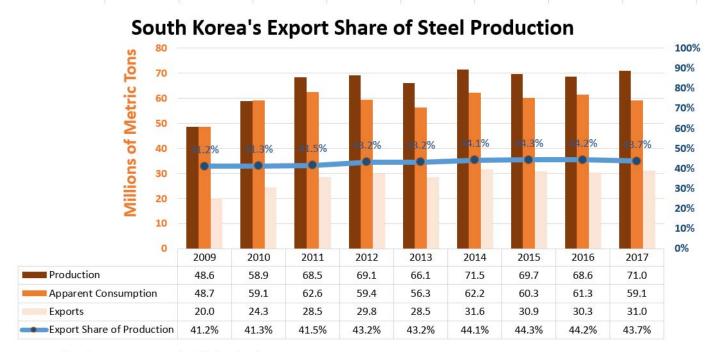
Source: IHS Markit Global Trade Atlas, based on import data per reporting country

from South Korea. In 2017, flat products accounted overwhelmingly for the largest share of steel imports from South Korea in each Japan (77% or 3 million metric tons) China (86% or 3.6 million metric tons), and India (89% or 2.3 million metric tons).

Steel Import Composition of Top Market-Share Countries - 2017



Overall Production and Export Share of Production



Sources: World Steel Association; IHS Markit 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. 2017 production totaled 71 million metric tons — up 4 percent from 2016. Apparent consumption (a measure of steel demand) went from being in balance with production in 2009 and 2010 to falling behind production by 7.2 million metric tons in 2016. The gap between production and apparent consumption grew to 11.9 million metric tons in 2017. 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 43.7 percent in 2017 — down slightly from 44.2 percent in 2016.

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			
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	6			6
China	1			1
European Union	1		1	2
India	5			5
Indonesia	3			3
Malaysia	3			3
Mexico			1	1
Taiwan	3		1	4
Thailand	5			5
United States	14	6		20
Vietnam	1			1
TOTAL	52	6	3	61
Source: World Trade Organization, through June 30, 2017				

Global Steel Mill Safeguards in Effect			
Country	Product(s)		
India	1) Hot-rolled steel in coils; 2) Hot-rolled steel flat sheets and plates		
	1) Flat-rolled products of iron or non-alloy steel; 3) I and H sections of other alloy steel; 4) Bars and rods,		
Indonesia	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		
South Africa	Hot-rolled steel flat products		
	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 February 28, 2018			

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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