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Section 232 National Security Investigation on Steel
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A strong domestic steel industry is critical to U.S. national defense and to the health of America's critical infrastructure (Gibson 2017). Surging imports of dumped and subsidized steel have undermined domestic steel production, prices, employment, profits, investments and the fundamental health of the U.S. domestic steel industry. A surge of unfairly traded steel imports in 2014 was responsible for the elimination of 14,000 direct jobs in the U.S. steel industry between January 2015 and December 2016, and for the elimination of tens of thousands of additional jobs in industries supported by steel production.

U.S.-produced steel is used in critical applications in U.S. weapons, ships, submarines, tanks, artillery, and aircraft. A healthy U.S. steel industry is also essential to the maintenance of a sound U.S. infrastructure to transport military equipment and personnel on land, air and at sea, and to the construction of military bases and equipment. Domestic steel is a critical input in the construction and maintenance of critical infrastructure for transportation, and for public safety and health that are also essential for our homeland and national security. The military depends on having a reliable transportation infrastructure including roads, bridges, railroads, transit and airports. Steel is also an essential element of safe and effective water and sewage systems. Steel pipe, tube and other products are also essential to the construction and maintenance of domestic energy infrastructure in oil, gas, electricity and renewable energy sources which are essential both our national defense and to the health of the U.S. economy.

The steel industry's ability to provide the materials needed to support U.S. national defense and essential domestic infrastructure depends critically on the domestic industry's continuing ability to participate in its commercial markets and to the preservation of a strong, domestic manufacturing base in all aspects of the steel industry. Repeated, periodic surges of unfairly traded steel product from many countries have battered the U.S. steel industry, which is also threatened with future injury from surging imports, both of which directly endanger U.S. national security.

In 2014, as steel imports began to soar, we showed that "Surging Steel Imports Put Up To Half a Million U.S. Jobs at Risk" (Stewart, Drake, Wang, Bell, and Scott 2014). At that time, the U.S. steel industry was facing its worst import crisis in more than a decade. In the aftermath of the Great Recession, steelmakers in other countries, backed by aggressive government support, continued to add production capacity as demand stagnated. The open and large U.S. market became the prime target for the massive excess supply stemming from this excess capacity, and, U.S. steel imports surged sharply between 2011 and 2014, as import prices and unit values plummeted.

The combination of rapidly rising imports and falling import prices drove down revenues in the domestic steel industry and pushed the industry to the brink of financial crisis in 2014. Domestic producers pursued a number of successful fair trade cases against dumped and subsidized products, and total U.S. steel Imports fell 15 percent in 2015. However, imports have increased 19% in the first three months of 2016 and import unit values have fallen sharply and steadily since 2011, which has had depressing effects on the performance of the domestic steel industry that are summarized below.

This statement will update some of the analysis in in our 2014 report on Surging Steel Imports and discuss the implications for the domestic steel industry and U.S. National Security.

Background

Global excess steel capacity is now over 700 million metric tons, more than twice the volume of excess capacity in the last steel import crisis that followed the Asian financial crisis in the late 1990s. While China accounts for more than half of global excess capacity, there is also significant overcapacity in South Korea, India, and elsewhere. With more additions planned overseas and a continued slow recovery in demand, the excess capacity problem is not projected to be resolved any time soon.

Excess capacity means that steel production facilities have the capacity to produce much more steel than the market demands. High fixed costs, capital intensity, and the large scale of steelmaking encourages state-backed producers with excess capacity to maintain production in excess of domestic demand, and export the surplus at below-market rates.

The glut of exports from global excess steel supply is targeted in particular at the U.S. market. U.S. steel imports increased from 25.9 million net tons in 2011 to a peak of 40.2 million net tons in 2014, and then falling back to 30 million tons in 2015 following imposition of anti-dumping and countervailing duties in a number of successful fair trade cases, as shown in **Figure 1**. However, as noted above, imports have increased 19 percent in 2017 (through March) and if sustained at the current pace, will reach 35.6 million tons this year. Since 2011, imports have increased not only in absolute terms, but also relative to domestic production and consumption, seizing more of the U.S. market and thwarting the domestic industry's efforts to recover from the Great Recession.

Evidence that imported steel prices are falling, and falling unfairly, can be found in the declining sales price of imports. Average import unit values (AUVs, in dollars per ton) for a variety of steel products, shown in **Figure 2**, declined sharply between 2011 and March 2017. These declines ranged from \$320 per ton for standard pipe to \$610 per ton for cold rolled sheet. In percentage terms, import AUVs fell 25.9 percent to 41.5 percent over this period, as shown in **Figure 3**.

Surging imports of unfairly traded steel are threatening U.S. steel production, which supports more than a half million U.S. jobs across every state of the nation. The import surge has depressed domestic steel production and revenues, leading to sharp declines in net income in the U.S. steel industry over the past several years, layoffs for thousands of workers, and reduced wages for many more.

Falling import prices have had a depressing effect on domestic steel prices, shipments, market shares, employment, total revenues and profits. Trends in domestic steel prices for the comparable domestic like products are shown in **Figure 4** (based on data from the Bureau of Labor Statistics Producer Price Index Commodity data). Between December 2011 and December 16, steel products fell between 15.6 percent for cold rolled sheet and strip to 45.6 percent for oil country tubular goods.¹

Domestic steel shipments recovered steadily from the Great Recession of 2008-2009, and reached a peak of 98.2 million tons in 2014. Domestic shipments fell to 86.6 million tons in 2015 (a decline of 11.6 percent), and were essentially unchanged at 86.5 million tons in 2016 (American Iron and Steel Institute 2017, not shown). The sharp fall in domestic steel output in 2015 entirely, which essentially continues through early 2017, explains the loss of 14,000 steel jobs between December 2015 and December 2016 (a 9.1 percent decline in total direct employment) shown in **Figure 2**.

¹ Domestic and imported products shown in Figures 2-4 may not be directly comparable due to differences in product coverage and survey methodology.

While U.S. steel output did recover from the depths of the Great Recession between 2009 and 2014, domestic producers have experienced declining shipments since 2014, and sharply declining revenues between 2012 and 2014. As a result, the U.S. steel industry had net losses of \$388 million in 2012 and \$1.2 billion in 2013, and it posted net losses in four of the five years between 2009 and 2013 (Stewart, *et al* 2014). (More recent data on net gains and losses in the domestic steel industry were unavailable for these comments). A large, capital-intensive industry cannot long survive in its present form when subject to such chronic financial losses.

Overall U.S. steel production supported 583,600 jobs in 2012, including 123,400 direct jobs in steel production; 255,500 of the jobs supported were in manufacturing (including direct jobs in the steel industry), accounting for 43.8 percent of all jobs supported by the industry (Stewart, *et al* 2014). These jobs are at risk if surging imports of unfairly traded steel are allowed to displace domestic steel production.

The top 10 states, ranked by total number of jobs at risk from displaced domestic steel production, are Texas (59,800 jobs supported), California (52,300 jobs), Pennsylvania (35,300 jobs), Ohio (33,900 jobs), Illinois (28,400 jobs), Indiana (26,000 jobs), New York (25,100 jobs), Florida (23,200 jobs), Michigan (20,100 jobs), and Wisconsin (15,700 jobs).

These 583,600 steel-related jobs are at risk if the U.S. does not directly address the root cause of the U.S. (and global) steel import crisis, which is the global glut of excess steel production capacity, more than half of which is located in China. While anti-dumping and countervailing duty orders have provided some relief to domestic producers, as shown above, it has not been sufficient to offset the overall impacts of unfairly traded imports on domestic steel prices, output, employment and net revenues. A more comprehensive program of trade remedies is required. The administration should use this section 232 investigation to construct an expansive program of action to preserve U.S. national security interests in a strong, reliable, *domestic* steel industry.

The excess capacity plaguing the global steel industry stems largely from massive government support for, and direct government involvement in, the steel industry in other countries. In 2011, half of the world's 46 top steel companies were state-owned, and these state-owned companies accounted for 38 percent of global production. These governments view their steel industries as strategic (i.e., important to grow regardless of profit), and thus governments provide a wide array of subsidies to their steel industries, including grants, tax breaks, subsidized loans and debt forgiveness, the provision of inputs at below market rates, direct equity infusions, and more. These factors led to “uneconomic additions to capacity”—increases in capacity that don't make economic sense because they are not driven by demand.

U.S. imports of unfairly traded steel products from many countries are increasing as countries such as China and others sell dumped and subsidized “upstream” (basic) steel products (such as steel slabs and billets) to other countries, which use these inputs in the “downstream” (finished) products, like steel pipe and oil country tubular goods, that they sell to the U.S. China and Korea accounted for more than three-fourths (77.9 percent) of the growth in global steel exports between 2003 and 2012. Imports of Chinese steel by South Korea, Japan, the Russian Federation, Turkey, Vietnam and Mexico rose sharply between 2009 and 2015, as shown in **Figure 1**; South Korea, Japan, Russia, Turkey, Vietnam and Mexico, in turn, are themselves major exporters to the U.S.

Trade Remedies

Inputs of basic steel products represent a substantial share (half to three quarters or more) of the cost of goods sold for downstream products such as tubular products, fittings, flanges and wire products. Thus, it is important that any remedy provided against surging imports of steel imports provide comparable levels of relief from both upstream and downstream producers.

The 2002 steel safeguard provided for 30 percent tariffs in year 1 for slabs, hot- and cold-rolled sheet, but much lower tariffs of 8 percent to 15 percent of certain tubular products, carbon fittings and flanges, and stainless steel wire, rod and bar products (U.S. Trade Representative 2002). As a result, domestic producers of these like products were at a substantial disadvantage relative to imports from countries that were not otherwise subject to unfair trade remedies.

Aggressive government support, coupled with the industry’s capital-intensive nature (i.e., its difficulty ramping down production to handle drops in demand) leads to the kinds of trade distortions (overcapacity, export surges) now threatening the U.S. market. The last time this happened, in the early 2000s following the 1998 Asian financial crisis, trade remedies served as a vital line of defense. Trade remedies have provided significant benefits for the domestic industry and its workers, including resurgent shipments and sales revenue, improved operating performance, retained jobs, and the ability to make needed capital investments. In cases where relief is denied, the costs have been just as great, in some cases forcing the industry to endure additional years of injury before finally obtaining needed relief, or, worse, going out of business.

However, it is important to recognize that there are important limitations regarding the use of unfair trade and safeguard remedies. Anti-dumping and countervailing duty cases are typically filed by domestic producers or workers, and are expensive to pursue. Some firms may opt not to participate due to investments or other market considerations in subject country markets. Hence, not all possible unfair trade cases will be pursued. Remedies provided can be effective, at least in the short-term, but often result in trade diversion to non-subject countries, and in (legal and illegal) trans-shipment to avoid

imposition of unfair trade duties. Broad safeguard remedies, such as the 2002 steel safeguard measures, which are only rarely used, are more comprehensive but are designed to provide only temporary adjustment assistance. The 2002 steel safeguard measures, intended to be in effect through 2005, were lifted in December 2003, in response to an EU trade dispute (Tran 2003). Developing an effective response to the threats posed by global excess steel production capacity will require a comprehensive, global response and a long term plan for confronting unfair trade and rebuilding critical national steel production infrastructure.

Costs and Benefits of Steel Remedies

The economic impacts of potential section 232 relief for the U.S. steel industry are small, but important, relative to the U.S. economy as a whole. As an extreme case, assume a 40 percent across the board tariff on steel imports, which may not be sufficient to reverse the 25.9 percent to 43.1 percent fall import AUVs shown in Figure 1.² The total value of U.S. steel imports was \$22.3 billion in 2016 (U.S. Census Bureau 2017). A 40 percent tariff on all U.S. steel imports would directly raise the cost of those imports by \$8.9 billion. Assume that the tariff causes competing domestic prices to increase by approximately 20 percent, and that the import value share of the U.S. domestic steel market was initially 25 percent in 2016. This implies that the cost of competing domestic steel could increase by \$13.4 billion, for a total increase in steel costs of \$22.3 billion.³ Then the \$22.3 billion hypothetical cost of steel import relief is 0.15 percent of U.S. GDP in 2016.

If effective import relief was imposed, then domestic steel production would likely rise, as it did in briefly in 2014. Domestic steel output, employment and other measures could improve comparably. Total industry revenues, including wages and tax payments, would increase, reducing government budget deficits nationwide. In addition, domestic expenditures for unemployment relief and other safety net expenditures would fall further reducing government budget deficits. Investment in steelmaking capacity would rise, as would levels of domestic productivity growth. While it is hard to quantify the benefits of these investments, they are much easier to calculate than the national security benefits that would be gained by reducing dependence on imported suppliers of steel in terms of improved reliability access to domestically sourced critical resources for national defense, infrastructure and homeland security. Overall, investments in securing the U.S. would involve relatively small costs and would generate substantial returns on

² If the average decline in import AUVs shown in Figure 3 is 40 per cent, then a tariff of 66.7% (which equals $1 \text{ over } 0.6$) would be required to reverse the decline in average unit values that has taken place since 2011.

³ If imports are 25 percent of the domestic market, then the domestic share of the domestic steel market is $3 * \$22.3 \text{ billion} = \66.9 billion . If domestic costs increase by 20%, then the total costs of domestic and imported steel increases by $\$9.3 + \$13.4 \text{ billion} = \$23.3 \text{ billion}$.

investment in building a more secure steel industry to complement U.S. national defense, homeland security and critical infrastructure needs.

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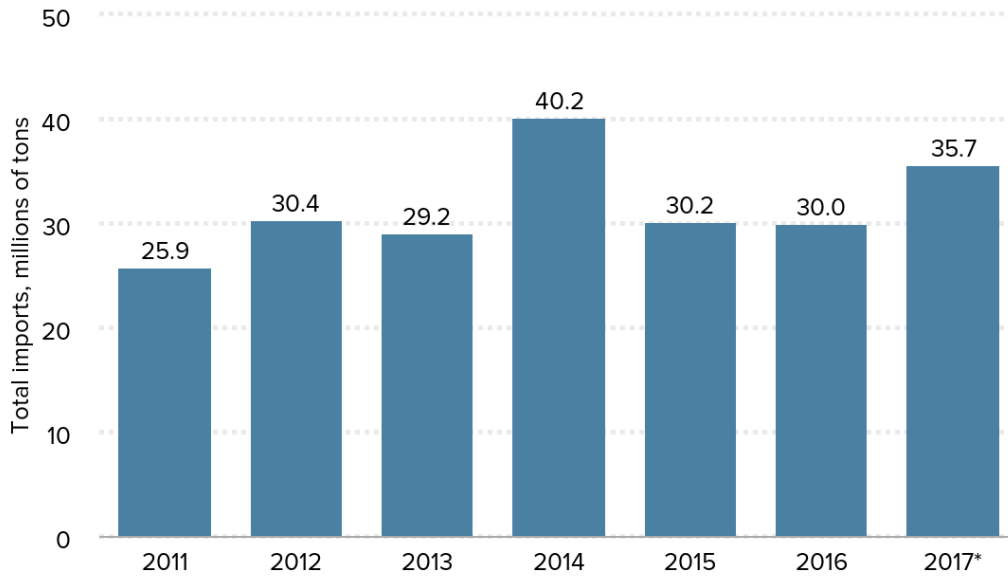
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Figure 1

Rising U.S. Steel Imports, 2011 – 2017 est.



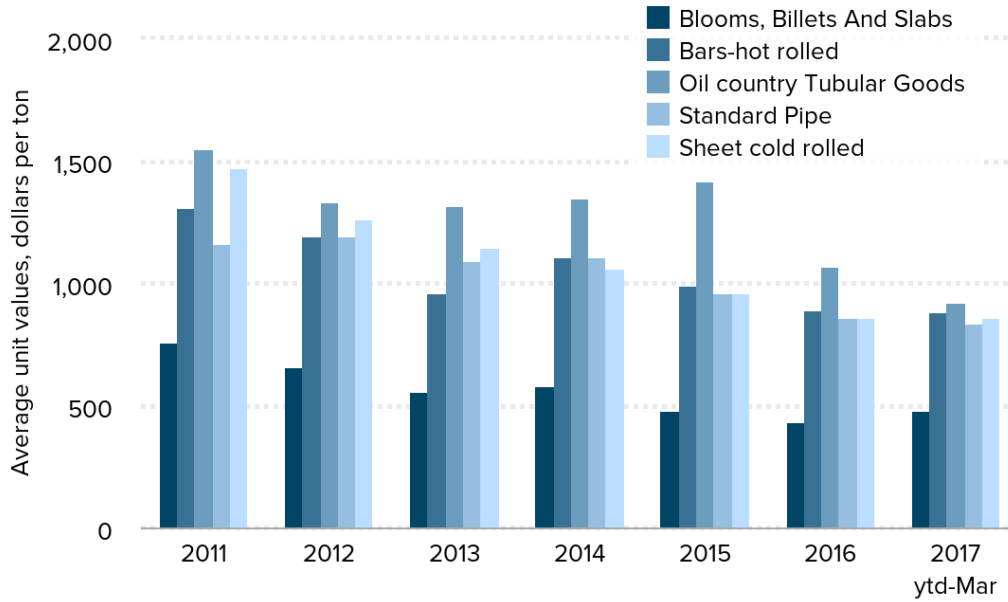
*2017 estimate based on total imports, year-to-date March.

Source: Economic Policy Institute analysis of U.S. Census Bureau, FT 900A reports.

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Figure 2

Falling Steel Import Prices, 2011 – Mar 2017

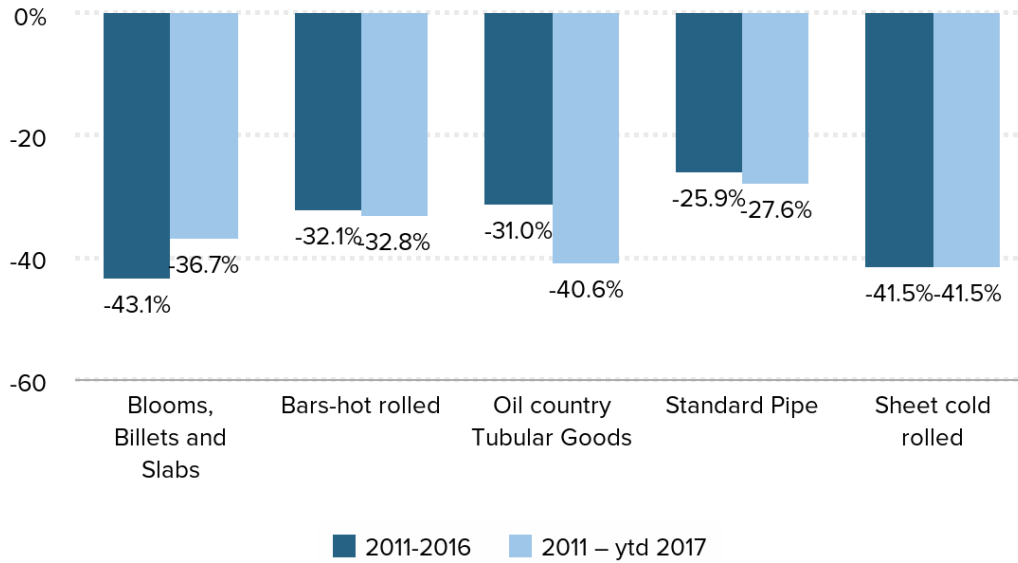


Source: Economic Policy Institute analysis of U.S. Census Bureau, FT 900A reports.

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Figure 3

Cumulative percent change in average unit values of steel imports, 2011 – 2017 ytd (Mar)

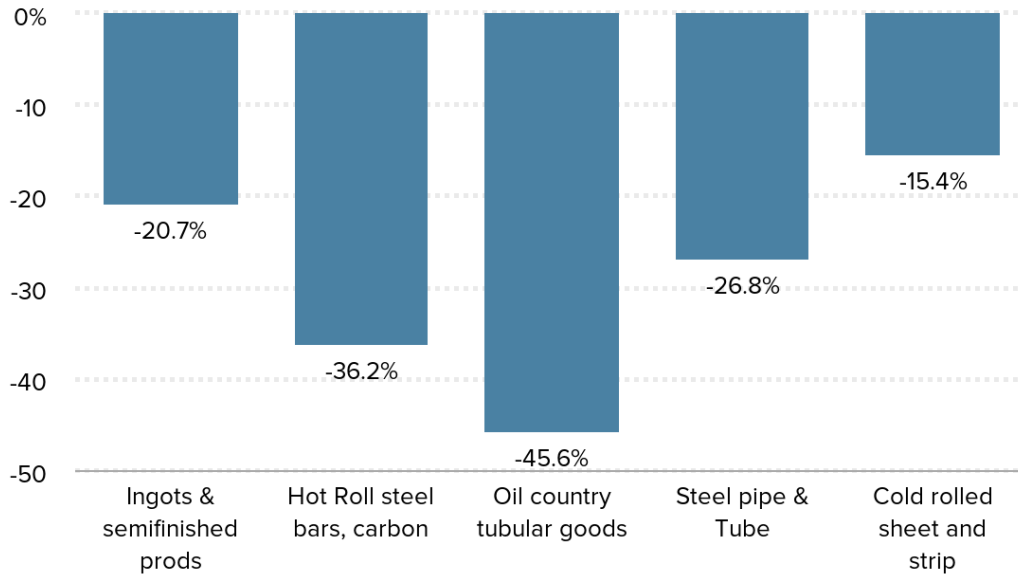


Source: Economic Policy Institute analysis of U.S. Census Bureau, FT 900A reports.

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Figure 4

Cumulative percent change in various U.S. domestic steel commodity price indices, 2011-2016

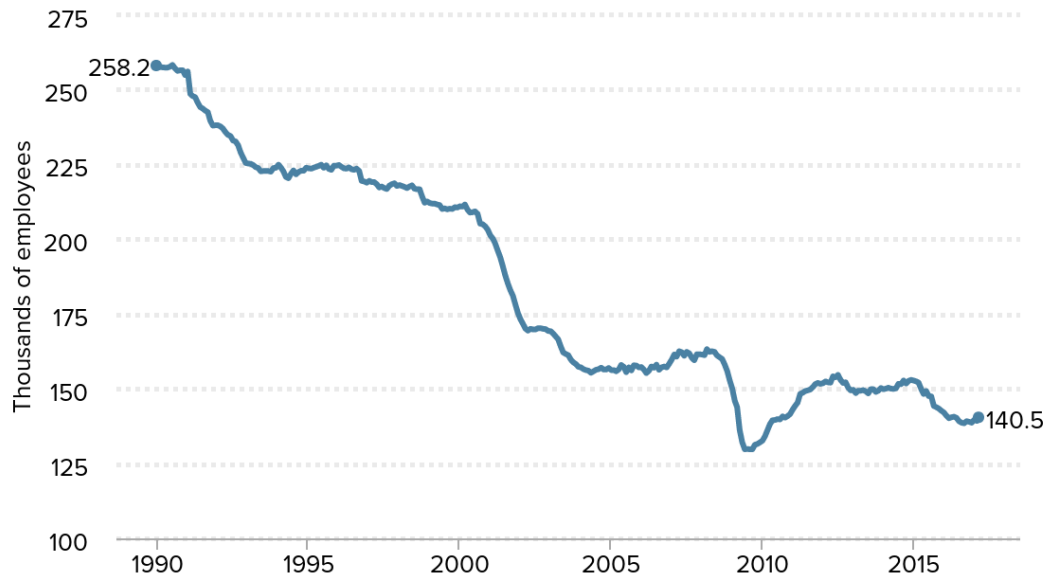


Source: BLS Commodity Price Indexes

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Figure 5

U.S. steel employment, 1990 – 2017



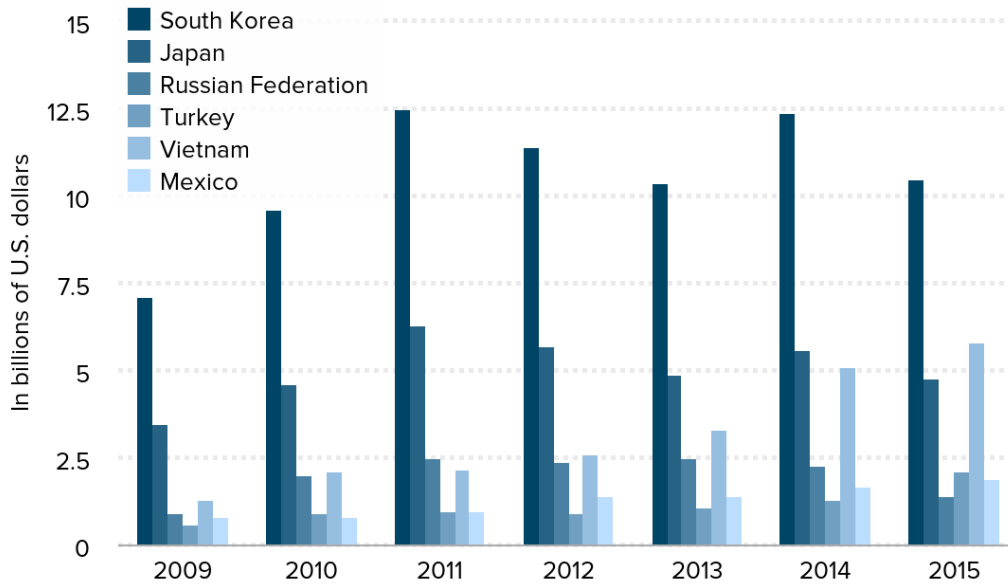
Note: Employment data combine blast furnaces and steel mills (NAICS 3311) and steel products from purchased steel (NAICS 3312).

Source: Economic Policy Institute analysis of Bureau of Labor Statistics Current Establishment Survey public data.

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Figure 6

Major steel exporters' imports of finished and semifinished steel from China, 2009–2015



Source: Economic Policy Institute analysis of United Nations Comtrade Database.

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