THE 2016 NATIONAL ECONOMIC IMPACT OF IMPORTED IRON AND STEEL PRODUCTS ON THE U.S. MARINE TRANSPORTATION SYSTEM AND THE U.S. ECONOMY:
EXECUTIVE SUMMARY

Conducted by Martin Associates
www.martinassoc.net
September 2017

Overview

Over the past 31 years, Martin Associates has conducted more than 600 seaport economic impact studies for the majority of ports throughout the United States. The purpose of this study is to quantify the national economic impacts of imported iron and steel products moving through the nation’s seaports and using the country’s highways, rail and inland waterways to move the products from the seaports and inland waterways ports to the intermediate and final end users. These end users include the nation’s auto and transportation equipment manufacturing industry, steel fabricators, as well as the construction industry. With the potential imposition of trade restrictions and quotas on imported iron and steel products being discussed in Washington by the current administration, it is critical to advance a defensible understanding of the importance of imported iron and steel products to the ports and transportation logistics supply chains that are the conduit for delivery of these products to the end users, as well as to the domestic industries that are dependent on the use of imported iron and steel products. As a service to the American Institute for International Steel (AIIS), Martin Associates has prepared this study, quantifying the economic impact of imported iron and steel products on the U.S. economy.
Economic Impact Analysis

The economic analysis is based on individual seaport impact models developed by Martin Associates in the last three years for major steel import ports in the U.S. These seaports include ports on the West Coast, Atlantic Coast, Gulf Coast and the Great Lakes. Detailed impact models were developed for several of the ports based on interviews with over 6,500 port service providers.

The imported steel handled at these ports accounts for nearly 85% of the imported iron and steel products reported by the U.S. Bureau of Census. Using these models, Martin Associates developed an estimate of the economic impact of the 2016 imported iron and steel products on the U.S. economy. These models were used to estimate the economic impact of 85% of the 34.4 million tons imported iron and steel products that moved via the nation’s seaports in 2016. The model structures were then used to expand the impacts to cover the remaining 15% of the steel imports at other ports throughout the U.S.

The resulting economic impact models can be used for annual updates, as well as to test and evaluate the potential impacts of trade restrictions on imported iron and steel products. Similar models have been developed by Martin Associates that have been used to quantify the total economic impacts of the U.S. Coastal ports on the nation’s economy; to measure the impacts of port shutdowns, such as the 2002 West Coast port shutdown, and the recent West Coast port slowdowns that occurred during the 2014-2015 contract negotiations; and to measure the impacts of the March 2002 Section 201 iron and steel import restrictions.

2016 National Economic Impacts Generated by the Imported Iron and Steel Products on the National Marine Transportation System and Domestic Users

- **1.3 million jobs** supported by port activity
  - Direct Jobs: 26,432
  - Induced Jobs: 33,182
  - Indirect Jobs: 24,338
  - Related importers direct, induced and indirect: 1,216,863

- **$239.8 billion** of total economic activity - accounts for 1.3% of U.S. GDP in 2016
  - $4.2 billion direct business revenue
  - $4.8 billion of re-spending of personal income and consumption expenditures
  - $230.7 billion of economic output by related importers

- **$62.7 billion** total personal income and local consumption
  - $53,796: Average salary for direct employees

- **$19.4 billion** of federal, state, and local taxes
  - $2.3 billion local tax generated by direct, induced, and indirect activity
  - $17.1 billion generated by importers using the imported steel
2016 National Economic Impacts of the Imported Iron and Steel Moving through the U.S. Port System

In 2016 there were 83,952 direct, induced and indirect jobs in the United States generated by imported iron and steel products moving via the nation’s seaports. Of the 83,952 jobs, **26,432 jobs are directly** generated by the imported iron and steel cargo and related vessel activity. As the result of local and national purchases by those 26,432 individuals holding the direct jobs, an additional **33,182 induced jobs** were supported in the national economy. In addition, as the result of $1.9 billion of purchases by businesses supplying the direct services at the marine terminals, and by businesses dependent upon the imported iron and steel products and vessel activity, **24,338 indirect jobs** were created in the national economy. An additional **1.2 million jobs are with related importers and users** of the imported iron and steel products moving through the nation’s seaports.

In 2016, the re-spending and local consumption impact generated by the imported iron and steel products is estimated at $4.8 billion. The remaining $230.7 billion represents the value of the output to the national economy with users of the imported iron and steel products moving via the U.S. ports. This includes the value added at each stage of production for the firms and industries using imported iron and steel products that flow via the marine terminals.

A total of $19.4 billion of federal, state, and local taxes were supported by the imported iron and steel products handled at the nation’s ports in 2016, including $2.3 billion of direct, induced and indirect federal, state and local tax revenue, and an additional $17.1 billion of federal, state and local tax revenue created as a result of the economic activity of the importers using the imported steel that passed through the nation’s marine transportation system.

In 2016, imported iron and steel activity supported **$239.8 billion of total economic activity**, accounting for 1.3% of the nation’s $18.9 trillion Gross Domestic Product in 2016. Of this $239.8 billion, **$4.2 billion accounts for direct business revenue** that was received by the firms providing services to the imported iron and steel cargo and associated vessels calling at the nation’s seaports. From this $4.2 billion of direct business revenue, the firms use a portion, $1.4 billion, to pay the salaries of 26,432 direct job holders. This equates to an average annual income of $53,796.

In addition to the direct salary paid from the $4.2 billion of direct business revenue, the firms providing the direct services also make purchases for goods and services, totaling about $1.9 billion.

Another component of the $239.8 billion economic activity is the re-spending effect that occurs due to consumption purchases by the direct jobs holders. This is not included in the direct business revenue as it occurs from the portion of the direct income that is used by individuals for purchases of goods and services.
Implications of Iron and Steel Import Reductions

Prior to imposing trade restrictions on imported iron and steel products, it is necessary to first consider the potential negative impacts on the Marine Transportation System and the national economy.

The 34.4 million tons of imported non-containerized iron and steel products have a significant impact on the nation’s marine transportation system, and further on key domestic industries using the imported iron and steel products.

In addition to the economic impacts generated by the imported steel, it is important to emphasize that the majority of the ocean vessels carrying imported steel into the Gulf Coast ports such as New Orleans, as well as the Great Lakes ports, provide the backhaul vessel capacity to move export grain from the U.S. to overseas destinations.

If import restrictions are imposed on the imported iron and steel products, not only will the 1.3 million jobs be at risk, but the ocean cost to export grain from the U.S., particularly from the Lower Mississippi River, will increase due to the restricted number of vessels that will be available to carry grain exports (due to the restricted steel import volumes). This in turn will have a ripple effect into the nation’s agricultural sector.

In 2016, according to USA Trade OnLine, about 47 million tons of grain were exported via the Lower Mississippi River. Using the Martin Associates grain export model, this export grain generated 10,830 direct, induced and indirect jobs and supported about 39,000 jobs in the nation’s agricultural industry. With the imposition of import restrictions on iron and steel products, these jobs in the U.S. agricultural sector are also at risk due to increased ocean costs resulting from a restricted supply of ocean vessels that could occur under trade restrictions imposed on iron and steel products.

The models developed in this study will provide an updated framework to estimate the economic impacts that could occur should trade restriction be imposed on imported iron and steel products.

A similar analysis was conducted by Martin Associates in 2006 to assess the impacts of the Section 201 imported iron and steel restrictions. On March 5, 2002, a select group of imported iron and steel products were subject to import restrictions under Section 201 of the Trade Act of 1974. The purpose of these measures was to impose a temporary safeguard to assist America’s steel industry and its workers to make a positive adjustment to import competition with respect to certain steel products. While the initial period of coverage extended from March 2002 to March 2005, the measures were removed at the end of 2003. During this period, March 2002 through December 2003, steel imports were reduced significantly, with implications on the economic health of the nation's Marine Transportation System. Based on the statistical analysis conducted by Martin Associates, in each month that the restrictions were in effect, 424,000 tons per month of imported iron and steel products were lost from the nation’s marine transportation system. Over the 22 months that the restrictions were in force, a total of 9.3 million tons of steel products were excluded from moving via the U.S. port system. This loss of imported iron and steel products in turn had an impact on the economic health of the nation’s Marine Transportation System, and the overall economy. Based on the previous analysis conducted by Martin Associates in 2006, the imposition of the Section 201 steel restrictions cost the economy 22 million person hours over the 22-month period, $77.3 million of federal taxes and $391 million in personal income and consumption expenditures. 1

In summary, such trade restrictions on imported iron and steel products will put at risk nearly 84,000 direct, induced and indirect jobs that are now generated by the handling and transport of the imported iron and steel products, and further potentially impact more than 1.2 million jobs with users of the imported iron and steel products.