



Value	Total	%
5,000.00	15,000.00	30.0%
5,000.00	15,000.00	30.0%
(2,000.00)	15,000.00	30.0%
(2,000.00)	15,000.00	30.0%
10,000.00	75,000.00	30.0%
950.00	7,125.00	30.0%
10,950.00	82,125.00	30.0%
4,000.00	1,000.00	100.0%
4,000.00	1,000.00	100.0%
(1,000.00)	1,000.00	100.0%
(1,000.00)	1,000.00	100.0%
8,000.00	2,000.00	100.0%
760.00	190.00	100.0%
8,760.00	10,950.00	100.0%
(4,000.00)	950.00	100.0%
(380.00)	10,950.00	100.0%
(4,380.00)	10,950.00	100.0%

EXPORT TRENDS IN WASHINGTON STATE VOLUME 9

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FS248E

Export Trends in Washington State Volume 9

Abstract

Accurate descriptions of export trends are needed so industry representatives, analysts, policymakers, and business owners can properly assess market conditions. This publication provides data on manufactured and processed agricultural exports from Washington State to foreign markets for industries including aerospace products, petroleum and coal products, navigational instruments, paper products, basic chemicals, other machinery, and fruit and vegetable preserves. The data here can be used to compare export changes over time.

This is the ninth edition of an annual series. This volume includes data on both exports and imports. Also included is a section discussing the trend in the exchange rate. Similar to the nation, Washington exports decreased remarkably in 2015, in some cases falling below 2006 levels. Exports decreased in almost every leading export industry. Unlike the nation, imports into Washington increased, led by more imports in the Aerospace Products and Parts industry.

Introduction

This publication includes data that depict trends in Washington exports from 2006 to 2015, and imports from 2008 to 2015, by industry. The data are presented as an inflation-adjusted time series, which allows values to be compared over time. These figures also emphasize the relationships between the export activity of Washington's individual industries and its overall state-level exporting activity. The industries discussed include some of the largest in the state: aerospace products and parts, petroleum and coal products, navigational instruments, paper products, basic chemicals, and other machinery. Special attention is given to the processed agricultural products industries: fruit and vegetable preserves, grain and oilseed milling products, meat products, and dairy products. Readers interested in seeing the sub-industries that make up each category should visit the [North American Industry Classification System \(NAICS\) website](#), which is administered by the United States Census Bureau, and click on the 2012 NAICS search button.

This volume of Export Trends in Washington State is the ninth fact sheet in a series of WSU Extension publications providing information on Washington exports and imports. New to this edition are 2015 export and import data, and a section discussing the trend in the exchange rate.

The [World Institute for Strategic Economic Research \(WISERTrade\)](#) is the source for Washington's exports and imports data. The key feature of the WISERTrade state-level export data is its focus on the location from which exporting begins (origin-of-movement state) rather than on the location from which exported goods are produced (production state). This fact has important implications for the accuracy of data interpretation and conclusions. A discussion of these implications can be found in *The Collection and Description of Washington State Export Data* (Cassey 2010). Also included is a description of the process by which the Washington State export data used in this series are collected as well as interpretation limitations and definitions for many technical terms.

Import data are collected at the U.S. port of entry and the statistics are credited to the state indicated by the importer of record. Therefore, the import data likely overestimate the value of foreign goods used for production or consumption in Washington since intermediary buyers in Washington could sell these imports to other states. However, if the overestimating remains constant over time, the import data will show trends accurately.

Though the export data for the origin-of-movement state and import data for the port-of-entry state are only available for purchase, interested readers may obtain some Washington State trade data at no cost from [TradeStats Express](#). In this publication, all nominal data have been adjusted for inflation using the annual values from the Consumer Price Index (CPI) for the Seattle-Tacoma-Bremerton area. These CPI data are for all urban consumers for all items, except food and energy, and are available from the [Bureau of Labor Statistics \(BLS\)](#) Series ID: CUUSA423SA0L1E. The base year used is the 1982–1984 average. This base year is the standard used by the BLS. This means that the dollar value of the data provided corresponds to the average value of the dollar from 1982 to 1984.

Washington Inflation-Adjusted Export Patterns in Total and by Selected Industry

In 2015, Washington State exports were \$29.5 billion in inflation-adjusted value. That is down from \$30.8 billion in inflation-adjusted value in 2014, a decrease of 4.3%. This may be seen in Figure 1. Though Washington's exports have decreased in the recent past, namely in 2008 and 2010, those years were part of the so-called Great Recession. That exports decreased in 2015 is noteworthy because the overall U.S. economy grew during the year.

A large part of the reason that the decrease in exports in 2015 is not larger is because exports from the Aerospace Products and Parts industry increased by about \$600 million or 3.1%. This may also be seen in Figure 1 as well. Though 2015 saw a slower increase than the double-digit percent increases from 2011–2014, 2015 is the fifth consecutive year for an expansion of exports from the Aerospace Products and Parts industry. Aerospace, by far Washington’s largest in terms of exports, buoyed 2015 statewide exports. Because of this, Aerospace Products and Parts now accounts for over 70% of Washington’s total export value, more than any year going

back to 2006. The increasing importance of Aerospace Products and Parts to Washington’s overall exports can be seen in Figure 2.

Unlike Aerospace Products and Parts, Washington’s other leading export industries experienced decreases in exports in 2015. This may be seen in Figure 3. (Note Figure 3 repeats the total Washington State export data with scale on the right axis.) Petroleum and Coal Products experienced an amazing 46% decline in 2015. Computer Equipment dropped 15%; Other General Purpose Machinery declined 13%;

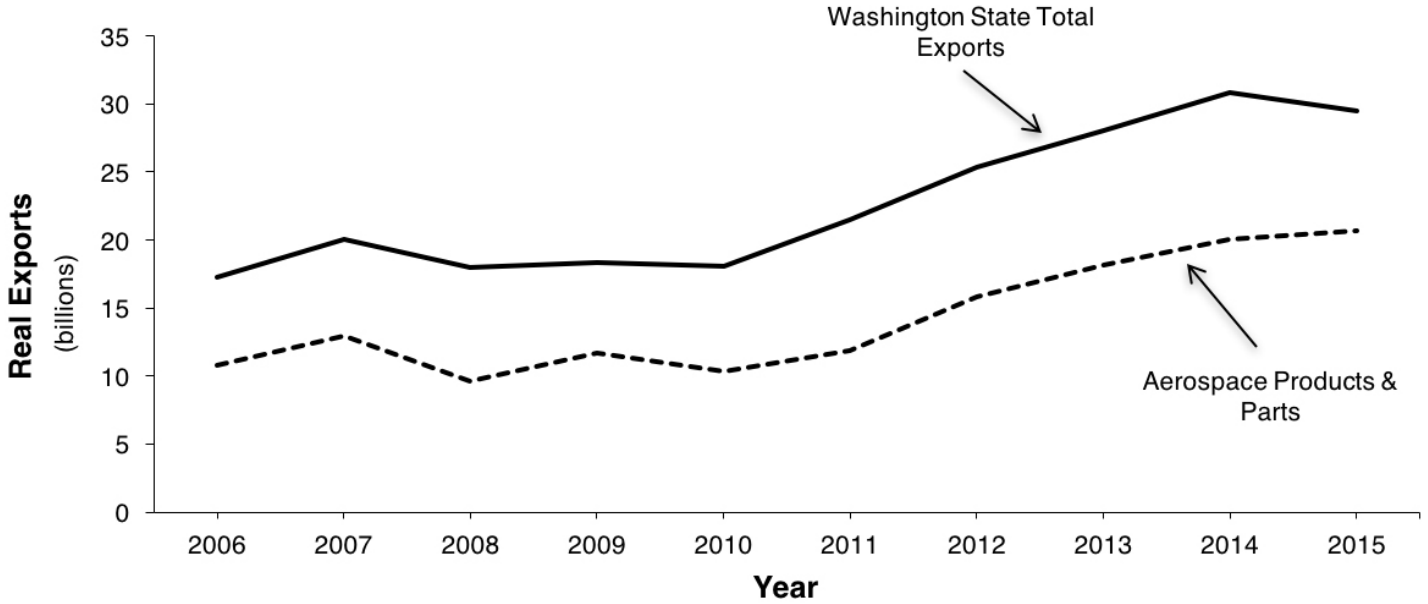


Figure 1. Inflation-adjusted exports for Washington State aerospace products and parts and total exports to the world, by year.

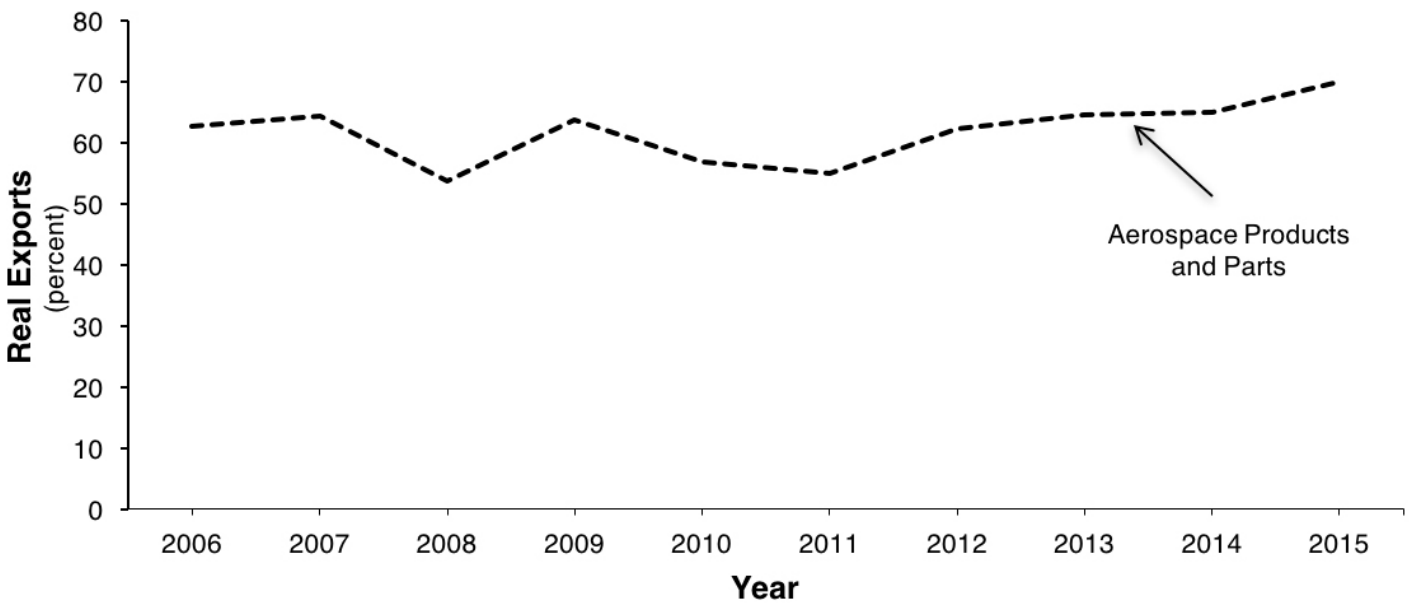


Figure 2. Percentage of total Washington exports to the world accounted for by Aerospace Products and Parts, by year.

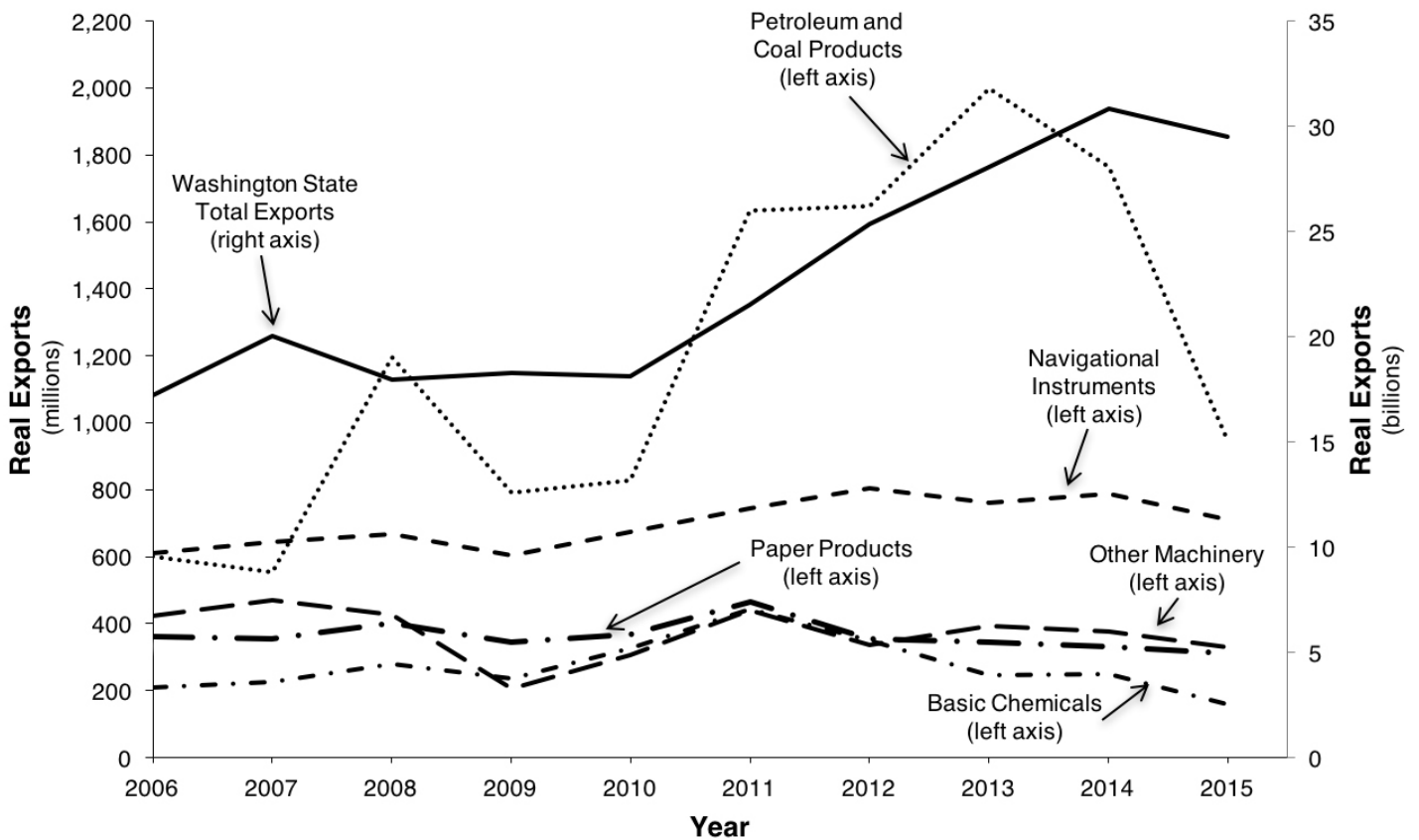


Figure 3. Inflation-adjusted exports for five Washington State industries and total exports to the world, by year.

Navigational, Measuring Electromedical and Control Instrument exports decreased almost 10%; Paper Products by 6.5%. Most of these industries also experienced a decline in exports in 2014 as well, but none as substantially as in 2015. In fact, nearly all of Washington’s leading export industries now ship less value to the world than in 2006 when adjusted for inflation.

The export data on processed agricultural products fall into the food manufacturing (NAICS 311) subcategory under manufacturing (NAICS 31–33). An agricultural product must be considered processed if it is to count as a manufactured good. Processing methods include freezing, cutting, and packaging. Thus, the Census Bureau counts many products informally considered agricultural goods as manufactured products. The export data for unprocessed agricultural products (crop and animal production, NAICS 111 and 112) are not considered because the data collection method used attributes goods to the port state, regardless of what state actually produced the good. Consequently, the export data for unprocessed agricultural goods for port states such as Washington do not accurately reflect the state’s economic activity. See *The Collection and Description of Washington State Export Data* (Cassey 2010) for details on Washington’s export data and related consolidation issues in port states.

Washington’s leading manufactured food products export industries include fruit and vegetable preserves and specialty foods, dairy products, meat and meat-packaging products, seafood products, foods not elsewhere specified, and grain and oilseed-milling products. Producers in the fruit and vegetable preserves industry group are primarily engaged in freezing fruits and vegetables as well as pickling, canning, and dehydrating them, regardless of the type of fruit or vegetable (www.naics.com).

Figure 4 shows the inflation-adjusted export value for Washington’s processed agricultural products. As with most other industries, exports declined in 2015. The fruit and vegetable preserves industry experienced a decline of 3.5% or about \$15.7 million in inflation-adjusted dollars. This marks a second consecutive decrease in exports in this industry. After a large gain in 2014, Dairy products experienced a decrease of \$17 million, or 8.2%. However, most industries have experienced an overall growth in exports in the past decade, since 2006.

Exchange Rate

Though the cause of the decline in exports in Washington and nationwide is not known, one obvious possibility to consider is

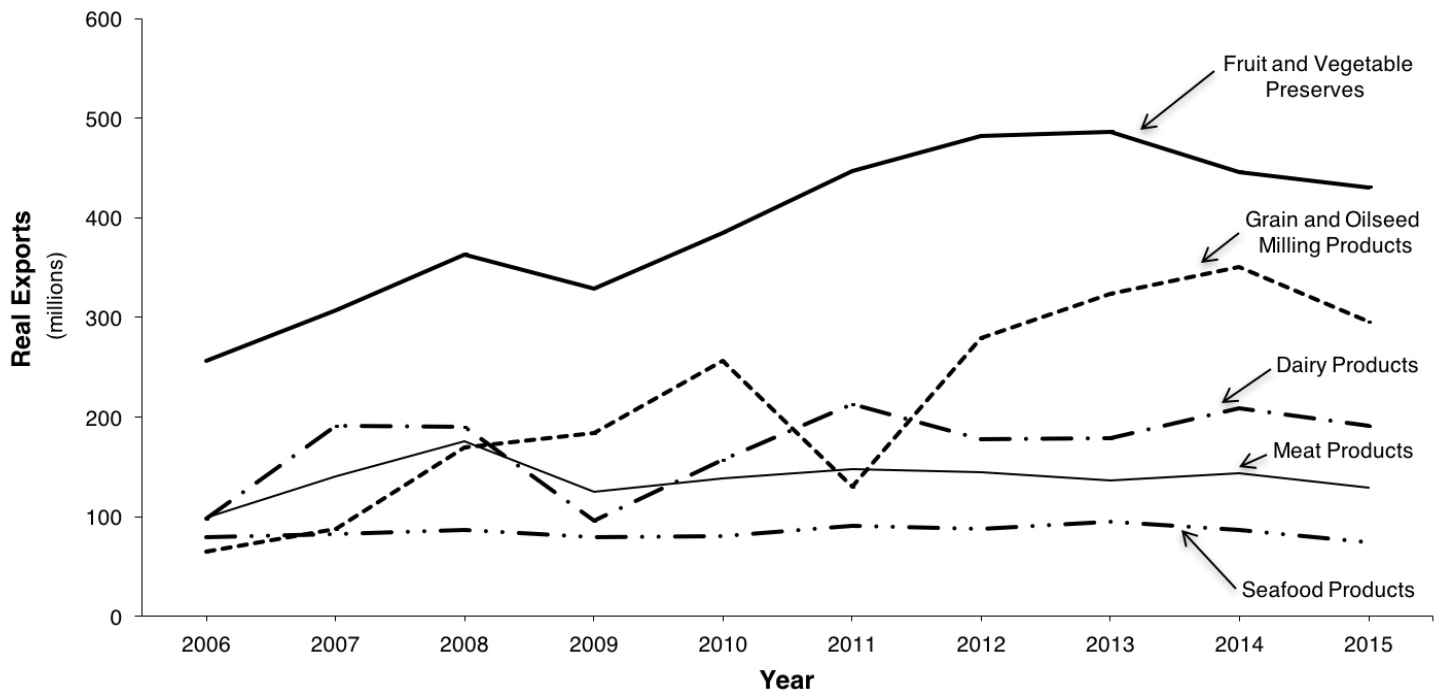


Figure 4. Inflation-adjusted exports of processed agricultural products for Washington State, by year.

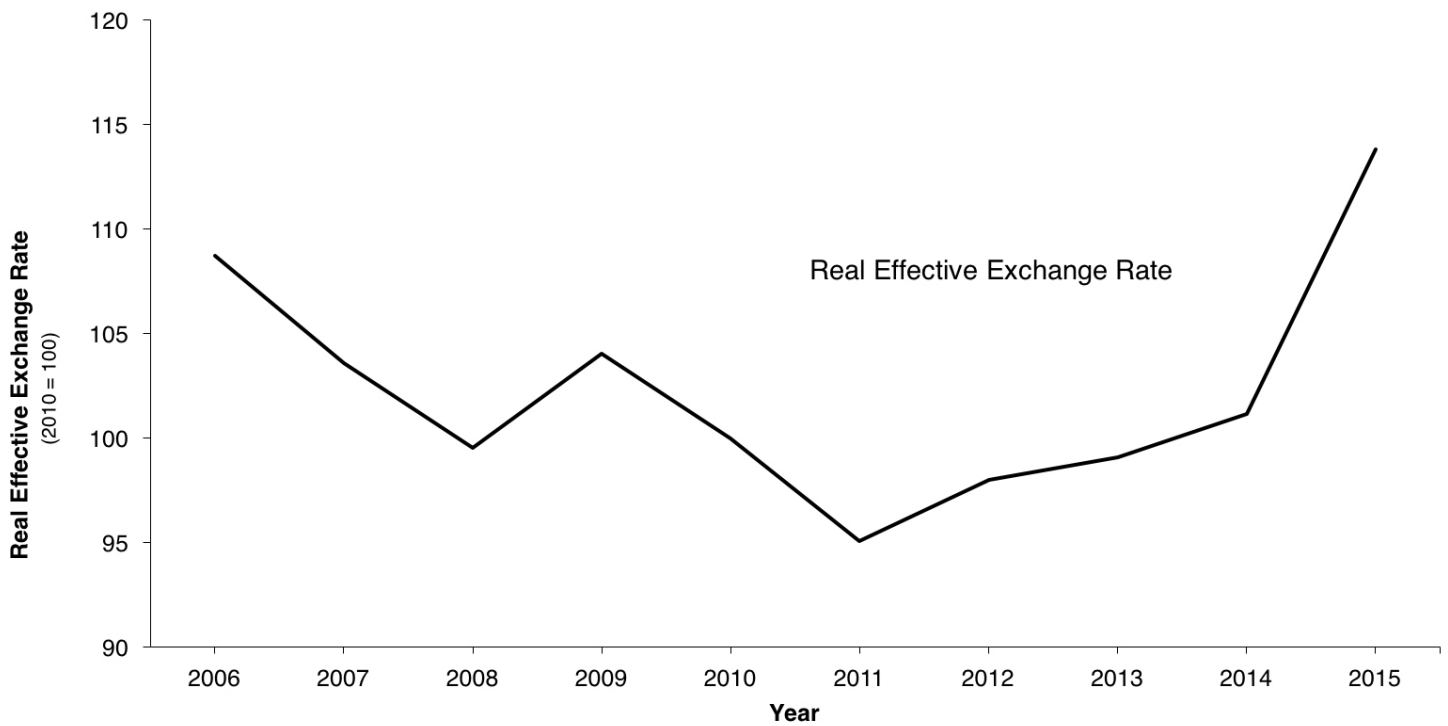


Figure 5. Inflation-adjusted exchange rate between the United States and its trading partners, by year. Larger values indicate exports are more expensive for foreign customers. Values are indexed so that the exchange rate in 2010 is set to be 100.

the exchange rate. The exchange rate determines how expensive it is for foreign customers to buy U.S. goods. Figure 5 shows what is known as the Real Effective Exchange Rate (World Bank). It is the inflation-adjusted exchange rate with the group of countries that trade most frequently with the United States. Larger values of the real effective exchange rate indicate it is more expensive for foreign consumers to purchase

exports. The figure indexes the exchange rate to be 100 in 2010, meaning it costs foreign consumers \$100 to buy \$100 worth of U.S. goods in 2010. Since 2011, the U.S. dollar has strengthened or appreciated. That appreciation is increasingly rapid beginning in 2014. By 2015, it cost foreign consumers \$113.84 to buy \$100 worth of U.S. goods. Thus, Washington exports are almost 14% more expensive in 2015 than they

were in 2010. For a complete explanation of how the exchange rate can affect international trade, consult *A Primer of Exchange Rates and Exporting* (Cassey and Dhanireddy 2011).

Washington Inflation-Adjusted Import Patterns in Total and by Selected Industry

Data for state imports included in this publication date from 2008 through 2015. As seen in Figure 6, Washington State imports increased in 2015 overall. This bucks the national trend, in which exports decreased by around 5%. Just as with exports, the driver of Washington’s increase in imports is that there is an increase in imports in the Aerospace Products and Parts industry.

The import trends of processed agricultural products are shown in Figure 7. In 2015, imports of meat products have overtaken Grain and oilseed-milling products as the state’s leading import industry.

Summary

Statewide exports decreased in 2015 for the first time since the Great Recession, an unusual occurrence when the overall economy is expanding. Though statewide exports fell, they were buoyed by an increase in exports from Aerospace Products and Parts. This industry accounts for an increasingly large share of overall exports. Nearly all of Washington’s other export industries experienced a decrease in exports, sometimes by substantial amounts. This corresponds to a substantial increase in the real effective exchange rate, which makes exports more expensive for foreign purchasers.

Washington imports, on the other hand, increased statewide in 2015. But as with exports, it was the increase in imports from the Aerospace Products and Parts industry that is accounting for most of the data. Meat products, for the first time, became Washington’s leading import industry.

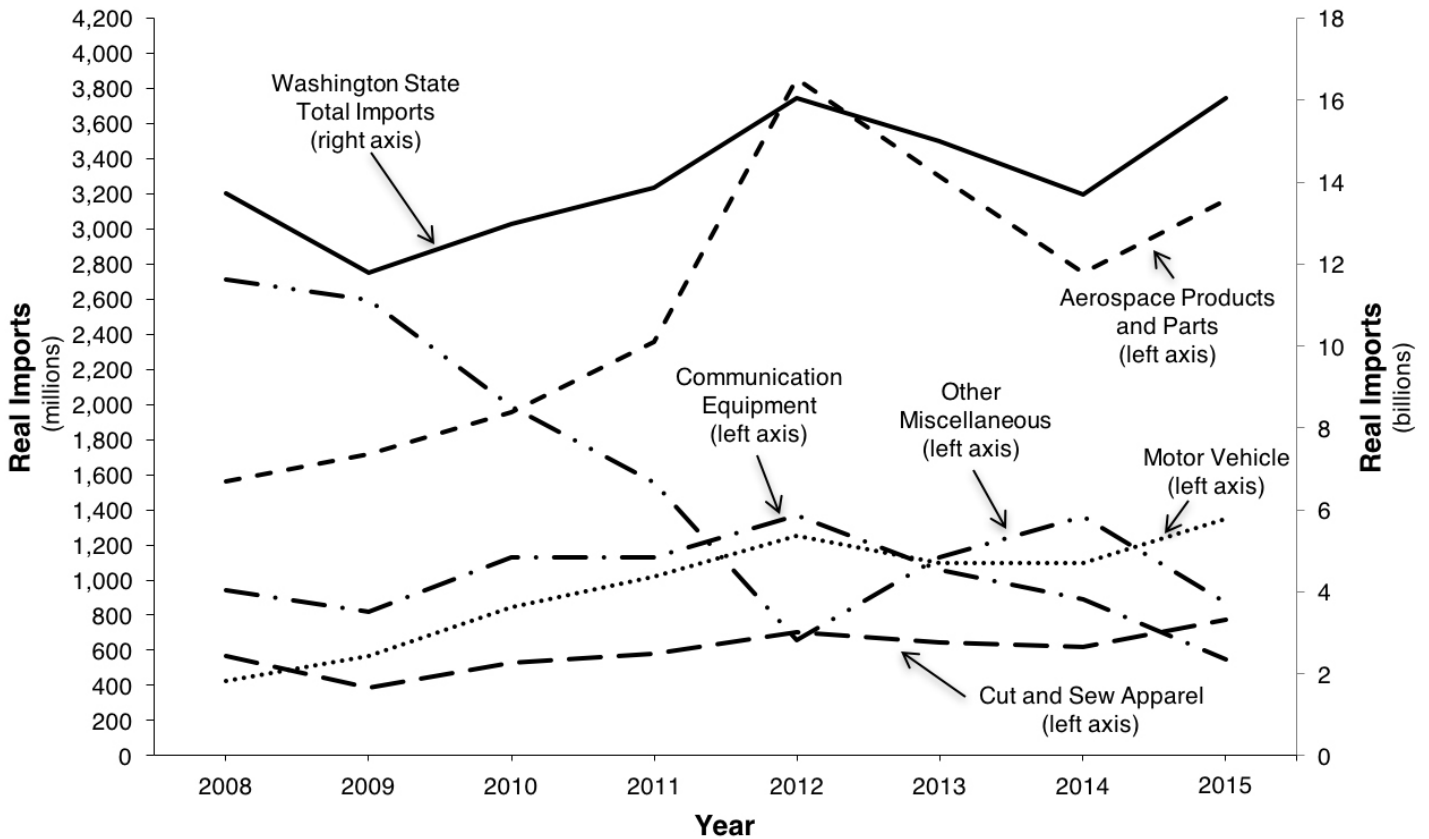


Figure 6. Inflation-adjusted imports for five Washington State industries and total imports from the world, by year.

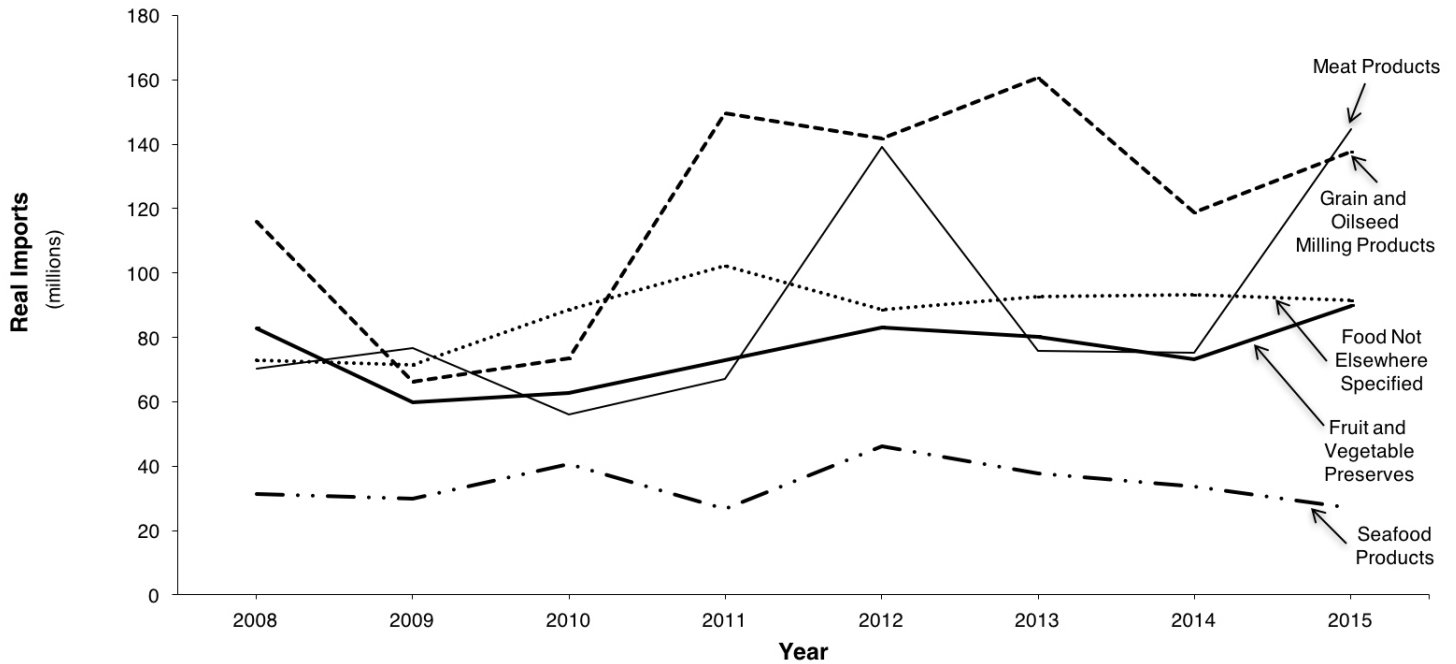


Figure 7. Inflation-adjusted imports of processed agricultural products for Washington State, by year.

Acknowledgements

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World Institute for Strategic Economic Research. Various years. [Origin of Movement State Export Data](#).



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