# Export Opportunities And Import Competition: Improving The Understanding Of International Markets For U.S. Organic Farm And Processed Products

Kathryn A. Boys<sup>1</sup> and Neal H. Hooker<sup>2</sup>

#### Abstract

The market for organic products is both large and expanding. In 2012 U.S. organic product sales exceeded \$31.4 billion reflecting a 10.2% annual increase (OTA, 2013). In examining trends over the past five years, growth in organic food sales has significantly outpaced those of comparable conventional food products (OTA, 2013). As domestic organic policy and international trading relationships continue to evolve, markets are becoming more accessible to U.S. organic farmers and processors. At the same time, due to ongoing efforts to establish organic equivalency agreements with trading partners, foreign firms are increasingly able to access the U.S. market. As a result, both the variety and quantity of organic food and ingredients available to U.S. processors and consumers is expanding. The types and volumes of internationally traded organic products, therefore, have clear and important quantity, price and other market implications for U.S. organic farmers, ingredient manufacturers, food processors,

#### Introduction

The global market for organic raw and processed products is large and expanding. As of 2012, the estimated value of this market was \$63.8 billion USD (Willer and Lernoud, 2014). Countries have independently developed or adopted a variety of organic rules or regulations. At present, 88 countries have some form of official organic production standards, and an additional 12 countries are in the process of developing such standards (Willer and Lernoud, 2014).

Beyond aggregated estimates, however, relatively little is known about international markets for organic products. This issue, however, is of concern to U.S. stakeholders. Through trade and organic equivalency agreements, foreign organic firms are increasingly able to access the U.S. market. The resulting increase in both the variety and amount of organic food and ingredients, in turn, has consequences on the quantity, price and other market conditions. At the same time, consumer demand for organic products is large and continues to increase. As of 2012, the U.S. market for organic food was valued at \$29.0 billion USD, and organic products other than food, such as pet food, fiber, flowers, supplements, and personal care products accounted for an additional \$2.45 billion in sales. Each of these markets experienced growth exceeding 10% over the previous year (OTA, 2012). To meet this demand, organic food manufacturers are expected to increase their use of organic ingredients in the near term, but continue to face pricing and supply challenges that may limit the organic content of these manufactured products (OTA, 2012).

This discussion proceeds by introducing U.S. international organic policies, provides an overview of U.S. exports and imports of organic food, considers opportunities for U.S. organic producers, and concludes with a consideration of the future of the U.S. organic product market.

## **U.S. International Organic Food Policies**

A series of policies have been developed to enable the recognition and use of the U.S. organic standards in selected international markets. These policies include a series of Recognition Agreements, Export Agreements, and Equivalency Agreements which are summarized in Table 1.

<sup>&</sup>lt;sup>1</sup> Department of Agricultural and Resource Economics, North Carolina State University, Raleigh, NC. Email: <u>kaboys@ncsu.edu</u>

<sup>&</sup>lt;sup>2</sup> John Glenn College of Public Affairs, The Ohio State University, Columbus, OH.

Type of Agreement	Description	Country (Year Entered)
Recognition Agreement	Allows a foreign government to accredit certifying agents that can certify products in that country to the USDA organic standard.	New Zealand (2003) India (2006) Israel (2007)
Export Agreement	Allows U.S. organic products to be sold as organic in the receiving country, provided specific requirements are met (e.g. export certificate with shipment).	Taiwan (2009)
Equivalency Agreement	Allows products produced and certified according to one country's organic standard to be sold and represented as organic in the other country	Canada (2009) European Union (2012) Japan (2014) Korea (2014) Switzerland (2015)

#### Table 1. Summary of U.S. International Organic Food Policies

Of these, equivalency agreements are the most significant. These agreements provide access for U.S. organic products to be labelled and sold as organic in the partner countries; in exchange, these partner countries have the same access to the U.S. market. As each country and, in the case of the E.U, region has its own organic standards, each agreement has to be separately negotiated and varies by the products covered, allowances concerning the use of specific compounds during production (i.e. antibiotics, sodium nitrate), and administrative requirements.

## **U.S. Trade of Organic Products**

To offer improved insight into international markets, in 2011 the U.S. International Trade Commission began tracking organic imports and exports separately from their conventionally produced counterparts. Initially, the trade of 23 exported and 20 imported organic products were separately measured (Baldwin, 2012). In the intervening years, additional products were added and, as of 2015, the trade of 28 exported and 35 imported organic products are being tracked.

### U.S. Organic Food Exports

In 2014, the U.S. exported \$575.3 million USD in organic products to 90 countries. Among tracked items, U.S. organic food exports are dominated by fruit and vegetables. Apples alone account for 20.2% of exports by value, while lettuce and grapes are among the other major exports (Figure 1). U.S. exports of roasted organic coffee are an interesting exception. While the U.S. grows only a minimal amount of organic coffee, a majority (or perhaps all) of these exports are generated through roasting and re-exporting previously imported coffee.

By significant margins, Canada and Mexico are the primary destinations for these goods; Canada took delivery of \$277.4 million USD (48.2%) of U.S. exports by value, and Mexico purchased \$168.5 million USD (29.3%) of these goods. In order of export value, other important destination countries include Japan, Taiwan, Australia, the United Kingdom, and the United Arab Emirates.



Figure 1. Major U.S. Organic Food Product Exports by Value (2014) Data Source: USITC DataWeb, 2015

#### Imports of Organic Food into the U.S.

U.S. imports dwarf U.S. exports of organic foods. In 2014, the U.S. imported \$1.04 billion USD of the tracked organic products. Coffee accounted for \$325 million of these imports (31.2%, by value). In order of their value, soybeans (17.6%), bananas (11.7%), red wine (4.7%), and honey (4.4%) were other major categories of imported organic foods. These and other tracked products were sourced from over 85 countries. As presented in Figure 2, Mexico is the primary source of U.S. imported organic products (13.0% of imports by value). Peru, India and Brazil are other major suppliers. Overall the supplier network is relatively concentrated; the largest ten countries (by value), account for 67.6% of U.S. organic food imports.



Figure 2. Major Sources of U.S. Organic Food Imports By Country (2014) Data Source: USITC DataWeb, 2015

## **Organic Food Trade: Opportunities for U.S. Producers**

Examining U.S. import figures suggests opportunity for US producers who wish to expand their organic production. Due to increasing international and domestic demand for organic products, demand for organic leafy greens, carrots, tomatoes, strawberries, and blueberries (among other products) is expected to continue. Alternatively, U.S. farmers could opt for a strategy of import substitution. Recognizing that organic input availability and production challenges vary from place to place, to the extent possible

organic farmers could consider producing items which are currently being imported. Tea (black, green), wine, bell peppers, and ginger could be considered among targeted products.

For fresh products, however, timing does matter. Marketing windows for produce are relatively short but offer an additional market opportunity to those who can provide a product outside of its standard availability. Additional market opportunities can also be identified through ingredient shortages. Bottlenecks have been identified in the supply of functionally equivalent organic ingredients (van Camp et al., 2010). Further, the Organic Trade Association has noted in particular that the availability of organic soy, corn, wheat, beans, cacao, coconut and oils may limit organic food production (OTA, 2013).

#### The Future of U.S. Organic Foods in International Markets

The international market for organic products is evolving. Additional countries, with their own varied organic standards, are entering the international market. The potential negative impact of fragmented food standards on international trade is well documented (e.g. Wilson and Otsuki, 2001; Chen and Mattoo, 2008). The potential success of ongoing efforts of the Codex Alimentarius Commission to encourage rapprochement of organic standards is thus likely to be an important consideration that will shape international trade of organic products. In the meantime, there is potential for the U.S. to facilitate organic product trade through the formation of additional bilateral equivalency or other agreements. Given proximity, volume of organic trade, and already established trade networks, Mexico would be a good candidate country for such an agreement.

U.S. domestic demand for organic food is expected to continue to grow considerably faster than the overall food market. Further, the often significant margins that exist between prices for organic products and their conventional equivalents are not likely to decrease in the near term (see, for example, Jaenicke and Carlson (2015)). Due to the market realities of seasonality, and limits to domestic variety and product availability, the future international market for organic products will continue to increase in prominence.

#### References

- Baldwin, Katherine. 2012. "A Baseline for U.S. trade in organic agricultural products. US-ITC Executive Briefings on Trade," U.S. International Trade Commission, October 2012, http://www.usitc.gov/publications/332/US\_Organic\_Products\_Trade\_editedPublic.pdf
- Chen, Maggie X. and Aaditya Mattoo. 2008. "Regionalism in standards: good or bad for trade?," *Canadian Journal of Economics* 41, no. 3: 838-863.
- Jaenicke, Edward C. and Andrea C. Carlson. 2015. "Estimating and Investigating Organic Premiums for Retail-Level Food Products." *Agribusiness* 00, no. 0:1-15.
- Organic Trade Association (OTA). 2013. 2013 Organic Industry Survey. Washington, DC: Organic Trade Association.
- Wilson, John S. and Tsunehiro Otsuki. 2001. "Global Trade and Food Safety: Winners and Losers in a Fragmented System. The World Bank Development Research Group - Policy Research Working Paper 2689," *The World Bank*, December 2001, <u>http://wwwwds.worldbank.org/external/default/WDSContentServer/IW3P/IB/2001/12/11/000094946\_01110</u> 204024949/Rendered/PDF/multi0page.pdf
- USITC DataWeb. 2015. "U.S. International Trade Commission Interactive Trade DataWeb, using data retrieved from the U.S. Bureau of the Census," February 2015, <u>http://dataweb.usitc.gov/</u>
- Van Camp, Debra, Pauline Ie, Noah Muwanika, Neal H. Hooker and Yael Vodovotz. 2010. "The Paradox of Organic Ingredients," *Food Technology* 64, 11: 20-29.
- Willer, Helga and Julia Lernoud (Eds.). 2014. The World of Organic Agriculture. Statistics and Emerging Trends 2014. FiBL-IFOAM Report. Research Institute of Organic Agriculture (FiBL), Frick, and International Federation of Organic Agriculture Movements (IFOAM), Bonn. Revised version of February 24, 2014.