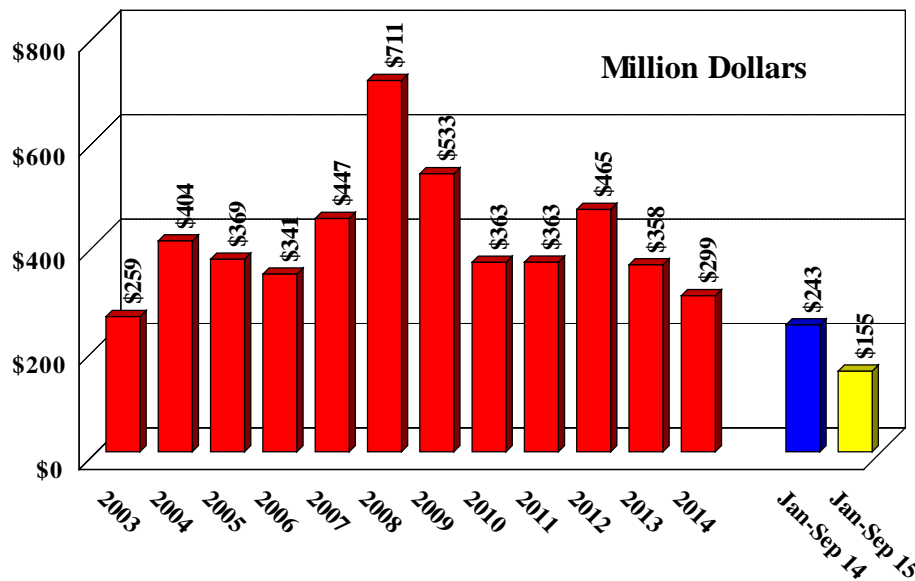


Overview

The U.S. government placed a partial trade embargo on Cuba in 1960 and a full trade embargo in 1962. However, the Trade Sanctions Reform and Export Enhancement Act of 2000 permits the export of agricultural, food, and medical products to Cuba on a cash-in-advance basis. Since then, U.S. exports expanded, reaching a record \$711 million in 2008 before falling to less than \$300 million in 2014 (Figure 1). Through September 2015, exports to Cuba have declined even further, due in part to Cuba’s desire to completely end the U.S. embargo, the ban on U.S. poultry due to avian influenza, and weak economic conditions in Cuba along with more favorable credit terms from other trading partners. The decline in U.S. exports has occurred as the market for Cuban food imports reached nearly \$2.0 billion in 2014, spurred largely by the extension of credit by U.S. competitors.

Figure 1. Total U.S. Exports to Cuba, 2003 - 2015



Note: Total exports to Cuba include small amounts of non-ag/related exports.

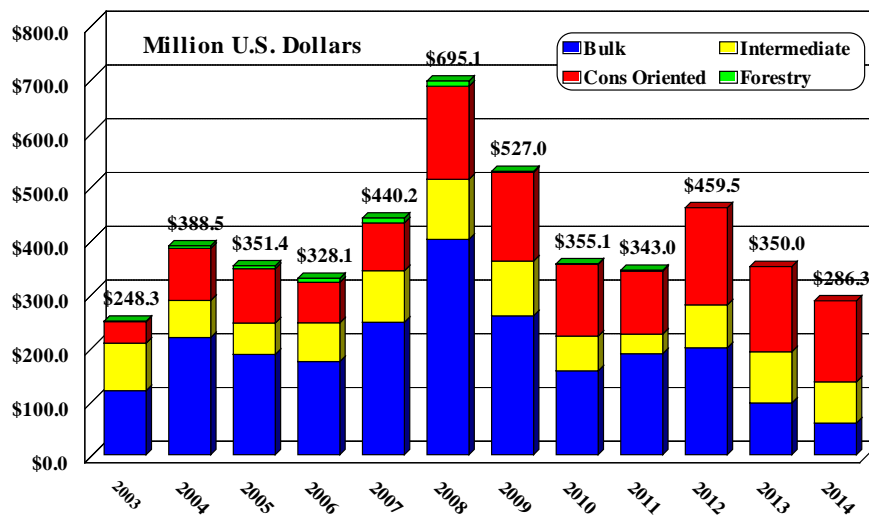
Source: U.S. Census Bureau, Foreign Trade, U.S. Trade in Goods by Country, www.census.gov/foreign-trade/balance/

The vast majority of U.S. exports to Cuba are agricultural and food products. For instance, of the \$711 million in total U.S. exports to Cuba in 2008, agricultural, food, and forestry products totaled \$695 million, or 98 percent (Figure 2). Prior to 2013, U.S.

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exports to Cuba were primarily bulk products such as corn, wheat, rice, and soybeans. In more recent years, consumer oriented products such as poultry meat, other meats, and dairy have made up the majority of U.S. exports to Cuba. The balance is intermediate products such as soybean meal, soybean oil, and animal feeds. Slightly more than half of all U.S. exports to Cuba in 2014 was frozen chicken leg quarters and thighs. About one-third was soybeans and soybean meal with the rest being corn, animal feeds dairy products and pork. A small amount of medical products and agricultural chemicals were also exported.

Figure 2. Composition of U.S. Agricultural and Forestry Exports to Cuba



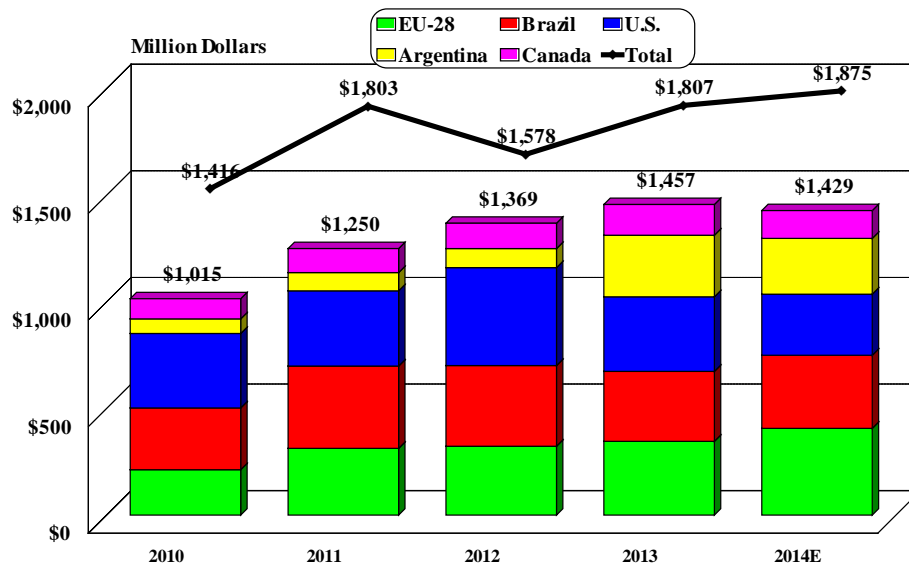
Source: USDA Global Agricultural Trade System, <http://www.fas.usda.gov/gats/default.aspx>

The Cuban Market for Agricultural and Food Products

The restoration of diplomatic relations between the United States and Cuba in July 2015 coupled with other moves by the Obama administration in January 2015 has increased interest in the Cuban market. In an effort to better identify Cuban market potential, it is important to determine Cuba's total agricultural and food imports and their sources. Figure 3 shows that Cuba has imported between \$1.4 billion and \$1.9 billion in agricultural and food products each year since 2010. Imports from the United States, shown in blue, exceeded those from all other countries during 2010 and 2012; however, the European Union (EU-28) and Brazil are now the top two sources of Cuban agricultural and food imports while Argentina and Canada continue to grow in importance.

Five suppliers, the United States, the EU-28, Brazil, Argentina, and Canada account for between 70 and 90 percent of these imports depending on the year. Not shown on this chart are China and Chile, both of which have about two percent of the Cuban market, and Vietnam, which has shipped large volumes of broken rice to Cuba since 2008. It is also important to mention that the 2014 total for agricultural and exports to Cuba is an estimate based on recent market shares for the five largest exporters as shown in Figure 3.

Figure 3. Ag and Food Exports to Cuba



Source: USDA Foreign Agricultural Service; WISERTrade; Brazilian Ministry of Development, Industry, and Foreign Trade; and Argentina Institute of Statistics and Census

The highest valued Cuban agricultural and food imports were wheat, corn, dairy products, poultry meat and rice. All of these products are important to Texas. Further, prepared meats, dry beans, animal feeds and beef are also imported by Cuba in various volumes. Other products which are imported by Cuba in larger volumes but are of lesser importance to Texas are soybeans and soybean products as well as coffee, tea, and cocoa preparations. In the following summary, each product category important to Texas will be discussed. The reason different baseline levels were chosen for each product is due to the different export patterns and levels of competition for each commodity. Moreover, 2008 exports were not used as baseline because it was an unusually high year for U.S. exports to Cuba.

Wheat

Cuba imported about \$299 million worth of wheat in 2013 with the EU-28 supplying about 55 percent and Canada supplying about one quarter of the total. While most Cuban wheat imports previously came from the United States, no U.S. wheat has entered Cuba since 2011. U.S. wheat exports to Cuba totaled \$70.2 million in 2007, \$135 million in 2008, and \$73 million in 2009. If the United States returns to 2009 levels, then Texas could account for about \$2.5 million of those exports.

Corn

Cuba imported about \$290 million worth of corn in 2013 with the EU-28 supplying about 43 percent, the United States at 20 percent and Brazil at 14 percent. While U.S. corn exports to Cuba averaged \$42.5 million annually in 2013-2014, the average from 2009-2012 was \$115.4 million per year. Texas could account for about \$2.6 million of U.S. corn exports to Cuba if 2009-2012 levels are reached.

Dairy Products

Cuba imported about \$215 million worth of dairy products in 2013 with most of that being dry or condensed milk. Cuba has a wide variety of sources for dairy products; however, the EU-28 and Argentina each have significant shares. U.S. dairy exports to Cuba have averaged \$3.2 million annually since 2009 with much of that being donated dairy products. Prior to that time, U.S. dairy exports topped \$13 million in each of 2006 and 2008 and averaged just under \$30 million in 2004-2005. It is likely unrealistic to expect U.S. exports to return to levels of a decade ago, but if the United States could maintain the recent average, Texas would likely account for about \$330,000 of those exports.

Poultry Meat

Cuba imported \$200 million worth of poultry meat in 2013 with the United States supplying about 72 percent and Brazil supplying about 18 percent. This is one product category where the United States has maintained a strong market presence in Cuba. If the United States can maintain these levels, Texas would account for about \$10.0 million of those exports.

Rice

Cuba imported about \$182 million worth of rice in 2013; however, much of this was lower quality broken rice from Vietnam. Brazilian rice exports to Cuba have averaged about \$62 million per year since 2012, while Argentina has begun to export more rice to Cuba as well, \$16 million in 2014. While U.S. rice exports to Cuba averaged \$41 million from 2004-2007, there have been no U.S. rice exports to Cuba since 2008. If the United States could capture a quarter of the \$73 million in rice supplied by Brazil and Argentina in 2014, then Texas could account for about \$847,000 of those exports.

Animal Feeds

Cuba imported about \$86 million worth of grain-based animal feeds in 2013 with Argentina supplying about 56 percent and the United States supplying about 20 percent. However, U.S. feed exports to Cuba, which include dried distillers grain and other feed preps, were less than \$10 million in 2014. U.S. animal feed exports averaged about \$28 million from 2007-2013. If the United States could return to the \$28 million levels then Texas could account for about \$1.0 million of those exports.

Dry Beans

Cuba imported about \$78 million worth of dry beans in 2013 with China and Canada each supplying a little over \$32 million. While Argentina did not supply much dry beans in 2013, they averaged just under \$7 million over the past five years. While the United States has not exported any dry beans to Cuba since 2011, exports reached a high of \$22 million in 2006 and averaged just under \$6 million from 2009-2011. If the

United States could return to 2009-2011 levels, then Texas could account for about \$87,000 of those exports. Possibly more important is that when U.S. dry beans are exported to Cuba, they are often shipped through the Port of Corpus Christi as the point of departure.

Other Products

Cuba imported about \$7.5 million worth of beef and \$4.5 million worth of potatoes in 2013 with Canada supplying most of the beef while the sources for potatoes in unknown. If the United States could capture 25 percent of the Cuban markets for beef and potato imports, then Texas could account for about \$254,000 in beef exports and about \$18,000 in potatoes. Further, Cuba imported a little over \$3 million in cotton each year from 2011-2013. Until 2012, most of that was U.S. cotton. If the United States could reclaim half of the market, that could result in \$495,000 in cotton exports from Texas to Cuba.

Economic Impacts on Texas

If the estimated exports to Cuba from above were realized, Texas exports to Cuba would reach \$18.8 million annually. In addition, these exports would require support in the amount of \$24.1 million from supporting sectors and result in total economic impacts of \$42.9 million throughout the Texas economy (Table 1). Major gains in output would occur for poultry meat, wheat, corn, and animal feeds, rice, cotton, dairy, and other meats. Increases in total business activity attributed to exports to Cuba would be \$10.6 million for poultry meat, \$3.0 million for wheat, \$2.8 million for corn, and 2.5 million for animal feeds. Output would also increase for rice, cotton, dairy, and other meats, all in the \$383,000 to \$852,000 range.

Other Texas industry sectors that do not have exports to Cuba would also experience increased output. Indirect output is generated through purchases of inputs and services which support the exported products while induced output results from household purchases from income earned by households from exporting and supporting sectors. Supporting sectors for Texas agricultural and food exports to Cuba include other agricultural production, \$6.4 million; wholesale and warehousing, \$2.0 million; finance and business services, \$1.6 million each; real estate, \$1.5 million; transportation, \$1.4 million; and petroleum and products, \$1.3 million. All other supporting sectors are estimated to contribute \$5.6 million in total additional business activity to the Texas economy. Further, all of this additional output would help to increase the gross state product of Texas \$13.7 million per year.

In addition to positive impacts for the product sectors, these exports to Cuba would require \$24.1 million in additional business activity and 214 new jobs. A large portion of the new jobs (83) are required in agricultural sectors that produce goods for export to Cuba. There are additional 131 jobs attributed to the sectors that provide inputs and services needed to support exports to Cuba. Major gains can be anticipated in sectors such as other supporting agricultural sectors, business services, transportation, and wholesale and warehousing.

Table 1. Economic Impacts of Texas Exports to Cuba

	<i>Impacts on Output (\$1,000)</i>			<i>Employment</i>
	<u>Direct</u>	<u>Indirect & Induced</u>	<u>Total</u>	<u>Jobs</u>
Total	\$18,783	\$24,117	\$42,900	214
Export Sectors				
Poultry Meat	\$10,013	\$624	\$10,637	40
Corn	\$2,706	\$319	\$3,025	18
Wheat	\$2,537	\$300	\$2,837	17
Animal Feeds	\$1,207	\$1,268	\$2,474	2
Rice	\$847	\$5	\$852	1
Cotton	\$495	\$56	\$550	3
Dairy Products	\$330	\$24	\$354	0
Processed Meat Products	\$289	\$156	\$444	1
Beef	\$254	\$129	\$383	1
Potatoes	\$18	\$4	\$22	0
Selected Supporting Sectors	<u>Indirect</u>	<u>Induced</u>	<u>Total</u>	
Other Ag	\$6,359	\$34	\$6,393	46
Wholesale/Warehousing	\$1,650	\$311	\$1,962	8
Finance	\$924	\$680	\$1,604	9
Business Services	\$1,124	\$453	\$1,576	14
Real Estate	\$622	\$924	\$1,546	6
Transportation	\$1,247	\$156	\$1,402	8
Petro/Chemicals	\$1,035	\$225	\$1,260	1
Health Care	\$8	\$712	\$720	7
Food and Beverage Places	\$78	\$376	\$454	7
Retail	\$98	\$330	\$428	5
	<u>Direct</u>	<u>Indirect/Induced</u>	<u>Total</u>	
Impacts on Gross State Product (\$1,000)	\$2,602	\$11,073	\$13,675	

Source: Center for North American Studies and IMPLAN, MIG Inc.

Potential Roles of Texas Ports

U.S. exports to Cuba could benefit the state by moving more cargo through Texas ports. Over the last dozen years, virtually all U.S. agricultural exports to Cuba have moved through southern ports due to geographic advantages. Historically, Louisiana ports, led by New Orleans, Gramercy and Baton Rouge, accounted for an average of 48 percent of all U.S. exports to Cuba from 2003-2013 before dropping to 28 percent in

2014 (Figure 4). One reason for this decline is that in the past, bulk products came down the Mississippi River to Louisiana ports for export. The main products typically moving through Louisiana ports to Cuba are corn, soybeans and soybean products, dried distillers grain, wheat, and some poultry meat. When Cuba was purchasing U.S. wheat and rice, much of that was using Louisiana ports. As the mix shifted more towards intermediate and consumer oriented products, ports in other states became more competitive.

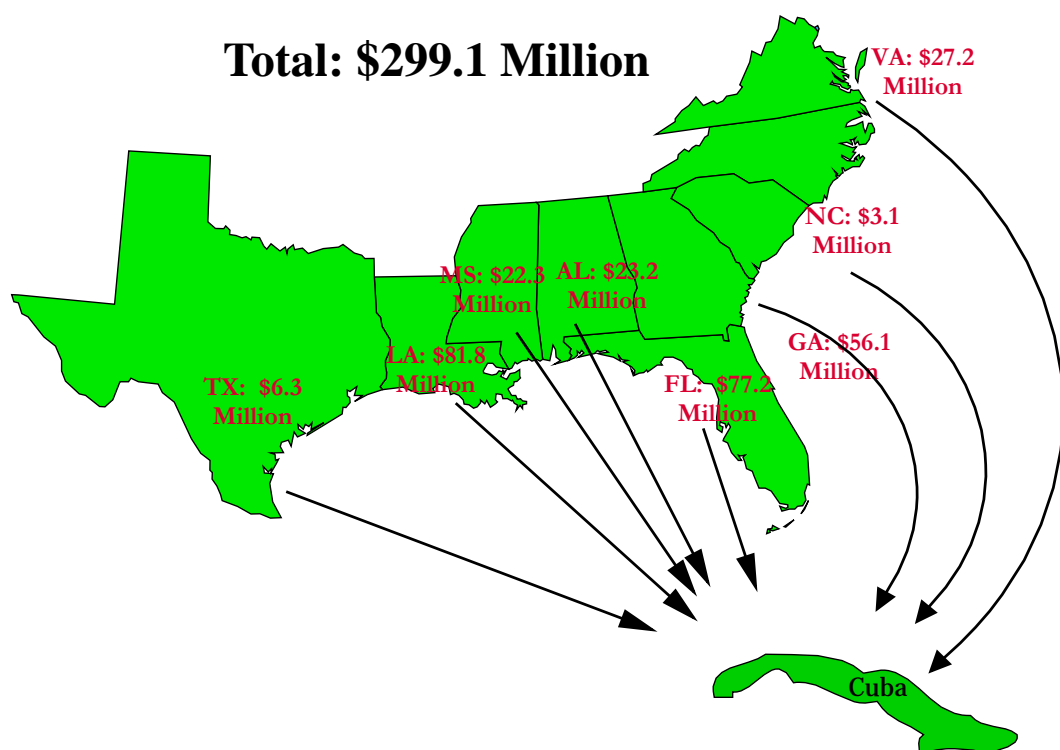
Florida and Virginia ports have since increased in importance. Florida ports, led by Port Everglades, Jacksonville, and Tampa, have grown from about ten percent during 2003-2004 to average 25 percent for 2010-2014. Most of the products moving through Florida ports are poultry meat, animal feeds, and edible swine offal. Virginia ports, namely Norfolk, now accounts for about 12 percent of U.S. exports to Cuba after accounting for less than four percent from 2003-2008. Most products shipped through Norfolk are soybeans and soybean meal. Alabama, Mississippi and, more recently, Georgia, have accounted for varying amounts of exports to Cuba.

Texas ports had a substantial share of exports to Cuba from 2003-2009 with an average of 18 percent of U.S. exports to Cuba moving through the ports of Houston, Freeport, Corpus Christi, Beaumont, Galveston, and Port Arthur. The peak year was 2008 with \$143 million worth of agricultural and food products moving through Texas to Cuba. Further, 2007 saw \$95 million moving through Texas ports with 2009 at \$80 million and 2004 at \$77 million. Rice, wheat, poultry meat, and dry beans were among the leading products shipped through Texas ports prior to 2010. However, beginning in 2010, U.S. exports to Cuba through Texas ports have averaged less than two percent. Sporadic shipments of wheat, dry beans, and insecticide along with selected consumer oriented products have used Texas ports for exports to Cuba.

There are a couple of ways to directly increase the level of U.S. exports to Cuba through Texas ports. The first is to promote the use of Texas ports with exporters in order to shift their exports to Texas regardless of where the product originates. While there is fierce competition among U.S. ports for U.S. poultry meat exports to Cuba, it is also currently the largest export to Cuba. Efforts to attract poultry meat exports back to Texas could help return Texas to pre-2010 levels. One major problem affecting Texas ports, however, is the lack of direct container service to Cuba. Because of this, Texas products must be shipped via truck or rail to Florida then loaded to barge or ship for export to Cuba. Consequently, value-added exports tend to be higher priced than other states.

Another approach which could have a positive impact on Texas ports is to promote the purchase of U.S. rice, wheat, and dry beans as exports to Cuba. The United States lost the Cuban rice market in 2008 largely due to a period of high U.S. rice prices during which Cuba switched to Thailand and Vietnam, and has not exported wheat or dry beans to Cuba since 2011. With new competition from the EU-28, Brazil, Canada, Argentina, and China for these products, this effort will be difficult. However, if successful, it is likely that Texas ports would be a good option for the export of these products to Cuba just as in years past.

Figure 4. Exports to Cuba by Port State, 2014



Summary and Conclusions

The Cuban import market for agricultural and food products reached nearly two billion dollars in 2014. U.S. exporters had a significant portion of those imports as recently as 2012. However, as Cuba has had a more difficult time acquiring the hard to currency needed to meet U.S. cash-in-advance requirements, they have shifted from purchasing a wide variety of U.S. agricultural and food products while continuing to import mainly U.S. poultry meat, soybeans and products, corn and other animal feeds. Recent actions by the Obama administration to reestablish diplomatic relations and loosen certain travel and business restrictions have spurred interest in the Cuban market.

Competition from other exporters such as the European Union, Brazil, Canada and Argentina will make it more difficult to reclaim previously held market share. However, if Cuba increases its purchases of U.S. agricultural and food products to near previous levels, it could mean that up to \$18.8 million of Texas agricultural and food products would be shipped there. These Texas exports to Cuba would be supported by nearly \$43 million in total economic activity and 214 jobs. Further, it could also increase exports of U.S. agricultural and food exports through Texas ports regardless of their origin, particularly if there is a return of U.S. wheat and rice to the Cuban market. While this may not happen overnight, transportation advantages along with changing policies and reinvigorated interest could result in higher exports of U.S. and Texas agricultural and food products to Cuba.

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