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Overview of U.S.-South Korea Agricultural Trade

-name redacted-
Analyst in Agricultural Policy

August 8, 2018

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SUMMARY

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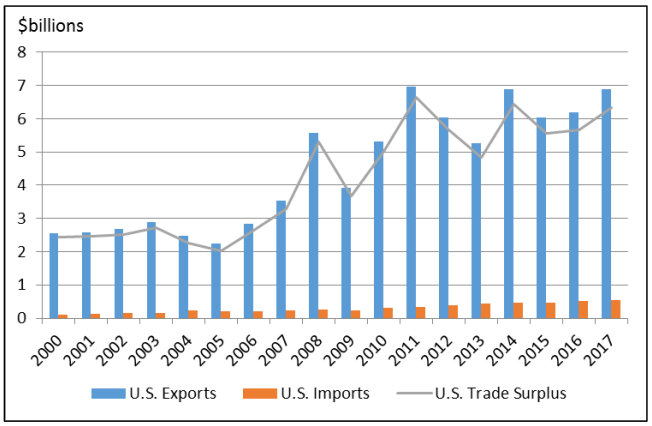
Overview of U.S.-South Korea Agricultural Trade

South Korea is an important export market for U.S. agricultural products. In 2017, U.S. farmers and ranchers sold about $7 billion of goods to South Korea, making it the sixth-largest export market by value for U.S. agricultural products. Leading U.S. agricultural exports to South Korea include beef, corn, soybeans, pork, wheat, oranges, nuts, and cheese. Further, the United States had a trade surplus of more than $6.3 billion in food and agricultural products with South Korea in 2017.

The trading relationship between the two countries has been governed by the U.S.-South Korea Free Trade Agreement, known as KORUS, since it took effect in 2012. The bilateral free trade agreement (FTA) reduces, and in many cases eliminates, tariff and nontariff barriers between the United States and South Korea. South Korea's agriculture sector is highly protected—its agricultural tariffs average 57%—but through KORUS, South Korea immediately granted duty-free status to almost two-thirds of U.S. agricultural product exports. In March 2018, the Trump Administration and South Korea reached an agreement in principle on modifications to KORUS. These changes reportedly did not address agricultural provisions.

The value of U.S. agricultural exports to South Korea almost tripled in nominal dollars between 2000 and 2017, increasing from $2.5 billion to $7 billion. From 2009 to 2011—the three years prior to the implementation of KORUS—U.S. exports to South Korea averaged about $5.4 billion. In the three years following the implementation of the FTA, 2012-2014, U.S. exports to South Korea averaged about $6 billion—a 12% increase. The value of U.S. exports to South Korea has continued to grow since then, averaging about $6.4 billion from 2015 to 2017. Because South Korea is reliant on food imports and has a growing middle class, it could be a growth market for U.S. agricultural exports.

U.S.-South Korea Agricultural Trade



Source: USDA Global Agricultural Trade System (GATS), Foreign Agricultural Trade of the United States (FATUS) product group. Data are in nominal dollars.

Although market access for U.S. agricultural exports to South Korea has generally increased under KORUS, certain issues may prevent the export of specific products. The Korean government's policies regarding certain plant pests and diseases have limited exports of U.S. cherries, potatoes, blueberries, apples, and pears. Further, South Korea's regulatory system for genetically engineered crops makes it difficult to introduce certain new U.S. crops. Moreover, long-standing South Korean protections on rice, which it considers necessary for national food security and which were not addressed in KORUS, allow imports of only a small amount of U.S. rice. Finally, new rules on pesticide residues on crops, animal drug residues in meat, and carcinogenicity labeling for alcoholic products also act as potential barriers to expanding trade in these products.

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South Korea is the United States' sixth-leading export market for agricultural products.[1] U.S. farmers and ranchers sent almost $7 billion worth of agriculture and food products to South Korea in 2017, accounting for 5% of total U.S. agricultural exports.[2] Meanwhile, the United States imported about $548 million in agriculture and food products from South Korea in 2017, accounting for 0.5% of U.S. agricultural imports. As a result, the United States had a trade surplus in agricultural products of more than $6.3 billion with South Korea in 2017.

U.S. agricultural trade with South Korea is governed by the U.S.-South Korea Free Trade Agreement, known as KORUS, which took effect in 2012. The free trade agreement (FTA) allows for largely open access for goods entering each market. In 2018, the Trump Administration negotiated certain modifications to KORUS, but the announced changes do not affect agricultural provisions of the FTA.

South Korea is a promising export market for U.S. farmers and ranchers who are looking to trade to boost the value and sales of agricultural products—about 20% of U.S. farm income is due to trade, according to the U.S. Department of Agriculture.[3] South Korea has little arable land, thus it is largely dependent on food imports. At the same time, its growing middle class is increasingly buying higher-value food products, making it a potential growth market for U.S. meat and other value-added agricultural goods.

Although the United States and South Korea trade a wide range of products and services, this report provides only an overview of U.S.-South Korea agricultural trade, including details of key agricultural products and issues affecting U.S. exports.[4]

U.S.-South Korea Agricultural Trade under KORUS

KORUS is a bilateral FTA that reduces—and, in many cases, eliminates—tariff and nontariff barriers between the United States and South Korea. The agreement applies to manufactured goods, agricultural products, and services. It includes rules on investment, worker treatment, and environmental standards, and provides mechanisms for resolving disputes (see **text box**).[5] KORUS is the second-largest U.S. FTA as measured by trade flows after the North American Free Trade Agreement (NAFTA). It is also the most recently negotiated U.S. FTA. Although many of the tariff reductions and other provisions of the agreement became effective in 2012, others are being phased in within 20 years. The FTA remains in force in perpetuity unless the two countries agree to changes or a party withdraws.

South Korea's agriculture sector is highly protected—its agricultural tariffs average 57%. As part of KORUS, South Korea immediately granted duty-free status to almost two-thirds of U.S.

[1] This report uses the USDA Foreign Agricultural Service's (FAS's) definition of agricultural products, which includes most of chapters 1-24 of the U.S. Harmonized Tariff Schedule. The chapters included in the definition cover meat, grains, animal feed, dairy, horticultural products, processed food, and unprocessed tobacco. The FATUS definition does not include seafood in chapter 3 and processed seafood in chapter 16. It also doesn't include spirits in Chapter 22 and manufactured tobacco products in Chapter 24. Certain other products outside of Chapters 1-24 are also considered agricultural products, including essential oils in Chapter 33, raw rubber in Chapter 40, raw animal hides and skins in Chapter 41, and wool and cotton in Chapters 51 and 52. For the full definition, see https://apps.fas.usda.gov/gats/AgriculturalProducts.aspx.

[2] USDA Global Agricultural Trade System (GATS), May 15, 2018.

[3] USDA Foreign Agricultural Service, "U.S. Farm Exports Hit Third-Highest Level on Record," press release, November 16, 2017.

[4] For an overview of KORUS, see CRS In Focus IF10733, *U.S.-South Korea FTA (KORUS)*.

[5] For the text of KORUS, see https://ustr.gov/trade-agreements/free-trade-agreements/korus-fta/final-text.

agricultural products.[6] Tariffs and import quotas on most other agricultural goods are to be phased out over time. In total, U.S. agricultural products accounted for about $7 billion of the almost $27 billion in farm and food products that South Korea imported in 2017.[7]

Trade Liberalization Under KORUS

- **Tariff and quota elimination.** Eliminated some trade restrictions immediately, while others were phased out in time frames up to 20 years. Set temporary safeguards to protect South Korean beef, pork, and some fruits and vegetables. Put in place tariff-rate quota (TRQ) for U.S. dairy imports.
- **Sanitary and phytosanitary (SPS) measures.** Established a Committee on Sanitary and Phytosanitary Measures to enhance regulatory cooperation and facilitate trade. The committee has been the venue for addressing plant pest and disease concerns that could prevent South Korean imports of certain U.S. fruits and vegetables, among other issues.
- **Rules of origin.** Establishes rules on whether a product is considered to have originated in the United States or South Korea and therefore eligible for the KORUS tariff benefits. Sets limits for how much of a product can be composed of ingredients produced elsewhere and still qualify for KORUS tariffs.
- **Treatment of foreign investors.** Requires signatories to treat covered investments and investors no less favorably than domestic investors and investments.
- **Formal dispute resolution mechanism.** Establishes a panel to adjudicate disputes between the two countries under the agreement if consultations do not lead to a resolution.

Sources: KORUS Chapter 3 (Agriculture), Chapter 2 (National Treatment and Market Access for Goods), Chapter 11 (Investment), Chapter 22 (Institutional Provisions and Administration), and Annex 6-A (Specific Rules of Origin).

Market Access and Tariffs

Under KORUS, South Korea immediately eliminated tariffs on a range of agricultural products, including, for example, animal hides and skins, cherries, cotton, orange juice, pistachios, and wine, among many other items. It also initiated a phasing out of tariffs on goods such as beef and pork. **Table 1** shows examples of how tariffs are phased out on a variety of different products. To protect South Korean farmers and ranchers during the phaseout period, South Korea included temporary safeguards and TRQs for some key products, while the United States negotiated a TRQ for the import of dairy products from South Korea.[8] Under KORUS, if U.S. exports to South Korea exceed the safeguard level or TRQ, they are subject to higher tariffs—in some cases as much as South Korea's applied most favored nation (MFN) rate, or the rate that applies to all countries not under an FTA or other preferential trading arrangement.[9]

[6] CRS Report RL34330, *The U.S.-South Korea Free Trade Agreement (KORUS FTA): Provisions and Implementation*.

[7] USDA Foreign Agricultural Service (FAS), *Republic of Korea Exporter Guide 2017*, GAIN Report KS 1740, November 21, 2017.

[8] A TRQ is a two-part tool used by countries to protect sensitive agricultural and food products. The quota component provides for duty-free access of a specified quantity of a commodity, which under an FTA may be allowed to expand over time. Imports above this quota are subject to a higher tariff rate. A safeguard protects against import surges well above current trade levels as those products transition to free trade.

[9] MFN rates apply to products traded between all World Trade Organization (WTO) members unless another agreement is in place between the trading countries. MFN rates generally reflect the highest (most restrictive) rates that WTO members can charge each other on imported goods and services.

Table 1. Tariffs for Selected U.S. Agricultural Exports Under KORUS

Product	Year 1 (2012) Tariff and Safeguard or TRQ (if applicable)	2018 Tariff and Safeguard or TRQ (if applicable)	Full Implementation (2027) Tariff and Safeguard	Most Favored Nation Tariff	Percentage of 2017 U.S. Agricultural exports to South Korea by Value
Beef	37.3% for up to 270,000 metric ton (MT) 40% for more than 270,000 MT	21.3% for up to 306,000 MT 30% for more than 306,000 MT	0% and unlimited	40%	17%
Oranges	0% for up to 2,500 MT from Sept. 1-end of February. 50% for more than 2,500 MT 30% from March 1-Aug. 31	0% for up to 2,985 MT from Sept. 1-end of February. 50% for more than 2,985 MT 0% and unlimited from March 1-Aug. 31	0% for up to 3,895.2 MT from Sept. 1-end of February. 50% for more than 3,895.2 MT 0% and unlimited from March 1-Aug. 31	50%	3%
Pork					
Fresh	20.25% for up to 8,250 MT 22.5% for more than 8,250 MT	6.75% for up to 11,703 MT 14.6% for more than 11,703 MT	0% and unlimited	22.5%	0.2%
Frozen	25%	0%	0%	25%	6%
Nuts					
Almonds	0%	0%	0%	8%	2.4%
Walnuts	30%	0%	0%	30%	1.3%
Corn	0%	0%	0%	328%	10.2%
Cattle Hide	0%	0%	0%	3%	2%
Wine	0%	0%	0%	15%	0.3%

Source: World Trade Organization (WTO) tariff database, KORUS text, USDA GATS. Data as of May 3, 2018. 1 MT (metric ton) = 2,205 pounds. All Korean import tariffs are ad valorem.

Notes: The following harmonized tariff system (HTS) codes cover each product: beef: 0201.10, 0201.20, 0201.30, 0202.10, 0202.20, 0202.30; oranges: 0805.10; fresh pork: 0203.19; frozen pork: 0203.29; almonds: 0802.12; walnuts: 0802.32; corn: 1005.90.20; cattle hides: 4101.50.10; and wine: 2204.20. These products account for about 40% of U.S. exports to South Korea.

a. South Korea has a 10 MMT duty-free quota on feed corn imports, an amount that largely equals domestic consumption. Only once that quota is filled does the 328% tariff apply.

Similarly, the United States eliminated tariffs on almost all agricultural product imports from South Korea, although it does have a TRQ in place until 2021 for dairy products and prepared foods and drinks containing dairy. Currently 358 MT of these products can be imported duty free into the United States from South Korea. These products accounted for 6% of the value of U.S. agricultural imports from South Korea.

Technical and Other Barriers to Trade

KORUS largely focuses on reducing tariffs to provide market access for U.S. and South Korean agricultural goods. However, the FTA created a Committee on Sanitary and Phytosanitary Matters as a venue to discuss SPS issues and other trade barriers (see "Issues in U.S.-South Korea Agricultural Trade").[10] The SPS committee follows the provisions of the WTO's 1995 Agreement on the Application of SPS Measures,[11] which aims to guide countries to resolve bilateral SPS disputes that arise, coordinate technical assistance programs, and consult on issues and positions in the WTO and other international bodies where SPS issues are considered.[12] Similar committees exist in other U.S. FTAs, including the North American Free Trade Agreement. The committee has been the venue for discussion of, among other things, pest issues that are preventing South Korean imports of certain U.S. fruits and vegetables and U.S. questions over South Korea's new maximum residue levels (MRLs) for pesticides and animal drugs on imports.

U.S.-South Korea Agricultural Trade

South Korea is the sixth-leading market for U.S. agricultural exports by value, behind Canada, China, Mexico, Japan, and the European Union (EU). U.S. farmers, ranchers, and food manufacturers exported almost $7 billion of agricultural goods and food to South Korea in 2017, accounting for 5% of total U.S. agricultural export value that year.[13]

The United States is the top foreign supplier of agricultural imports by both value and quantity to South Korea, according to South Korea Customs data.[14] U.S. food and agriculture products accounted for 28% of the value of South Korea's agricultural imports in 2017.

Meanwhile, the United States imported $548 million in agricultural products from South Korea in 2017, accounting for 0.5% of total U.S. agricultural imports that year, resulting in a U.S. agricultural trade surplus of more than $6.3 billion (see **Figure 1**).

[10] SPS measures are the laws, rules, standards, and procedures that governments employ to protect humans, animals, and plants from diseases, pests, toxins, and other contaminants. Examples include meat and poultry processing standards to reduce pathogens, residue limits for pesticides in foods, and regulation of agricultural biotechnology. For more details on SPS trade barriers, see CRS Report R43450, *Sanitary and Phytosanitary (SPS) and Related Non-Tariff Barriers to Agricultural Trade*.

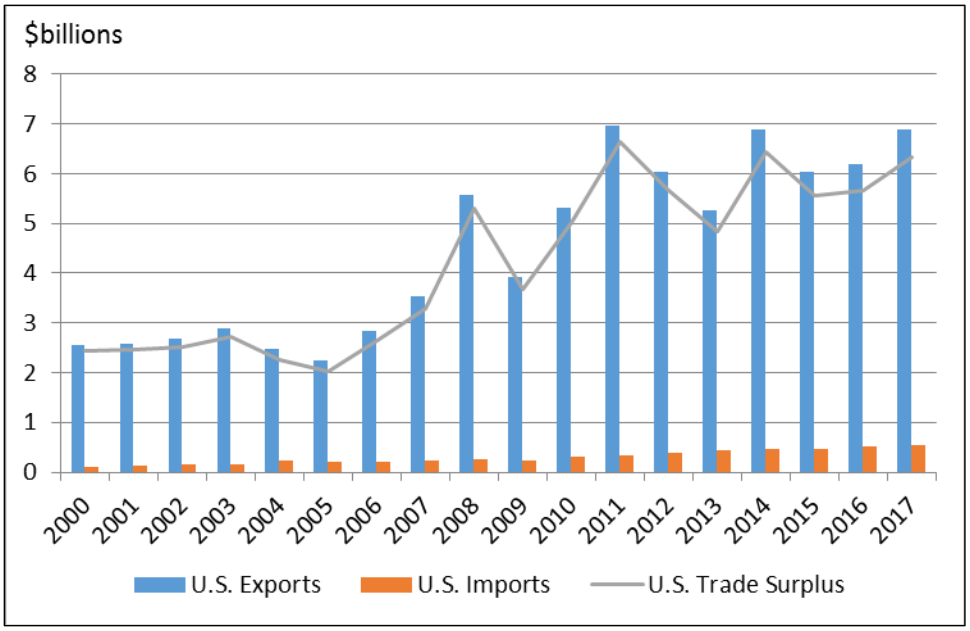
[11] The WTO's 1995 Agreement on the Application of SPS Measures sets out the basic rules for ensuring that each country's food safety and animal and plant health laws and regulations are transparent, scientifically defensible, and fair. For more information on the agreement, see WTO, "The WTO Agreement on the Application of Sanitary and Phytosanitary Measures (SPS Agreement)," https://www.wto.org/english/tratop_e/sps_e/spsagr_e.htm.

[12] For more information, see CRS Report RL34330, *The U.S.-South Korea Free Trade Agreement (KORUS FTA): Provisions and Implementation*.

[13] USDA Global Agricultural Trade System (GATS), May 15, 2018.

[14] Global Trade Atlas, May 15, 2018.

Figure 1. U.S.-South Korea Agricultural Trade



Source: USDA Global Agricultural Trade System (GATS), Foreign Agricultural Trade of the United States (FATUS) product group. Data are in nominal dollars.

U.S. Agricultural Imports from South Korea

U.S. agriculture and food imports from South Korea are largely in the form of noodles and other prepared foods and beverages. Grain-based foods and ingredients—including pasta and noodles, biscuits, and rice flour—are the highest-value category of U.S. imports from South Korea, accounting for about $165 million in 2017. The United States also imported about $115 million in fresh and prepared fruits and nuts, roughly $74 million in juice and other beverages, and nearly $63 million in teas, soups, condiments, and honey that year.

The value of U.S. imports of South Korean food products has increased from about $115 million in 2000 to about $548 million in 2017. From 2009 to 2011—the three years prior to the implementation of KORUS—U.S. imports of South Korean food products averaged $292 million. In the three years following the implementation of the FTA, 2012-2014, U.S. imports of South Korean food products averaged $421 million—a 44% increase. The value of U.S. imports of South Korean food products has continued to grow since then, averaging about $514 million from 2015 to 2017. U.S. imports of South Korean noodles, which account for 20% of the value of U.S. imports from South Korea, have increased in volume from about 6,246 MT in 2011 to 18,503 MT in 2017.[15]

U.S. Agricultural Exports to South Korea

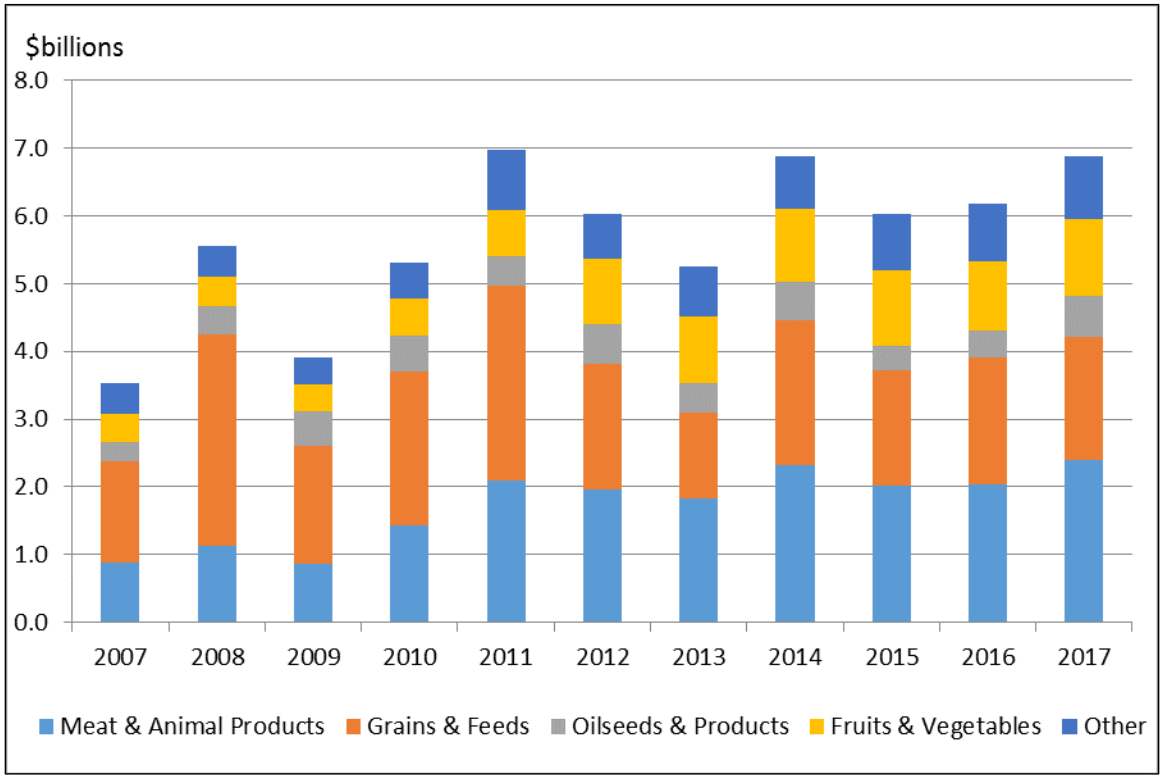
South Korea is by value the United States' second-leading export market for beef, the fourth largest for corn and pork, and the fifth largest for dairy products.[16]

[15] These products are covered by HTS Code 1902.30.

[16] USDA GATS, May 15, 2018.

The value of U.S. agricultural exports to South Korea almost tripled between 2000 and 2017, increasing from about $2.5 billion to about $7 billion (see **Figure 2**), growth that has coincided in part with trade liberalization under KORUS. From 2009 to 2011—the three years prior to the implementation of KORUS—U.S. exports to South Korea averaged about $5.4 billion. In the three years following the implementation of the FTA, 2012-2014, U.S. exports to South Korea averaged about $6 billion—a 12% increase. The value of U.S. exports to South Korea has continued to grow since then, averaging about $6.4 billion from 2015 to 2017. That growth has occurred despite an initial decline in U.S. agricultural exports to South Korea following the implementation of KORUS. The decline was due largely to a lower-than-anticipated volume of corn exports in 2013 and the slowing of the South Korean economy.[17]

Figure 2. U.S. Exports to South Korea by Commodity



Source: USDA (GATS) reflecting FATUS product groupings. Data are in nominal dollars.

U.S. exports to South Korea have been strong in recent years in response to rising consumer demand for prepared and consumer-oriented foods, including fruits and nuts, cheese and dairy products, beef, and other prepared foods, according to USDA.[18] South Korea imported about $3.7 billion in U.S. consumer-oriented agricultural products in 2016.[19]

[17] USDA FAS, *U.S. Agriculture Reaps Benefits of Free Trade Agreement with Korea*, December 18, 2017.

[18] USDA FAS, *Republic of Korea Retail Foods Biennial Report 2017*, GAIN Report KS1729, September 26, 2017.

[19] Ibid.

U.S. farmers and ranchers export a variety of products to South Korea (see **Table 2**).

Table 2. Leading U.S. Exports to South Korea

(millions of dollars)

Commodity	2008	2010	2012	2014	2016	2017
Beef	285	495	539	814	1,014	1,149
Corn	2,147	1,416	610	1,046	865	705
Pork	240	172	383	411	346	423
Wheat	526	345	645	412	248	328
Nuts	89	145	262	369	303	315
Soybeans	187	312	395	358	227	294
Citrus fruits	103	135	249	173	226	261
Cotton	125	158	163	208	165	248
Cheese	59	79	160	311	170	213
Soybean Oil	67	32	18	27	66	207
All Other Products	1,733	2,018	2,607	2,755	2,556	2,953
Total	5,561	5,307	6,031	6,884	6,186	6,889

Source: USDA GATS using FATUS product groupings. Data are in nominal dollars.

Beef

Beef was the top U.S. agricultural export to South Korea in 2017, amounting to about 171,000 MT worth more than $1.1 billion. South Korea is the second-largest market for U.S. beef exports by value and quantity. The year 2017 marked a high point for the U.S. beef industry, which worked to regain market share after South Korea banned U.S. beef in December 2003 over concerns about Bovine Spongiform Encephalitis (BSE, also known as mad cow disease) in the U.S. herd (see **Figure 3**).[20] Prior to the positive test for BSE, South Korea had been the third-largest market for U.S. beef exports, importing roughly 206,000 MT worth about $750 million in 2003.

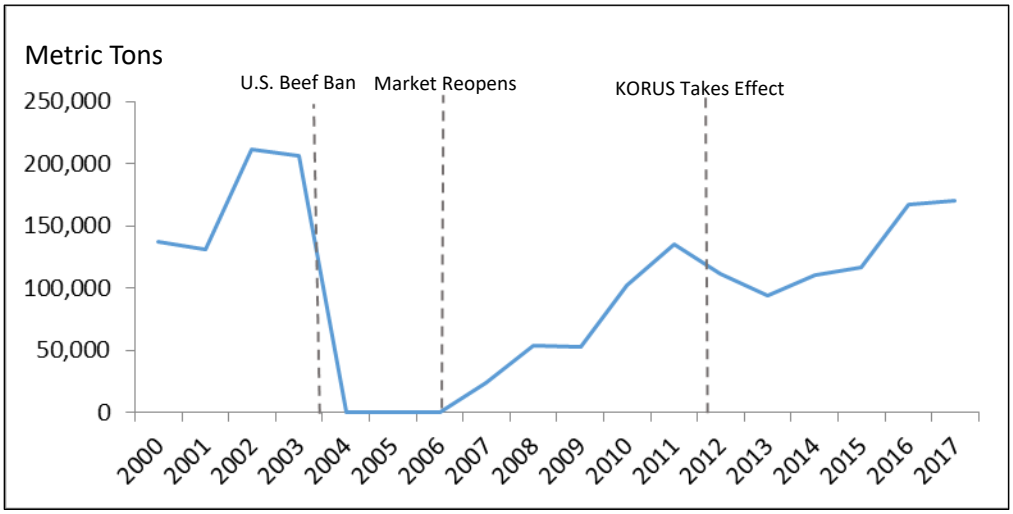
In 2006, South Korea eased the restrictions, allowing imports of small quantities of U.S. boneless beef from cattle less than 30 months of age.[21] In April 2008, South Korea agreed to allow imports of all cuts of U.S. boneless and bone-in beef and other beef products, regardless of the age of the animal. However, as a result of backlash by South Korean consumers over the elimination of import restrictions, a private-sector agreement in June 2008 limited imports of U.S. beef to products from cattle of less than 30 months of age until such time as Korean consumer confidence

[20] In December of 2003, BSE was found in a 6-year-old dairy cow in Washington State. Following the discovery, major foreign markets for U.S. beef—including Japan, South Korea, Mexico, and Canada—put in place either restrictions or bans on the import of U.S. beef. Canada and Mexico resumed imports in 2004, while Japan and South Korea maintained their restrictions until late 2006.

[21] Older cattle are a higher risk for BSE, though certain mitigation measures are effective in reducing the risk.

in U.S. beef improves.[22] Presently, the 30-month requirement remains in place.[23] As part of the reopening agreement, U.S. beef producers and processors exporting to South Korea must follow traceability and record-keeping requirements.[24] To date, USDA has approved 71 U.S. slaughter and processing facilities to export beef to South Korea.[25]

Figure 3. U.S. Beef Exports to South Korea



Source: CRS using data from GATS.

South Korean consumers are reportedly regaining confidence in U.S. beef. Polling by the U.S. Meat Export Federation in December 2017 found that 54% of South Korean consumers were confident in the safety of U.S. beef, compared with 5% in March 2010. Reflecting this shift in consumer sentiment, U.S. beef is also regaining market share, according to USDA. Whereas U.S. exports accounted for 35% of South Korean beef imports by volume in 2015, that share increased to 46% in 2017. Also, 2017 marked the first year since 2003 that the value of U.S. beef exports to South Korea exceeded that of Australian beef exports to South Korea.[26]

Part of the success of U.S. beef in South Korea likely reflects improved terms of trade under KORUS. The United States currently has a tariff advantage over other major beef exporters, particularly Australia and Canada, because of reduced tariffs under KORUS. Beef ranked as the top export to South Korea by value for both the United States and Australia in 2017. Of the roughly 379,000 MT of beef imported by South Korea in 2017, 47% was shipped from the United States whereas 46% was from Australia.[27] However, in December 2014, the South Korea-Australia FTA went into force, initiating a reduction of tariffs on Australian beef exports. By

[22] For more on the South Korea-U.S. beef negotiations, see CRS Report RL34528, *U.S.-South Korea Beef Dispute: Issues and Status*.

[23] For more information, see USDA Food Safety and Inspection Service, "Export Requirements for the Republic of Korea," accessed June 13, 2018.

[24] For more information, see USDA, Agricultural Marketing Service, "QSA LT30 Age Verification Program," accessed June 13, 2018.

[25] For the full list of approved facilities, see https://www.ams.usda.gov/sites/default/files/media/LSOfficialListingQSAJapanKoreaTaiwan.pdf.

[26] USDA FAS, *There's the Beef (and Pork)! U.S. Red Meat Success in South Korea*, GAIN Report KS1817, April 11, 2018.

[27] Global Trade Atlas, June 11, 2018.

2029, neither U.S. nor Australian beef is to be subject to South Korean import tariffs or safeguards, eliminating the existing U.S. tariff advantage.

Pork

South Korea is the fourth-largest export market for U.S. pork. U.S. producers exported about 164,000 MT of pork products worth roughly $423 million to South Korea in 2017. U.S. pork exports to South Korea have expanded under KORUS, which phased out a 25% tariff on frozen pork on January 1, 2014. Frozen pork accounts for the bulk of U.S. pork exports to South Korea. The volume of U.S. pork exports to South Korea has increased by 9% since 2011, the year before KORUS took effect. In part, this limited expansion may reflect a slump in total U.S. exports in 2013. That year, South Korea had an oversupply of domestically produced pork, while U.S. producers were dealing with an outbreak of Porcine Epidemic Diarrhea virus that reduced the U.S. pork supply.

In addition, U.S. pork exports to South Korea compete with exports from the EU. The South Korea-EU Free Trade Agreement (KOREU), which went into effect in 2011, also phases out tariffs on EU pork. However, for many pork products the phaseout periods for the EU extend beyond those for the United States.[28]

Corn

U.S. corn producers exported about 4 million metric tons (MMT) of corn valued at roughly $705 million to South Korea in 2017, ranking South Korea as the fourth-largest export market for U.S. corn. The roughly 4 MMT of U.S. corn exported to South Korea in 2017 was up 74% since 2000, though it was 32% below its peak level in 2011.[29] Part of the decrease from 2011 was due to low sales in 2012 and 2013, when a drought across the U.S. Midwest curbed U.S. corn production, reducing supplies for export and increasing prices.

South Korea uses corn largely for animal feed—almost all of U.S. corn exports to South Korea go to animal feed—though there are also a small amount of food and industrial uses. Domestic production accounts for less than 1% of the country's corn consumption. To feed its livestock sector, South Korea imports about 10 MMT of feed corn each year under a duty-free quota. While U.S. feed corn does not count as part of the global quota, it also does not benefit from a tariff advantage. As a result, U.S. feed corn exports to South Korea may fluctuate based on prices of corn from Brazil, Argentina, and other export competitors.[30]

Oranges

U.S. orange growers have seen gains in the South Korean market since KORUS took effect, and ship more oranges to South Korea than to any other country. U.S. oranges have more than a 90% market share in South Korea.[31] According to USDA, about 182,000 MT of U.S. oranges worth roughly $211 million were exported to South Korea in 2017. Export volume has increased by more than 31% since 2011, the year before KORUS took effect. South Korea's orange tariffs vary by season, and KORUS commitments are likewise season-specific. In January 2018, the 50% tariff on U.S. orange shipments to South Korea between March 1 and August 31 was eliminated.

[28] See GAIN Report KS1817.

[29] USDA GATS, May 15, 2018.

[30] USDA FAS, *Korean Animal Feed to Include More Corn and Wheat, Less Rice*, GAIN Report KS1815, April 4, 2018.

[31] USDA FAS, *Republic of Korea Citrus Annual*, GAIN Report KS1746, December 15, 2017.

Thus, the bulk of U.S. orange exports take place in that time frame. U.S. oranges that are exported to South Korea from September 1 until the end of February are currently subject to a TRQ of 2,985 MT under KORUS. The TRQ increases by 3% each year until 2022, when a licensing system is to be introduced based on historical imports of U.S. oranges. Imports below the quota are not subject to a tariff, while those above that amount are subject to a 50% tariff.

Tree Nuts

Since 2011, the amount of U.S. tree nut exports to South Korea has increased by 54%. Those exports were valued at about $315 million in 2017. Almonds and walnuts account for the majority of U.S. tree nut sales to South Korea, though it is also a market for U.S. pistachios, pecans, and hazelnuts.[32] KORUS immediately eliminated the 8% tariff on U.S. almonds, whereas the 30% tariff on shelled walnuts was phased out in 2017. South Korea is the fourth-largest market for U.S. walnuts, accounting for 5% of the total U.S. amount exported in 2017, and the seventh-largest market for almonds, accounting for 3% of the total U.S. volume exported in 2017.

Cheese

South Korea ranks as the second-largest market for U.S. cheese exports. U.S. cheese makers sold about 52,000 MT of cheese worth roughly $213 million to South Korea in 2017. This is up 50% from 2011 but below the peak of about 71,000 MT valued at roughly $311 million in 2014. KORUS created duty-free quotas for U.S. fresh, grated or powdered, and processed cheese exports to South Korea and started to phase out the 36% tariff on imports above the quota. In 2012, the quota was 7,000 MT. In 2018, U.S. cheese makers will be allowed to export 8,358 MT duty free, but exports above the quota will be subject to a tariff of 19.2%. Cheddar cheese is not to be subject to the TRQ as of 2021, whereas the TRQ on other cheese products is to be eliminated in 2026.[33]

U.S. cheese exports to South Korea face competition from suppliers in the EU. In 2016, the volume of EU cheese exports to South Korea exceeded U.S. exports to South Korea for the first time since 2009, according to South Korea Customs data. The KOREU FTA eliminates tariffs and quotas on EU cheese exports in 2026, much as KORUS does.[34]

When KOREU was signed, U.S. cheese makers expressed concern that EU rules on geographical indications (GIs) that were included in the FTA could prevent them from selling certain products in South Korea.[35] The United States does not recognize EU GIs, so U.S. products are free to use such common names for cheeses as feta, gouda, and parmesan. In a June 2011 exchange of letters, South Korean officials clarified that GI provisions in KOREU would not restrict U.S. products.[36]

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[32] USDA FAS, *Tree Nuts Market Brief Update 2016,* GAIN Report KS1625, October 6, 2016.

[33] USDA FAS, *Republic of Korea Dairy and Products Annual*, GAIN Report KS1732, October 27, 2017.

[34] The text of KOREU is available here: http://eur-lex.europa.eu/legal-content/en/TXT/PDF/?uri=CELEX:22011A0514%2801%29&rid=1.

[35] Geographical indications (GIs) are place names used to identify products that come from these places and to protect the quality and reputation of a distinctive product originating in a certain region. The term is most often applied to wines, spirits, and agricultural products. For more information, see CRS Report R44556, *Geographical Indications (GIs) in U.S. Food and Agricultural Trade*.

[36] CRS Report RL34330, *The U.S.-South Korea Free Trade Agreement (KORUS FTA): Provisions and Implementation.*

2018 Update of KORUS

In January 2018, at the request of the Trump Administration, the United States and South Korea began negotiating potential amendments to KORUS. The Trump Administration called for the talks in July 2017 due to concerns over the United States' overall trade deficit with South Korea, though it stopped short of requesting a full renegotiation.[37] In March 2018, the U.S. Trade Representative (USTR) and South Korea announced an agreement in principle.[38] The proposed KORUS modifications consist primarily of South Korean regulatory changes. The U.S. tariff modifications are unlikely to require action by Congress for implementation because the original KORUS implementing legislation gives the President authority to modify the U.S. tariff schedule as needed in line with the agreement.[39]

The proposed KORUS update[40] would not make any changes to agricultural provisions—South Korea specifically asked that agricultural products be excluded from the talks. However, U.S. farm exports will likely benefit from a commitment by South Korea to address issues with its import verification process. Specifically, U.S. exporters have raised concerns that South Korean customs officials have been requiring extra documentation for U.S. agricultural and other products to prove they are of U.S. origin before applying the KORUS tariff rates. Some U.S. dairy exporters have had product shipments that were verified as U.S.-made by the USDA rejected by South Korean customs officials. U.S. dairy exporters have also complained of rejected paperwork. They claim the extra requirements have been applied inconsistently and have in some cases resulted in delayed shipments and the application of non-KORUS tariffs.[41] In the agreement in principle, South Korea has reportedly indicated it will address the concerns with its import verification process and form a working group with the United States to monitor and address future issues as they arise.[42]

Issues in U.S.-South Korea Agricultural Trade

Although KORUS removed, or set the phaseout for, many tariff barriers, several nontariff barriers remain that obstruct U.S. exports of certain agricultural products to South Korea. Some of these trade barriers, and other potential regulatory actions by South Korea that could affect imports of U.S. agricultural products, are being discussed in the KORUS standing SPS committee.

New Crop Approvals and Acceptance

One such nontariff barrier is that South Korea has been slow to grant regulatory approval to crops created through modern genetic engineering (GE) technologies.[43] South Korea does not cultivate

[37] USTR, "USTR Calls a Special Session Under the U.S.-Korea Free Trade Agreement," press release, July 2017, https://ustr.gov/about-us/policy-offices/press-office/press-releases/2017/july/ustr-calls-special-session-under-usv.

[38] USTR, *New U.S. Trade Policy and National Security Outcomes with the Republic of Korea*, fact sheet, March 2018.

[39] For more information, see CRS In Focus IF10733, *U.S.-South Korea FTA (KORUS)*.

[40] Although an agreement on an update to KORUS was reached in March 2018, the text of the deal has yet to be released and signed. Once signed by both the United States and South Korea, the updates to the FTA will also need to be approved by the South Korean National Assembly.

[41] Letter from Jim Mulhern, president and CEO, National Milk Producers Federation, and Matt McKnight, chief operating officer, U.S. Dairy Export Council, to Robert Lighthizer, U.S. Trade Representative, March 29, 2018.

[42] USTR, *New U.S. Trade Policy and National Security Outcomes with the Republic of Korea*, fact sheet, March 2018.

[43] USTR, *2018 National Trade Estimate Report on Foreign Trade Barriers*, March 30, 2018.

any GE crops, and its regulatory system for the approval of products for import requires clearance from up to five different agencies.[44] USTR has criticized the review process as being onerous, redundant, and, on occasion, lacking in scientific justification.[45] Under pressure from the United States and industry, South Korea has launched a pilot project to test a streamlined approach to GE crop approvals.

South Korea largely imports GE crops for animal feed, though a lesser volume goes to food processing. According to USDA, of the roughly 4.2 MMT of U.S. corn exports to South Korea in 2016, about 3.6 MMT were used as feed and about 0.6 MMT went to food uses.[46] The U.S. corn used for feed was nearly all genetically engineered, as was about 90% of the corn for food uses—including high fructose corn syrup, corn oil, and other processed ingredients.

South Korea has in the past banned the import of U.S. crops over concerns of unapproved GE strains. For example, imports of U.S. wheat were temporarily halted in the summer of 2006 after unapproved GE wheat was found to be comingled in a field in Washington State. South Korea now tests all U.S. wheat and wheat flour shipments for the presence of unapproved GE strains. It also requires testing of some U.S. rice and corn shipments.

South Korean consumers have expressed concerns about GE crops, which has hindered acceptance of the technology by the government and food makers. Since February 2017, South Korea has required labeling of GE food ingredients, though only for products where the GE protein is present. Korea's threshold level for adventitious presence of GE material in agricultural products is 3%.[47] High fructose corn syrup and oils do not require labeling, as the GE proteins are eliminated in processing. Still, South Korean companies have not fully embraced those ingredients due to consumer concerns.

Fruit Market Access

USTR is working with South Korean officials to gain better access for U.S. apples, pears, cherries, and blueberries.[48] South Korea currently bans all imports of fresh U.S. apples and pears due to pest concerns.[49] U.S. officials are in the process of developing risk management practices and quarantine requirements for growers looking to export to South Korea. The plan will need approval by South Korea before exports can begin. Apples are the second-most consumed fruit in South Korea after citrus, and currently all apples sold in South Korea are grown domestically. South Korea is also a large producer of pears.[50]

[44] Once a GE crop is petitioned for approval by the South Korean government, the Rural Development Administration (RDA) conducts an environmental risk assessment. That process includes consultations by RDA with three different agencies: the National Institute of Ecology (NIE), the National Fisheries Research & Development Institute (NFRDI), and the Korea Center for Disease Control and Prevention. Meanwhile, the Ministry of Food & Drug Safety (MFDS) conducts a safety assessment for food grain varieties developed with biotechnology. The MFDS review process includes consultations with RDA, NIE and NFRDI.

[45] USDA FAS, *Republic of Korea Agricultural Biotechnology Annual*, GAIN Report KS1739, November 16, 2017.

[46] Ibid.

[47] USDA FAS, *Korea's New Biotech Labeling Requirements*, GAIN Report KS1711, March 28, 2017.

[48] USTR, *2018 National Trade Estimate Report.*

[49] For details on South Korea's import risk analysis process, see http://www.qia.go.kr/english/html/Plant/Plant_017-22.jsp.

[50] USDA FAS, *Losing Juice: This Year's Expected Pear Production Increase is an Exception to Longer Term Trend*, GAIN Report KS1736, November 1, 2017.

USTR and USDA are working with the South Korean government to approve imports of fresh blueberries from states other than Oregon. In 2011, South Korea approved Oregon blueberries for import after growers there agreed to pest management and crop production requirements.[51] Other blueberry-producing states—specifically California and Washington—are now also seeking market access, stating that their pest mitigation measures are as effective as those in Oregon.

Similarly, the U.S. cherry industry is pushing South Korea to allow imports of cherries from Pacific Northwest states. Currently only cherries grown in California are available for export to South Korea due to concerns over the spread of the coddling moth. Although South Korean officials have approved of California's pest mitigation measures, they argue that measures in Oregon, Washington, and Idaho are not sufficient.

Potato Access

Currently only potatoes grown in the Pacific Northwest can be exported to South Korea. Due to pest concerns, growers in California, Colorado, North Dakota, and other states do not have access.[52]

Although tariffs on potatoes were immediately eliminated when KORUS took effect, South Korea had formally closed its market to U.S. potatoes in 2012 after zebra chip virus was found in the Pacific Northwest crop.[53] The U.S. and South Korea reached an agreement allowing exports from the region to resume in 2018 after growers and processors put in place mitigation measures to prevent the spread of the virus. However, the agreement did not include access for growers in other parts of the United States.

Efforts to expand access for potato exports from other U.S. regions have been hampered by South Korean concerns related to potato spindle tuber viroid disease.[54] Although that disease is not present in commercial potato producing areas, and farmers have put in place mitigation measures, South Korean officials have cited the disease in their reluctance to grant access to additional states.

Changing Maximum Residue Limit Requirements

The South Korean government is putting in place a system that would require the preapproval of maximum residue levels (MRLs) for veterinary drugs on meat and agrichemicals on plants before products containing their residues can enter the country.[55] South Korea expects to make a list of approved plant products final at the end of 2018 and complete the list of approved products for meat, poultry, and other animal products by December 2020. USTR has raised concerns over the transparency of South Korea's process in setting its MRLs, and the potential for an unwarranted increase in testing, potentially delaying shipments. USTR has asked for the final implementation

[51] Among other requirements, Oregon growers looking to export to South Korea must register their fields and subject them to regular state inspection during growing periods. Once harvested, that fruit must be segregated from nonregistered fields, and identifying information for the grower and packer must be included on packaging labels. The blueberries must then be shipped by air in individually wrapped and sealed packages. For more information, see the 2018 Oregon Blueberry Korea Export Program at http://www.oregonblueberry.com/korea/.

[52] USTR, *2018 National Trade Estimate Report.*

[53] Zebra chip causes striping and discoloration in potato chips produced from infected tubers, and also reduces yield.

[54] This disease affects the growth of infected plants, causing them to develop more slowly, or stop growing entirely.

[55] USTR, *2018 National Trade Estimate Report.*

to be delayed to allow U.S. companies and producers time to review the plan and to ensure that MRLs are set at levels supported by scientific data.[56]

Access for U.S. Rice

South Korea has tight import restrictions on rice to protect its farmers, claiming that strong domestic production of the staple crop is necessary for national food security. To that end, rice was not included in KORUS, to the "great disappointment" of U.S. growers.[57] South Koreans consume about 3.1 MMT of rice annually.[58]

Between January 1, 2005, and December 31, 2014, South Korea increased its annual rice import limit from 225,575 MT to 408,700 MT as part of a 1995 WTO agreement, which included country-specific rice import quotas for the United States, Australia, China, and Thailand. As of January 1, 2015, South Korea implemented an over-quota tariff of 513% for all international rice imports above 408,700 MT and has eliminated country-specific allocations. U.S. rice exports amounted to 152,000 MT in 2017, accounting for 37% of the total quota. However, USA Rice, which represents U.S. rice growers, wants to return to a system that provides for a U.S.-specific quota.[59] In 2017, U.S. rice exports to South Korea amounted to approximately 1.5% of the total U.S. rice crop.[60]

Carcinogenicity Labeling for Alcoholic Beverages

South Korea is the sixth-largest export market for U.S. wines, and the fifth-leading export market for U.S. beer, accounting for about $22 million and $28 million in exports, respectively, in 2017. South Korea requires that all beer, wine, and other alcoholic beverages available for sale include the statement "alcohol is a carcinogen" on the label—the first county in the world to have such a stringent health labeling requirement for alcoholic beverages.[61] However, USTR has raised concerns with how the rules were put in place, arguing that the United States and other countries were not given enough time to review and comment on a proposal sent to the WTO in 2016 before the final measure was enacted. Producers were given six months to comply with the labeling requirements. USTR has requested consultations over the labeling rules, and that South Korea provide a scientific basis for the carcinogenicity claims.[62]

Competition from South Korea's Other FTAs

Since 2004, South Korea has entered into 15 FTAs that provide preferential market access to 52 countries. In addition to the United States, South Korea has FTAs with Chile, Singapore, India, Peru, Turkey, Australia, Canada, China, New Zealand, Vietnam, the EU, and Colombia. South Korea also has FTAs with the European Free Trade Area and the Association of Southeast Asian Nations. Seven of South Korea's FTAs have been signed since KORUS was enacted in March

[56] USTR, *2018 National Trade Estimate Report*.

[57] USA Rice, "USA Rice Sees KORUS Modernization Talks as Opportunity," press release, January 26, 2018.

[58] USDA, *The Rice Market in South Korea*, RCS-161-01, September 2016.

[59] USA Rice, "USA Rice Sees KORUS Modernization Talks as Opportunity," press release, January 26, 2018.

[60] USDA, *Rice Outlook*, RCS-18A, January 17, 2018.

[61] The labeling requirement also applies to liquor, however those products are not considered to be agricultural products by USDA.

[62] USTR, *2018 National Trade Estimate Report*.

2012. Further, South Korea is in negotiations over new FTAs with several countries, including a multilateral deal with China and Japan.[63]

South Korea's expanding free trade network could create future challenges for U.S. farmers and ranchers looking to maintain their share of the South Korean market. For instance, although the United States currently has a market access advantage in many products, it is losing its tariff advantage to other South Korean FTA partners, some of which have lower transportation costs, among other advantages. For example, U.S. beef producers can currently export 306,000 MT of beef to South Korea with a 21.3% tariff—anything over that amount is subject to a 30% tariff, though currently exports do not exceed the safe guard level. Australian producers can export 167,327 MT of beef, or just more than half the U.S. limit, to South Korea at 26.6% tariff rate, with anything exceeding that amount subject to a 40% tariff. Tariffs and safeguards on U.S. beef imports are to be eliminated in 2027 and Australia's are to do the same in 2029.

Congressional Interest

South Korea is a key export market for U.S. agricultural products, and continued access to this market is important for U.S. farmers and ranchers. The importance of South Korea as an export market for U.S. agricultural products is magnified by the uncertainty that currently prevails in three leading U.S. farm export markets—China, Canada, and Mexico—due to tariff-related actions and ongoing trade negotiations over NAFTA. With the reduction and elimination of import tariffs under KORUS and the rebound of the South Korean economy, South Korea has potential to be a growth market for U.S. agricultural products. The successful conclusion of the KORUS update talks also suggests potential stability in U.S. trade ties with South Korea at a time when there is some uncertainty in other U.S. trading relationships. As U.S. farmers and ranchers look to expand exports, Members of Congress may be interested in engaging with the Administration through their oversight activities regarding the U.S.-South Korea relationship and its effect on facilitating market opportunities for U.S. food and agricultural interests.

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[63] For a full list of South Korea's FTAs and on ongoing negotiations, see http://www.customs.go.kr/kcshome/main/content/ContentView.do?contentId=CONTENT_ID_000002320&layoutMenuNo=23225.