# United States-Korea Free Trade Agreement and Effects on the U.S. and Korean Textile and Apparel Industries

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## **Key Words**

Korea, United States, Free Trade Agreement, Textile Industry, Apparel Industry

#### **Abstract**

On April 1, 2007, the United States and South Korea (SK) announced completion of their free-trade agreement (KORUS). The U.S. Congress passed KORUS on October 20, 2011, allowing the agreement to take effect. KORUS is the first U.S. free-trade agreement since NAFTA with a country having significant textile and apparel exports to the United States. In 2010, the value of U.S. textile and apparel imports from SK was nearly three times that of U.S. exports of such products to SK. SK has become the second largest source of U.S. yarn and fabric imports by volume and the top U.S. import source of advanced textile reinforcements and coated or laminated membranes. KORUS provides duty-free access for the United States and SK to each other's market in most textile and apparel goods, along with preferential treatment of U.S. apparel imports from SK composed of U.S. or SK fabric and yarn, thereby supporting U.S. textile exports (OTEXA, 2011). The U.S. government agreed in KORUS to remove important border-enforcement measures for textile products, which some have warned may further encourage Chinese firms' longstanding practice of routing illegal transshipments through SK to the United States (USITC, 2011). The Economic Policy Institute estimated a loss of 9,300-12,300 U.S. textile and apparel industry jobs and another 40,000 related U.S. jobs under KORUS ("Textile Groups Oppose," 2011). The U.S. International Trade Commission (USITC) predicted that greatly increased U.S. imports from SK under KORUS will cause reduced U.S. textile manufacturing capacity to meet U.S. military needs (USITC, 2011).

#### Introduction

The Korea-U.S. Free Trade Agreement (KORUS) between the United States and South Korea became effective on March 15, 2012. The agreement has a broad range of coverage. It is expected to substantially influence the trade and investment relationship between the signatory countries, including not only their bilateral trade, but also the policies and procedures governing trade, investment, and the regulatory environment in this relationship (U.S. International Trade Commission, 2007). Under the KORUS, nearly80% of South Korean imports of consumer and industrial products from the United Statesbecame dutyfree on March 15, 2012; nearly 95% of these countries' bilateral trade in such products will become duty free within five years after that date, and virtually all remaining tariffs on these products will be lifted within 10 years (Fashion Industry Network, 2012). The two countries also agreed to liberalize trade in services by opening their markets in services beyond their commitments in the World Trade Organization.

The U.S. International Trade Commission (USITC) projected that solely the KORUS requirement for South Korea to reduce its tariffs and tariff-rate quotas on imports from the United States will add around US\$10 billion to annual U.S. merchandise exports to South Korea, along with US\$10 billion to US\$12 billion to the annual U.S. gross domestic product ("KORUS FTA U.S.," 2012). The KORUS is the first U.S. free trade agreement since the North American Free Trade Agreement (NAFTA) with a country having significant textile and apparel exports to the United States. It is expected to significantly increase the bilateraltextile and apparel trade of South Korea and the United States (Office of the United States Trade Representative, 2011). The USITCestimated that the agreement will lead to a growth in U.S. textile exports of US\$130 million to US\$140 million and in U.S. apparel exports of US\$39 million to US\$45

million, although the expected increasein U.S. imports from South Korea under the KORUS will not significantly affect output and employment in the U.S. textile and apparel sector (U.S.Korea Connect, 2011).

# **Textiles and Apparel**

Forbes Magazine reported that the textile and apparel industry seems to have been largely ignored in the negotiation of the KORUS, as the negotiation focused mostly on U.S. access to the South Korean auto and beef markets (Fashion Industry Network, 2010). Despite this, the KORUS contains provisions specific to textiles and apparel. For example, about 60% of the textile and apparel trade between South Korea and the United States became duty free immediately under the KORUS. It immediately eliminated all of South Korea's tariffs on 77% of the value of its textile and apparel imports from the United States, and it requires the phase out ofthe tariffs on 13% of the value of such imports over three years and the remaining 10% over five years. The United States immediately eliminated tariffs on 52% of the value of its textile and apparel imports from South Korea and will phase out tariffs on 18.6% of the value of such imports over five years and the remaining 20.2% over 10 years (U.S.Korea Connect, 2012). The KORUS also provides special safeguard mechanisms to reduce the impact of surges in the trade partners' textile and apparel imports from each other (Kim, 2011).

The KORUS is believed to offer important opportunities for U.S.firms to sell domestically produced apparel to South Korea. After Canada, the United Kingdom, and Japan, South Korea is the fourth largest export market for U.S.-made apparel. U.S. apparel exports to South Korea increased more than five timesover 2000-2010, in spite of the 8-13% duty onthis apparel upon entering the South Korean market. The removal of all South Korean tariffs on U.S.-made apparel under the KORUSmay therefore benefit U.S. apparel producers (American Apparel &Footwear Association, 2011).

Over the years, South Korea's share of the U.S. textile and apparel market has declined in relative and absolute terms. South Korea was historically an importantsource of U.S. apparel imports, but has become a far less significant apparel supplier in recent years. It was the thirdlargest source of U.S. apparel imports in 1990, with a 13.0% share, butdropped to the 27th position by 2010, with a 0.4% share. The drop in its share of U.S. apparel imports is partially due to the great growth in China's share. In 1990, South Korea was the thirdlargest source of U.S. textile imports, with a 9.8% share, but its share fell to 7.9% by 2010. In 2010, textiles accounted for 1.4% of all U.S. textile and apparel imports from South Korea and apparel for less than 1%. Table 1 displays U.S. textile and apparel imports from South Korea in 2010, 2011, and 2012.

Table 1. U.S Textile and Apparel Imports from South Korea, 2010-2012 (million dollars)

			January – June		Year Ending		
	2010	2011	2011	2012	8/2012	7/2012	6/2012
Yarn	257	249	120	156	300	296	286
Fabric	530	624	308	337	660	661	654
Made-up	86	105	50	40	103	102	103
Apparel	269	257	106	97	239	245	247
Total	1142	1235	584	638	1301	1304	1289

*Note*: Made-up refers to finished non-apparel textile products

Source: U.S. Department of Commerce, Office of Textiles and Apparel (2012a, 2012b).

In 2010, the United States exported a small volume of apparel worthUS\$112 million to South Korea (Cooper, Manyin, Jurenas, &Platzer, 2011). The Office of Textiles and Apparel (OTEXA) in the International Trade Administration of the U.S. Department of Commerce indicated that South Korea is currently the 11th largest export market for U.S. textile and apparel products, having grown in value from US\$241 million to US\$418 million over 2005-2011. The export growth occurred mainly in tailored apparelfor men and women, knit shirts, sweaters, dresses, filament yarns, and nonwoven fabrics. During 2005-2011, U.S. imports of South Korean textile and apparel products declined in total value from US\$1.9

billion to US\$928 million, partly due to changes in the sourcing strategies of U.S. buyers who currently source their textile and apparel imports mainly from Asian countries with production costs lower than those in South Korea (Rodie, 2012).

# U.S. Textile and Apparel Industry Overview

In 2009, the textile and apparel industry was one of the largest employers in U.S. manufacturing, employing 3.5% of the U.S. manufacturing workforce. The total combined value of U.S. textile (US\$47.2 billion) and apparel shipments (US\$15.6 billion) was US\$62.8 billion that year. Total U.S. textile and apparel production was valued at more than US\$66.3 billion in 2010 (U.S. Department of Commerce, 2010). The U.S. textile and apparel industry employed 395,000 workers within the United States that year (U.S. Department of Labor, 2010).

In 2008, the textile and apparel industries worldwide generated US\$612 billion in exports, accounting for 4% of global merchandise exports. The U.S. textile and apparel industry generated exports worth US\$16.9 billion in 2008, representing 2.8% of the total value of world exports of textiles and apparel. U.S. customs revenue earnings from textile and apparel imports totaled US\$9 billion, among the highest of all import categories due to the overall high tariffs on U.S. textile and apparel imports. The U.S. textile and apparel trade balance declined from US\$61.8 billion in 2003 to US\$49.6 billion in January-August 2010 (Office of Textiles and Apparel, 2010).

The U.S. textile and apparel industry exportednearly US\$274 million worth ofgoods to South Korea over 2008-2010. U.S. textile and apparel exports to South Korea increased by 62% in value overthat period. The top U.S. textile and apparel exports to South Korea are fabrics includingfelts/nonwovens and specialty and industrial fabrics; filament and spun yarn; men's and boys' knit t-shirts and trousers; women's and girls' suits and sweaters; infant wear; robes and dressing gowns; underwear; and bedroom furnishings. California, Georgia, Illinois, New Jersey, New York, North Carolina, South Carolina and Texas are the U.S. states with the most textile and apparel exports to South Korea (International Trade Admiration, 2011).

## The South Korean Textile and Apparel Industry

The Korea Federation of Textile Industry (KOFOTI) reported that 6,035 textile and apparel companies operated in South Korea in 2010, comprising 10.3 % of the country's total manufacturing activity. That year, the textile and apparel industry employed 174,000 people, representing approximately 7% of the total employment in the country's manufacturing sector. In addition, the products of this industry accounted for 3.2% of the goods manufactured inSouth Korea in 2010. According to KOFOTI, the country's textile and apparel exports in 2010 totaled US\$13.9 billion, representing 3% of South Korea's total exports. The total export value in 2010 was 19.5% higher than that in the previous year with textile material exportsincreasing by 39.7%; yarn by 34.5%; fabric by 18.9%; and finished textile products by 78%. China is South Korea's main export market, accounting for 19.8% of its total textile and apparel exportsin 2010. Other major textile and apparel export markets include Vietnam, receiving11.2% of these exports; the United States, 8%; and Indonesia, 7.9%. South Korea ranks first in global exports ofseveral textiles products, including man-made-fiber knit fabric, with a 16.7% global share; polyester-filament fabric, with a 27.6% share; and tire-cord textiles, with a 38.2% share (Thomasson, 2011).

Although fabrics and yarns composed of man-made fibers have come to dominate South Korean textile product exports to the United States, apparel formerly dominated these exports. Indeed, South Korea was among the top three sources of U.S. apparel imports in the mid 1980s (Cline, 1987). Owing to the large volume of its apparel exports to the United States during the 1970s and 1980s, South Korea was among the Asian newly industrialized countries (NICs) that were targeted for tight restrictions on their apparel exports under the Multi-Fibre Arrangement (MFA). The MFA was in effect from 1974 through 1994. It authorized any signatory country (e.g., the United States) to make bilateral agreements with exporting countries (e.g., South Korea) to set quantitative restrictions in the form of voluntary export restraints (VERs) on textile product exports of the exporting countries to the MFA signatory country in the bilateral agreements. The resulting restrictions on South Korean apparel exports to the United States led

South Korean apparel manufacturers to follow a practice initiated by Hong Kong counterparts. That is, South Korean apparel manufacturers shifted much of their garment production to other countries, first in Asia and then also in Africa and the Caribbean, which were not subject to or had unfilled MFA VERs (Bonacich& Waller, 1994). China was one of the countries to which garment production was shifted.

South Korean apparel manufacturers had an additional incentive to shiftgarment production to other countries. South Korea experienced rising wage rates over the last half of the 20th century as it underwent rapid economic growth. Given the labor intensity of apparel production, South Korea's rising wage rates reduced its competitiveness in supplying apparel to world markets, including the U.S. market. Thus, South Korean apparel manufacturers shifted their garment production to other countries, in particular low-wage countries, to not only avoid MFA VERS but also reduce production costs (Bonacich& Waller, 1994). The garment production shifted to low-wage countries was sometimes to factories owned and operated by South Korean apparel manufacturers in those countries and sometimes tocontractors these manufacturers hired to produce garments. Regardless of which, South Korean apparel manufacturers often provide fabrics and other inputs needed to produce garments, as well as worker training. Firms in South Korea and other Asian NICs thereby had a major role in the development of several low-wage countries' capability to produce apparel for export.

As garment production increasingly shifted from South Korea to other countries, various South Korean apparel manufacturers evolved into transnational producers, or intermediaries, that set up and manage triangular apparel manufacturing networks (Staritz, 2011). In such a network, a transnational producertakes orders for garment production from buyers in other countries (e.g., the United States) and then has the garments produced in low-wage countries. The triangle iscompleted by shipping the finished garments directly from the countries where they are produced to the buyers who placed the orders for garment production with the transnational producer. Despite the phase out of the MFA VERs over a tenyear period ending January 1, 2005, triangular manufacturing networks continue to operate. As China is one of the countries to which South Korean apparel manufacturers moved garment production, relationships were instilled between firms in South Korea and China.

The United States concluded its first MFA bilateral agreement with China in 1980 that set VERs on textile product exports of China to it (Lee &Vaziri, 1989). To avoid the VERs, some Chinese apparel producers illegally transshipped their exports to the United States through other countries, such as South Korea, depending on the export product categories. The illegal transshipments have continued since the MFA VERs expired in efforts to avoid U.S. trade barriers: the U.S. safeguard quotas imposed on 21 categories of textile product imports from China over 2006-2008, as allowed by the World Trade Organization (WTO) under China's accession agreement upon joining the WTO in 2001; and U.S. tariffs on textile product imports from China (and other countries). Although China is not the only source of textile products illegally transshipped to the United States, it is the top source (Kunz & Garner, 2011). This gave rise to fears of U.S. textile and apparel producers that Chinese firms would take advantage of the KORUS tariff reduction on U.S. textile product imports from South Korea to transship through South Korea their textile products bound for the U.S. market. China's history of illegally transshipping through South Korea is believed to have also led to KORUS provisions designed to prevent such transshipping (Industry Trade Advisory Committee on Textiles and Clothing, 2007).

# **Key KORUS Provisions for the Textile and Apparel Sector**

## 1 U.S. Military Clothing and Footwear

The KORUS protects the Berry Amendment, a provision of each appropriations bill for the U.S. military that requires all clothing and shoes worn by U.S. soldiers to be made in the United States from U.S. materials, by excluding textile materials, clothing, and footwear made in South Korea from being used in supplies for the U.S. military. This important provision ensures that the U.S. industrial base for textiles, clothing, and footwear for the U.S. armed forces remains American (American Apparel & Footwear Association, 2011).

# 2 SpecificSafeguards for Textile and Apparel Imports

The KORUS includes a special textile safeguard mechanism that allows temporary re-application of most favoured nation (MFN) tariff rates if imports under the agreement increase either absolutely or relative to the domestic market and are shown to cause or threaten serious damage to the domestic industry. MFN tariff rates are tariff rates that WTO members apply to imports from each other and are generally lower than the tariffs on products from nonmembers of the WTO. These tariff rates are generally not the zero rates prescribed by the KORUS that have taken effect or will take effect on textile and apparel products the United States and South Korea import from each other.

# 3 Labeling of the Country of Origin

To be cleared through South Koreancustoms, textile products, apparel and apparel accessories, home textiles, leather goods, and shoes must be labeled with information required by South Korea. The country of origin of a productmust be stated in Korean or English as "made in (country name)" or "product of (country name)". All other label information required in South Korea must be stated in Korean.

# 4 The Yarn Forward Rule of Origin

The KORUS includes the yarn forward rule of origin as the basic rule of origin. This rule is topromote the use of yarn and fabric produced in the United States and South Korea and thereby to ensure that only apparel composed of these materials will qualify for preferential tariff treatment. The rule also restricts South Korean suppliers from sourcing apparel components from third-country suppliers. Some view the yarnforward rule of origin as too restrictive and costly to support apparel trade with most countries. Sewing thread, narrow fabrics, and pocketing fabrics are not covered under this rule of origin so that these components need not have U.S. or Korean origins (National Textile Organization, 2009). However, most U.S. textile industry members of the National Textile Organization (NCTO) have strongly criticized the exclusion of sewing thread, narrow fabrics, and pocketing fabrics from the yarn forward rule of origin, noting that these products are in rich supply in the United States and South Korea. U.S. apparel industry members of the NCTO have complained that the reliance on the yarnforward approach in the KORUS limits opportunities for trade between the KORUS countries and only leads to confusing and burdensome compliance requirement (Industry Trade Advisory Committee on Textiles and Clothing, 2007).

# DifferingViewpoints on the KORUS

According to the Industry Trade Advisory Committee on Textiles and Clothing, firms in the U. S. textile and apparel industry are split on their views of the KORUS (Industry Trade Advisory Committee on Textiles and Clothing, 2007). US retailers and apparel and footwear sectors are generally positive, seeing prospectsfor increased trade in areas with huge growth potential. Matthew Shay, president of the National Retail Federation has stated the KORUS is a major step toward free and open trade and the creation of jobs for American workers. He also commented that limits on international trade have held back the U.S. economy for far too long and removing trade barriers through the KORUS is one of the keys to economic recovery. American Apparel & Footwear Association (AAFA) president and CEO Kevin Burke stated that the passing of the KORUS will reinvigorate U.S. competitiveness in the global marketplace. He added that opening the textile and apparel market to two-way permanent trade flows will allow U.S. firms to gain access to new consumers while continuing to deliver quality and affordable products (Woodward, 2011).

On the other hand, the U.S. textile industry is concerned that South Korea, as top supplier to the U.S. market in more than 20 textile and apparel categories, poses real threat. Overall, South Korea was U.S. six largest of textiles and apparel by volume in 2008. In textiles alone, where South Korean is particularly competitive, they are U.S. fourth largest supplier in terms of volume in 2008. From a bilateral perspective, U.S. textiles and apparel imports from South Korea are nearly six times the value of U.S. exports to South Korea. This relationship in textile and apparel trade added to the U.S. trade deficit (see Table 2). There

was an additional concern raised for the U.S. textile industry. The development of large joint "Gaesung industrial park" with North Korea, which offers a supply of labor reportedly even cheaper than Vietnam and which specializes in textile production (National Textile Organization, 2009).

**Table 2**: Textile & Apparel Trade Balance Report (Millions of Dollars)

		**	•	January	% Change	
		2010	2011	2011	2012	YTD 8/11-YTD 8/12
Yarn						
	Export	141	159	112	80	-28.21
	Import	257	249	159	211	32.16
Fabric						
	Export	113	99	66	61	-7.45
	Import	530	624	415	451	8.64
Made-up						
	Export	45	52	33	27	-18.46
	Import	86	105	69	67	-3.70
Apparel						
	Export	98	108	70	69	-1.10
	Import	269	257	166	148	-10.91
Total						
	Export	398	417	281	237	-15.45
	Import	1,142	1,235	810	876	8.20

Source: U.S. Department of Commerce, Office of Textiles and Apparel (2012a, 2012b).

According to Cass Johnson, president of the National Council of Textile Organizational (NCTO), the Korea FTA puts significant job losses in the U.S. textiles and apparel sectors jobs present and future jobs in serious jeopardy. He said that textile and apparel industry is one of the few that has continued to add jobs over the 2010. Textile mills have added 2,500 direct jobs and 7,500 indirect jobs to the U.S. economy over the year 2010 (National Council of Textile Organization, 2011b).

The Economic Policy Institute analyzed and estimated that if the KORUS agreement in its present form passes Congress that 15,900 good paying American jobs will be demolished. They estimate that between 9,300 and 12,300 jobs will be lost specifically in the U.S. textile and apparel sector as a result of legal KORUS trade. U.S. government figures showed that approximately three additional jobs are lost to the U.S. economy for each textile job that is eliminated. In addition, U.S. job losses from illegal Chinese exports are not included and these would be significant. Total U.S. job losses because of the flawed KORUS textile are expected to be at least 40,000 jobs (National Council of Textile Organization, 2011a). Textile workers are not convinced; nearly 27,000 workers petitions were delivered to Members of Congress in the approach to the FTA vote, calling for the Korea FTA to be canceled because of illegal shipped by China through South Korea. U.S. textile and apparel industry concerned that in the KORUS agreement, the government removed important textile enforcement measures, the door will be open to billions of dollars of illegal transshipments from China, a country with a long history of using Korea to illegally transship goods (National Council of Textile Organization, 2011b).

U.S. governmental analysis predicted that the KORUS agreement would cause the U.S. trade deficit to increase and cause a surge of export of Korean textile products. Studies show that the overall agreement is expected to cost nearly 159,000 U.S. jobs with a U.S. textile industry analysis shows that 40,000 direct and indirect textile and apparel sector jobs could be lost. Polls show that nearly 70% of Americans believe that free trade agreements are bad for the U.S. economy (National Council of Textile Organization, 2011b). Cass Johnson argued that the phase-out schedule provided South Korean exporters with greater access to the U.S., while domestic textile companies would have to wait years for equal access in South Korea (Woodard, 2011). Both the Peterson Institute for International Economics and the U.S. ITC in Washington have published a series of estimated for a U.S.-Korea FTA. Regardless of model, base year, and liberalization scenario, they predicted that total U.S. exports to Korea would increase by more than total imports from Korea, in both percentage and value terms (Schott, 2010; Schott, Bradford, & Moll, 2006; U.S.ITC, 2001, 2007).

The American Manufacturing Trade Action Coalition (AMTAC) is concerned about the direct impact of the KORUS FTA manufacturing jobs pointing out that textile production is likely to drop as a result of it. Executive director of AMTAC, AuggieTantillo said that textile output would likely decline almost certain which means the loss of U.S. textile jobs (Woodard, 2011).

The Korea Federation of Textile Industries (KOFOTI) said that KORUS FTA would increase the export of Korean textile and fashion products rapidly. The South Korean textile industry will have a chance to upgrade and diversify its products (Korea.net, 2012).

#### **Discussions and Conclusions**

The projections of increased trade in textiles and apparel between the KORUS signatory countries may or may not become reality. The textile and apparel industries of the United States and South Korea face an uncertain future under the KORUS. Some firms will gain, and others will lose. It seems instructive to consider trade patterns that may follow the implementation of the KORUS in light of those that followed the implementation in 1994 of the NAFTA among the United States, Canada, and Mexico.

The NAFTA allows tariff- and quota-free trade in textiles and apparel (and other products) among the three members of the agreement. Like the KORUS, it includes the yarn forward rule of origin for textile and apparel products to qualify for tariff- and quota-free treatment. After the NAFTA became effective, many U.S. apparel manufacturers shifted their garment production to Mexico to take advantage of the low Mexican wages and the NAFTA trade preferences. Numerous U.S. apparel factories closed, and by 1996 Mexico was the top source of U.S. apparel imports (Kunz & Garner, 2011). The movement of U.S. garment production to Mexico not only helped U.S. apparelmanufacturers reduce production costs, but also was a boon to U.S. textile producers as they exported large amounts of fabrics to Mexico to be made into apparel for the U.S. market (Cadot, Carrere, de Melo, & Portugal-Perez, 2005).

Although wage rates have risen in Mexico with advancement in the country's economic development since the NAFTA became effective, Mexico still supplies U.S. apparel imports, much more so than South Korea although far behind China and other Asian countries like Vietnam as a source of these imports. Mexico also remains one of the top export markets for fabrics produced in the United States, being well above South Korea in this regard (???OTEXA, ????). Mexico still lacks a well developed textile industry.

It is unlikely that the KORUS will lead South Korea to regain its historical position as a top source of U.S. apparel imports because wage rates in South Korea are much higher than those in many other countries and correspondingly because much of the garment production that formerly took place in South Korea has been moved to other countries. It is also unlikely that the KORUS will lead South Korea to become a major export market for apparel fabrics produced in the United States because South Korea already has strong capability in producing such fabrics. The KORUS could have the effect, however, of leading U.S. textile producers to move at least some of their fabric production to South Korea to take advantage of the high expertise and productivity South Korean textile producers have developed in this now capital- and knowledge intensive industry sector. A shift of U.S. textile production to South Korea could also allow U.S. textile firms to take advantage of South Korea's proximity to China and other Asian countries with large amounts of apparel exports. In addition, the KORUS may lead South Korean textile producers to shift some of their production to the United States to take advantage of U.S. proximity to Caribbean and other low-wage countries in the Western Hemisphere for which apparel is a major export product and also to supply to the growing U.S. market in technical textiles with industrial applications. It will be interesting to see what unfolds in the textile and apparel industries of the United States and South Korea under the KORUS trade preferences.

### Research Limitations and Directions for Further Research

This study was conducted by examining the KORUS provisions and data on textile and apparel trade between the United States and South Korea, as well as drawing insights from related literature. Although this approach is valuable in understanding the KORUS and related issues regarding the textile and apparel industries of these two countries, the study has the limitation that it does not include empirical analysis of potential effects of the KORUS on these industries and their trade activity.

Valuable directions for future research include estimation of factors such as the structural similarity and elasticity of substitution of the textile and apparel products of the United States, South Korea, and even other countries, such as China, whose production and exports of textiles and apparel may be affected by the KORUS. The structural similarity and elasticity of substitution of the textile and apparel products could be in aggregate and in particular categories of the wide range of textile and apparel products. Analysis of the structural similarity of the products would help elucidate the overall magnitude of the competition between the producers of the products, whereas analysis of the elasticity of substitution of the products would elucidate the degree of price competition between the producers of the products. Estimated elasticity of substitution values could then be combined with data on the magnitudes of the tariff reductions on the various products under the KORUS to predict trade diversion effects of the KORUS in its signatories' trade with nonmember countries such as China. Free trade agreements typically have trade diversion effects. Trade diversion occurs when importers in a member country of a free trade agreement substitute imports from a lower-cost nonmember with imports from a higher-cost member that enjoys the preferential tariff rates in the agreement.

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