Comparative Advantage of the United States and South Korea in Manmade Textiles

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Abstract
This study focused on manmade textiles, including technologically advanced textiles, because this product category has been (a) a growing sector and (b) traditionally produced by companies in developed (e.g., the US) and newly developed (e.g., South Korea) countries.

Keywords
RCA, South Korea, USA, KORUS-FTA

Disciplines
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Comments
Comparative Advantage of the United States and South Korea in Manmade Textiles

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Recent advancements in technology have increased the market and supply of manmade textiles (Allwood et al., 2006). This market had an estimated worth of US$60 billion with 9.3 billion tons of production in 2000, and continues to increase (Stylios, 2002). Furthermore, the world’s consumption of manmade textiles increased by about 5,000 tons and US$20 billion over a ten year span from 1995 to 2005 (The Lenzing Group, 2010).

This study focused on manmade textiles, including technologically advanced textiles, because this product category has been (a) a growing sector and (b) traditionally produced by companies in developed (e.g., the US) and newly developed (e.g., South Korea) countries (Chang & Kilduff, 2002). These two countries were specifically chosen because, being major textile exporters, they are in the process of implementing the United States-South Korea Free Trade Agreement (KORUS FTA) (International Trade Administration, 2010). With the KORUS FTA in negotiation, it is crucial to understand potential impact for the countries’ textile industries (KOFTI, 2010).

Few studies have investigated international trade in manmade textiles (Bender & Li, 2002; Kilduff & Chang, 2006). Furthermore, no studies have analyzed the US’ and South Korean competitiveness in this sector of textile industry (Chien, 2010; Widodo, 2009). The purpose of this research was to determine comparative advantages of the US’ and South Korean manmade textile industries. It was the first attempt to analyze the US’ and South Korean manmade textile industries using the Revealed Comparative Advantage (RCA) framework, which evaluates competitiveness of a product from two countries (Balassa, 1965).

To determine comparative advantage of each industry, export patterns of manmade textiles from the US and South Korean were examined during a six-year period (2004-2009). The period was chosen because 2004 was the year before the MFA quotas were fully phased out and 2009 was the latest available trade data. The UN Comtrade database was used to obtain the data, which included the export values of all manmade textile commodities, a total of 27, from the US and South Korea from 2004 to 2009. The 27 commodities made up three manmade textile groups: (a) manmade filaments; (b) manmade staple fibers, and (c) impregnated, coated or laminated fabrics. All export data required to calculate the RCA index were collected: $RCA = (E_{ij} / E_{it}) / (E_{nj} / E_{nt})$, where $E_{ij}$ is export value of a country’s commodity; $E_{it}$ is that country’s total export of all products; $E_{nj}$ is the world’s export of the commodity; and $E_{nt}$ is the world’s total export of all products. The RCA index is interpreted as follows: if the index is greater than one, the country has a comparative advantage in that commodity. However, if the index is less than one, the country does not have a comparative advantage in that commodity (Balassa, 1965).

The results showed that South Korea had a consistent comparative advantage in each of the six years for 15 out of the 27 manmade textile commodities, while the US only had a consistent comparative advantage in seven. Furthermore, South Korea’s stable increase in all of the three manmade textile groups under the period of the study suggests that the country will
continue to advance its competitive position in the global marketplace after the ratification of KORUS FTA. At the same time, the US’ RCA indexes for the three manmade textile groups fluctuated for all six years and plummeted in 2008, suggesting that the industry’s competitive position is unstable and may further suffer its market position after ratification of the proposed trade agreement.

This research determined manmade textile industries’ niches in which the US and South Korea have comparative advantages in the global marketplace. The study outlined strategies so that each country’s manmade textile industries can maximize their benefits from the pending FTA. These findings might be helpful for the respective industries to focus their resources and develop strategies for sustaining and advancing production and marketing of these manmade textile commodities to the world. Furthermore, this study challenges the belief that developed countries automatically have an advantage over newly developed countries in high value-added textile production, which has important implications for textile industries in developing countries.

References