

Potential Impact of the Trans-Atlantic Trade and Investment Partnership (T-TIP) on Related Textile and Apparel Trade Flows

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Background: The Trans-Atlantic Trade and Investment Partnership (T-TIP) is a high-standard free trade agreement currently under negotiation between the United States and the European Union (Akhtar & Jones, 2013). In 2013, as much as 36.9% and 59.9% of the world's textile and apparel (T&A) exports went to T-TIP members respectively (WTO, 2014), suggesting implementation of the agreement may result in a significant change of existing T&A trade patterns around the world. To better understand the T&A-specific trade impact of T-TIP, this study intends to provide a quantitative analysis. While most existing studies have only evaluated the macroeconomic implications of T-TIP, findings of this study instead will augment our understanding of the textile-specific sectoral impact of the agreement and support related policymaking (Pelkmans, Lejour, Schrefler & Timini, 2014).

Theoretical framework: On one hand, explained by the stage of development theory for the T&A

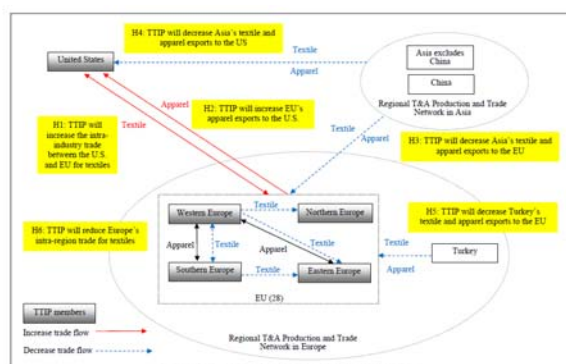


Figure 1. Potential impact of T-TIP on related T&A trade flows

industry, T-TIP members have formed specific intra-region and inter-region trade patterns as illustrated in figure 1 (Dickerson, 1999; Dicken, 2011; Scheffer, 2012). On the other hand, trade creation effect of T-TIP will encourage a T-TIP member to increase imports from other T-TIP members whereas trade diversion effect of the agreement will reduce trade flows between T-TIP members and non-T-TIP members (Krueger, 1999). Based on the above two factors, theoretical analysis proposes that: *H1*: T-TIP will increase the

intra-industry trade between the United States and EU for textiles. *H2*: T-TIP will increase EU's apparel exports to the United States. *H3*: T-TIP will reduce Asia's T&A exports to EU. *H4*: T-TIP will reduce Asia's T&A exports to the United States. *H5*: T-TIP will decrease Turkey's T&A exports to EU. *H6*: T-TIP will reduce EU's intra-region trade for textiles.

Method and data: The computable general equilibrium (CGE) model developed by the Global Trade Analysis Project (GTAP) was adopted in this study to empirically test the proposed hypotheses. Compared with a single-equation econometric model, the GTAP CGE model has the advantage of capturing the input-output relationship between the T&A industry and other sectors in the setting of an open global economy and generate more robust results (Hertel, 1999). Data of the analysis came from the latest GTAP8 database, which includes trade and production data of 57 sectors in 129 countries in 2007 as the base year (Narayanan & Walmsley, 2012). Because T-

TIP intends to both cut tariff rates on T&A products and reduce various non-tariff barriers (NTB) (Akhtar & Jones, 2013), the following four scenarios were simulated: *50% tariff reduction* and *100% tariff reduction* scenarios respectively assume that import tariff rates for T&A traded between T-TIP members were reduced by 50% from their applied rate in 2014 or 100% eliminated. *50% tariff+10%NTB* and *100% tariff +10%NTB* scenarios respectively assume that in addition to 50% or 100% tariff reduction, price of T&A exports from a T-TIP member to another T-TIP member were reduced by 10 percent as results of lowered non-tariff barriers.

Findings and discussions: As shown in Table 1: First, T-TIP will expand the intra-industry trade

Table 1 Volume Change of Textile and Apparel Trade Flows after T-TIP (Base year=2007)

Source of imports/scenarios	Unit: \$million			
	50% tariff reduction	100% tariff reduction	50%tariff +10% NTB	100%tariff +10% NTB
EU textile imports				
World	295.2	693.9	417.7	1793.4
EU	-59.6	-136.1	-804.2	-652.0
US	389.7	909.1	1891.3	2894.8
Asia	-20.1	-45.5	-426.8	-273.0
Turkey	-8.0	-18.3	-124.3	-92.6
EU apparel imports				
World	103.0	263.5	140.2	640.8
EU	-54.5	-133.3	-84.1	-370.3
Asia	-37.0	-92.1	-153.8	-281.2
Turkey	-8.9	-21.8	-26.8	-63.0
US textile imports				
World	425.6	962.4	552.1	2557.2
EU	989.2	2160.9	1011.8	6326.1
Asia	-379.0	-805.8	-307.5	-2534.7
US apparel imports				
World	460.5	1160.4	487.1	2715.4
EU	1039.0	2516.3	1047.3	6411.9
Asia	-422.7	-990.7	-407.5	-2700.8

between the United States and EU for textiles (*H1* is supported); however, it seems EU's textile exports will benefit more from T-TIP's trade creation effect than the U.S. side. Second, T-TIP will significantly expand EU's apparel exports to the United States (*H2* is supported). Interesting enough, most trade expansion will be enjoyed by Southern and Western European countries such as Italy, Germany and France which concentrate on high-end apparel production (Scheffer, 2012). Third, trade diversion effect will negatively affect traditional T&A suppliers to the T-TIP region, including Asia's T&A exports both to the US and EU markets and Turkey's T&A exports to the EU market (*H3*, *H4* and *H5* are supported). Fifth, although T-TIP will have a negative impact on EU's intra-region trade for T&A (*H6* is supported), the impact seems to be limited. Even in the worse scenario (i.e. *100%tariff +10%NTB*), T-TIP will only result in a 1.3% and 0.9% decrease of EU's intra-region trade for textiles and apparel respectively.

Implications and future research agenda: First, the results suggest that the US and EU T&A industries will benefit from T-TIP and enjoy additional market access opportunities created by the agreement. It will be interesting to further explore whether T-TIP will also result in job creation and manufacturing reshoring in the US and EU T&A sectors. Second, the results suggest that attention should be given to the details of non-tariff barrier removal under T-TIP because it may exert even larger impact on related T&A trade flows than tariff reduction. Third, the results suggest that T&A exports from non-T-TIP members will face stronger trade diversion effect of the agreement in the US market than in the EU market, although the specific reason can be further explored.

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