The Impact Analysis of TTIP on BRICs—based on dynamic GTAP model considering GVC

Topic:
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Within the global value chain (GVC), the intermediate inputs of the products in one country come from various countries around the world, the imported products consumed in domestic may also include the domestic intermediate inputs. Therefore, it is very important to reflect this GVC characteristic when Using GTAP (Global Trade Analysis Project) model to analyze the trade policy. Because of the lack of necessary data, the Armington assumption of trade linkage is implemented in two levels in the GTAP model: producers and consumers distinguish the domestic variety of a good from its imported variety without regard to the country of origin of the imported input; the sourcing of imported goods is placed at the border of an economy. In order to improve this common approach which simplifies the import decision at the border level, we introduce the WIOD（World Input-Output Database）with a micro-based determination of bilateral trade to place the sourcing of imports at the agent level. In this study, we use the improved dynamic GTAP model (we call it GTAP-GVC model) to assess the economy-wide impact of TTIP (Transatlantic Trade and Investment Partnership) on BRICs. In the simulation, we mainly do the work in two aspects. Firstly, we reduce both tariff and non-tariff barriers (NTBs) between US and EU. Because average tariff levels on both sides of the Atlantic are relatively low already, various non-tariff barriers or NTBs (often in the form of domestic regulations) on both sides of the Atlantic constitute important impediments to deepening transatlantic trade linkages. For quantification of NTBs, this study has adopted the equivalent tariff levels of NTBs from the research results of Ecorys (2009) to capture the impact of removing NTBs. Secondly, the simulations that are carried out also take into account two sets of possible spillover effects beyond bilateral liberalization. These are defined as follows. First, we have included direct spillover. It is based on the assumption that improved regulatory conditions negotiated between the EU and the US will also result in a limited fall in related trade costs for third countries exporting to the EU and US. A second indirect effect involving third countries is considered as well: the indirect spillover. It means to gauge the economic implications if third countries adopt some of the common standards agreed between the EU and the US.