Analyzing the trade effects of the Transatlantic Trade and Investment Partnership between the EU and the US: Do we need to care about agricultural domestic support?

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Abstract

The EU and the US belong to the major providers of agricultural domestic support. However, in recent studies analyzing the effect of the Transatlantic Trade and Investment Partnership a potential effect of agricultural domestic support is not taken into consideration. Using an extended version of the standard GTAP modeling framework that considers a detailed representation of EU and US domestic support payments and estimated ad-valorem equivalents of non-tariff barriers, we analyze the effects of the potential outcome of the TTIP agreements between the EU and the US considering the impact of agricultural domestic support policies on the potential outcome of the agreement. Our analysis reveals how country-specific agricultural policies can influence the results of bilateral trade agreements. We shed light on the costs and benefits of disciplining domestic support in the TTIP negotiations and contribute to the discussion whether the EU and US should consider further domestic support disciplines to foster trade between the EU and US and increase potential gains from TTIP and in addition fill a pioneering role in the multilateral negotiations.

Keywords: CGE modeling, agricultural policy, non-tariff barriers, free trade agreements, TTIP

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Introduction

In the current Trade and Investment Partnership (TTIP) negotiations between the European Union (EU) and the United States (US), the partners predominantly debate on the reduction of nontariff barriers (NTBs) and the elimination of tariffs. However, the EU and the US belong to the major providers of agricultural domestic support. This leads to the question, to which extent the outcome of the TTIP might be affected by the future development of country-specific agricultural policies. According to Josling and Tangermann (2014), it might be argued that including domestic support disciplines in FTA negotiations is of particular interest in this case. Domestic support provided to agricultural producers is trade distorting. Eliminating or reducing it affects domestic and world market prices and consequently production and trade patterns. Nevertheless, domestic support is not trade partner-specific and thus dealing with domestic support disciplines within Free Trade Agreement (FTA) negotiations is not a standard practice. Here, one can argue that the EU and the US are pioneers setting a new benchmark and encouraging other countries to follow within new multilateral negotiations. Otherwise, one can argue against that those two major players would reduce their power in future multilateral negotiations.

Recently, there is an increasing number of studies analyzing the effects of tariff elimination and NTB reductions within the TTIP using simulation models. However, none of the available studies takes the impact of agricultural domestic support and its evolution into consideration. Therefore, our objective is to analyze the effects of the potential outcome of the TTIP agreement between the EU and the US, considering not only tariffs and detailed NTBs in food and agriculture but also the potential impact of detailed agricultural domestic support policies. In doing so, we aim to investigate the following questions. What are the costs and benefits of disciplining domestic support in the TTIP negotiations? Would a reduction of domestic support foster trade between the EU and the US? Or would the trade facilitating effect on other countries eat up the potential positive effect on trade between the EU and US?

In contrast, what would be the effect of excluding restrictions on domestic support from the TTIP? A slight trend towards re-coupling of direct payments in the EU is already observable. Does this development affect the outcome of the TTIP? In addition, the US and the EU might reform their agricultural policies so that they might increase support to compensate potential losers of the TTIP or start to increasing support to sensitive sectors, potentially countering the bilateral trade objectives of the TTIP.

Methodology

The analysis conducted in this study builds on the GTAP modeling framework. The standard GTAP model represents all policy instruments as ad valorem tax equivalents that create wedges between the distorted and undistorted prices. Accordingly, the GTAP model mirrors agricultural policy instruments related to domestic support in the form of five price wedges that affect producers' transactions at agents' and market prices: output, intermediate inputs, land, capital, and labor. However, the standard GTAP framework does neither consider NTBs nor a detailed representation of country-specific agricultural policy instruments that accounts for different payment types and categories, and thus reflects production requirements that influence farm level output decisions. Therefore, we extend the standard GTAP model and database twofold.

First, we distinguish between two types of NTBs – resource-wasting or cost-incurring and rent-generating NTBs – and incorporate them into the GTAP model either as efficiency losses or as tariff equivalents (Andriamananjara et al., 2003). The two approaches rely on the assumption that NTBs limit trade and thus create an artificial scarcity that results in an increased import price. The division between the two types of NTBs is based on existing cost and rent shares for NTBs between the EU and the US (CEPR, 2013). We implement ad-valorem tariff equivalents (AVEs) of NTBs estimated by Engelbert et al. (2015) using a gravity-based approach. Gravity models have been used frequently to empirically analyze patterns of trade and the effects of trade agreements and barriers.

Second, based on Urban et al. (2014), we incorporate detailed EU and US domestic support payments into the GTAP modeling framework. This approach enables us to include detailed domestic support through subdividing the initial five price wedges into four different payment categories to account for product or non-product specific eligibility criteria and production requirements of different policy instruments. As a result, we obtain a detailed representation of the EU Common Agricultural Policy (CAP) and the US Farm Bill in the underlying value flows and corresponding price linkage equations through introducing additional policy instruments that account, in particular, for the depiction of their influence on farm level output decisions through creating production incentives. Thus, this approach facilitates the analysis of the potential effects of country specific agricultural policies on the outcome of the TTIP agreement.

Experiment design

We use version 9.1 of the GTAP database with the base year of 2011. This database is aggregated into 20 regions, accounting for major trading partners and other countries currently involved in FTAs with the EU and the US. We consider 31 sectors keeping the food and agricultural sectors as disaggregated as possible and additionally differentiating between several manufacturing and service sectors. We augment this database applying sophisticated procedures based on the Altertax utility, first using the AVE estimation results and second using OECD PSE tables for the EU and US in 2011 (OECD, 2015). This augmented database serves as starting point to conduct the following set of simulations.

1. Baseline 2020: Considering the most recent reforms of EU CAP and US Farm Bill; Assuming the conclusion of the TTIP (elimination of tariffs, reduction of NTBs)
2. Counterfactual simulations:
    a. Disciplines on domestic support:
        i. Abolishment of trade distorting support and further decoupling of payments
        ii. Total elimination of domestic support
    b. No disciplines on domestic support:
        i. Re-coupling of payments
        ii. Support of sensitive sectors and subsidies to compensate losers

Preliminary results

Preliminary results clearly show that reducing (extending) country-specific agricultural policies increase (decrease) the outcome of the TTIP. Thus, it is important to consider domestic support in TTIP analyses, even when it is not included in the negotiations.

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