

## **Transatlantic trade, intensive and extensive margin of trade, and non-tariff barriers to food trade**

**Language:** English

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### **Background:**

There is an ongoing trade negotiation between the EU and USA for a comprehensive trade agreement known as the Transatlantic Trade and Investment Partnership Agreement (T-TIP). The proposed trade agreement presents an opportunity to eliminate or reduce obvious trade barriers. The food sector in both sides of Atlantic is heavily subjected to various types of trade and non-tariff measures. Although, we are uncertain about the shape and coverage of a final T-TIP agreement, we are interested to see the possible impact of T-TIP on transatlantic food trade and measure the possible trade cost reductions under T-TIP based on past experience with regional trade agreements (RTAs) with respect to food trade. To look on the issue of transatlantic food trade, we estimate a gravity model of trade<sup>1</sup> based on Helpman, Melitz, and Rubinstein (2008) set-up and estimation procedure, which is a two-stage model, accounting for selection into positive trading pairs. This feature allows for the analysis of trade at extensive and intensive margins and accounts for zero trade flows. We then use the gravity estimates to gauge the trade cost reductions that we might expect under T-TIP.

### **Objectives:**

- 1- Evaluate the potential impact of T-TIP on the intensive and extensive margin of trade in different food subsectors.
- 2- Estimating the potential food trade cost reductions under T-TIP

### **Approach**

The estimation of gravity equation is based on Helpman, Melitz, and Rubinstein (2008) two-stage procedures, accounting for zero trade flows and firm heterogeneity. This first step is an estimation of a probit selection equation model where the probability of positive trade is defined. The results from this step are further included into the trade flow equation which will then be estimated using a nonlinear econometric method.

Lastly, we use a formula from Egger (2015) to convert the value of some coefficients estimated from gravity equation, into the trade cost reductions measures.

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<sup>1</sup> Head and Mayer (2014) provided an excellent review of gravity models. Anderson (1979); McCallum (1995); and Anderson and van Wincoop (2013) are the papers that you could consult to understand how the gravity model works.

**References:**

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