

A report summary from the Economic Research Service

November 2015



Find the full report at www.ers.usda. gov/publications/erreconomic-researchreport/err199

Estimating the Effects of Selected Sanitary and Phytosanitary Measures and Technical Barriers to Trade on U.S.-EU Agricultural Trade

Shawn Arita, Lorraine Mitchell, and Jayson Beckman

What Is the Issue?

The proposed Transatlantic Trade and Investment Partnership (T-TIP) is a trade and investment agreement under negotiation by the United States and the European Union (EU). Along with tariff reduction, the removal of non-tariff measures (NTM) has emerged as a key focus of negotiations. For agriculture, the most frequently cited policy barriers to trade are sanitary and phytosanitary (SPS) measures intended to address food safety and animal or plant health issues and technical barriers to trade (TBT) that set out requirements for a product, such as technical standards and labeling. Given that addressing NTMs is a key goal of trade negotiations, there is growing interest in quantifying the extent of protection embodied in these measures and the effects of their removal on trade.

What Did the Study Find?

The EU and U.S. SPS/TBT measures econometrically investigated in this study were found to be impediments to U.S.-EU agricultural trade. Across most measures examined, the ad valorem tariff equivalent (AVE) effects of these measures were estimated to be larger trade barriers than existing tariffs and tariff-rate quotas (TRQ) levied on the same products. The findings suggest that addressing these SPS/TBT measures has the potential to generate agricultural trade expansion between the two trading partners. Key findings from the econometric analysis follow:

- *Beef*: EU SPS restrictions, such as the ban on growth hormones, impede U.S. beef exports. The AVE effects of these measures were estimated to be equivalent to a 23- to 24-percent tariff. However, the gains from addressing these SPS restrictions may be restrained by the EU's current TRQ regime, which imposes high out-of-quota tariffs (70-percent AVE).
- *Pork*: EU restrictions on beta agonists, trichinae, and other measures were found to limit U.S. pork exports. The AVE effect of these measures was estimated to be 81 percent. The currently applied EU tariff rate is 25 percent.
- *Poultry*: The EU pathogen-reduction treatment restriction on poultry is a de facto ban on U.S. products. The estimated effect of the measure was found to be equivalent to a prohibitive 102-percent tariff. The currently applied EU tariff rate is 21 percent.
- *Corn and soy*: The EU's SPS/TBT measures on genetically engineered (GE) varieties of corn and soy were found to impede U.S. exports. While these commodity products enter the

ERS is a primary source of economic research and analysis from the U.S. Department of Agriculture, providing timely information on economic and policy issues related to agriculture, food, the environment, and rural America.

EU largely duty free, the AVE effects of these SPS/TBT measures were estimated to be 79 percent for corn and 17 percent for soy.

• *Fruits and vegetables*: The EU's maximum-residue limits of pesticide residues and other harmful substances were found to be impediments for U.S. exports of fruit and vegetable products. The AVE effects of EU requirements were estimated to be 35 percent for fruits and 53 percent for vegetables (the average currently applied EU tariff rates are 10 and 14 percent, respectively). The U.S. import approval process for new types of fruit and vegetable products was also found to impede EU fruit and vegetable exports, with estimated AVE effects of 45 and 37 percent (the current average U.S. tariff rates are 2 and 5 percent, respectively).

How Was the Study Conducted?

In contrast to typical broad-based approaches that provide generalized estimates of NTMs and do not distinguish among different types of measures, this study estimates specific NTMs. The analysis focuses on exports of commodities that face SPS/TBT measures that have been raised as significant concerns by U.S. and EU exporters. Individual gravity models were estimated for each of the concerns to measure the specific effect of NTMs. The approach takes advantage of recent theoretical and empirical advances in the literature to estimate appropriately specified econometric models.

The estimates are not intended to be exhaustive but to capture a sample of SPS/TBT concerns that have been raised in EU-U.S. trade discussions. Due to data and modelling limitations, not all SPS/TBT measures were evaluated. Furthermore, other trade-related measures, such as administrative and customs requirements, rules of origin, geographic indicators, and Government procurement, were not examined. The level of regulatory convergence or reform from a possible T-TIP agreement could include more (or fewer) NTMs than were examined in this study.