

Project of Doctoral Thesis

Impacts of Technical Regulations on Agricultural Trade – A Gravity Model Approach

Objective

The importance of technical barriers to trade as a possibility to influence trade flows of agricultural products has increased over the last decades. Indeed GATT and WTO were effective in reducing tariff trade barriers as result of previous trade rounds. But other aspects of trade impediments come to the fore which especially are relevant for trade in agricultural products. In spite of the increase in the relevance of technical regulations and their governance through multilateral agreements, their effects on international trade volumes are far away from being understood and their quantitative analysis remains difficult.

The first objective of this study is to systematize the regulatory goals of the various technical regulations for agricultural trade and derive their implementation.

In a second step the respective impact of technical regulations on agricultural trade is quantified via an econometric model based on gravity equations. Information is given about the trade restrictiveness of different groups of technical regulations in reference to the Sanitary and Phytosanitary Agreement which desires the minimization of negative trade effects when choosing instruments for enforcing an appropriate level of protection.

Theoretical background and methodology

A gravity model describes bilateral trade flows by a log-linear function of production and consumption and a somehow formulated trade cost factor which incorporates technical regulations. Most theory of gravity models depend on the assumption of differentiated products. Technical regulations transform homogenous agricultural goods into Armington-like differentiated goods as specific product and process characteristics of the product are accented. It is discussed whether a monopolistic competition model with increasing returns to scale is appropriate to describe the surrounding of agricultural trade markets. Formulating a gravity model the impact of technical regulations shall be quantified by estimating their coefficients.

Expected outcomes

A discussion will be conducted whether those technical barriers are used preferentially by public authorities for implementing regulatory goals which have a considerable trade restrictiveness effect and thus can be deemed to be an instrument for protecting domestic production.