Measuring the economic impact of the WTO Trade Facilitation Agreement in East Africa

Abstract:

The relationship between trade facilitation, trade flows, income growth and economic development is complex and challenging from an empirical point of view. Economic theory suggests a relatively simple chain of causality: economic development is enhanced through income growth; income growth is greater with more cross-border trade; and trade is increased through facilitation initiatives[1].

Trade facilitation refers to policies and measures aimed at easing trade costs by improving efficiency at each stage of the international trade chain. According to the WTO definition, trade facilitation is the "simplification of trade procedures", understood as the "activities, practices and formalities involved in collecting, presenting, communicating and processing data required for the movement of goods in international trade".[2]Since the launch of the World Trade Organization (WTO)'s negotiations on trade facilitation, empirical work has focused on quantifying each of the trade facilitation related measures. The positive relationship between trade and growth has come under scrutiny in recent years, but there is no or less evidence that increased cross-border trade reduces income growth.

This paper analyses the empirical relationship between selected WTO related trade facilitation measures, trade flows and economic development in the East African Community (EAC). It focuses on the trade in goods sector. First of all, we apply OCDE definition and set of indicators of trade facilitation[3] to selected EAC countries (Burundi, Rwanda, Uganda, Kenya and Tanzania), then we estimate the impact of generated trade costs and flows on the entire economy using a Computable General Equilibrium (CGE) model.

Several recent studies use CGE models to quantify the benefits of improved trade facilitation. In CGE models an improvement in trade facilitation can be modelled equivalent as a reduction in the costs of international trade or as an improvement in the productivity of the international transportation sector. Since this sector is already included in CGE model, the effect of improved trade facilitation will come from shocking the sector by an appropriate amount.

Twelve trade facilitation indicators (TFIs) have been constructed, corresponding to the main policy areas under negotiation at the WTO, with the aim to estimate the impact of addressing specific facilitation hurdles in the trade procedures of a given country. The relevance of the OECD's TFIs was first tested with a gravity equation[4], linking trade flows to economic attributes

[1] Wilson, S. J., Mann, L.C., Otsuki, T., H (2003), "Trade Facilitation and Economic Development: Measurement the impact", The World Bank.

[2] For the purposes of the Doha Round negotiations, discussions aim to "clarify and improve relevant aspects of Articles V, VIII and X of the GATT 1994 with a view to further expediting the movement, release and clearance of goods, including goods in transit"

[3] Moïsé, E., T. Orliac and P. Minor (2011), "Trade Facilitation Indicators: The Impact on Trade Costs", OECD Trade Policy Papers, No. 118, OECD Publishing. http://dx.doi.org/10.1787/5kg6nk654hmr-en

[4] Based on the most commonly used Anderson and Van Wincoop (2003) model.

and a series of variables controlling for bilateral costs, such as distance[5]. This is based on the premise that trade facilitation measures are supposed to increase bilateral trade flows.

The expected results are that enhanced port efficiency as well as improve customs reduce trade cost and have a large and positive effect on trade flows and GDP in East Africa.

[5] The results are quite stable for the classical variables of the gravity equation, which bear the expected signs and are statistically significant. The exception is the variable “colony”, which could be explained by the country coverage and the range of time used in the study.