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WTO OMC

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EXECUTIVE SUMMARY

WCP
SIDE EVENT

6th Global Review of Aid for Trade

Effects of Trade Facilitation on Sectoral Trade

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This contribution focuses on the analysis of the relationship between trade facilitation, transport costs and sectoral trade in developing countries. A gravity model is estimated using sectoral exports from 181 countries over the period 2004-2013. The model is augmented with maritime transport infrastructure and trade facilitation variables. In particular, the logistic performance index (LPI), time delays and number of bureaucratic procedures are used to proxy for maritime transport infrastructure and trade facilitation variables, respectively. The main findings show that time delays significantly decrease trade flows and that both, maritime infrastructure and institutional trade barriers (trade facilitation factors), are important factors influencing sectoral trade.

[1] This document draws upon an intermediary draft of a working paper that the authors contribute to the WTO Chair Programme and the side event organized in marge of the sixth Aid for Trade Global Review. Responsibility for opinions expressed in this document rests solely with the authors, and publication does not constitute an endorsement by the World Trade Organization of the opinions expressed here.

Use of gravity model with constant elasticity of substitution and product differentiation by place of origin

A gravity model is estimated using sectoral exports from 181 countries over the period 2004-2013. The dependent variable in the gravity model is exports between the country of origin and the country of destination. This variable expresses the amount in current dollars that importers have to pay for the products at free on board (fob) prices. Bilateral trade data from 1973 to 2013 for aggregated and disaggregated exports (1 digit level SITC) is from UN-COMTRADE. Number of days (documents) to import and export and over-land transport cost to import and export are from the World Bank's Doing Business (2017) database.

Data on income and population variables are drawn from the World Bank (World Development Indicators Database, 2017). Distances between capitals computed as great-circle distances using data on straight-line distances in kilometers, latitudes and longitudes, trade impeding or promoting factors such as being a former colony and sharing a common language or a common border are taken from the CEPII data base. An additional proxy for trade facilitation is aid for trade from the OECD Trade Facilitation statistics and reports the monetary value of the disbursements of official development aid dedicated to trade facilitation.

Empirical evidences show that trade time is a key barrier for developing countries, more statistically significant than bureaucratic procedures or natural trade barriers

Their econometric findings highlight that a better logistic performance is positively correlated with exports. However when they control for bilateral unobserved heterogeneity, the effect is largely reduced in size and least statistically significant.

Furthermore, the authors show that both the number of days and documents required to trade are in general negatively correlated to exports. In particular, a 10 percent decrease in the number of days needed to exports increases exports by almost 3.8 per cent.

An interesting lesson from their analyze indicates that the cost to move a container from the port to the final destination has also a significant influence on exports. Complementary specifications show that a better logistic performance is positively correlated with exports of machinery and transport equipment exports. Number of days to exports affect negatively the exports of raw materials and exports of textiles, apparel and clothing, leather, footwear, travel goods, etc. Number of documents for exports has a negative and significant impact on exports of agricultural and chemical products whereas the number of documents for imports impedes the exports of machinery and transport equipment. Their study finally shows that the cost to move a container from the port to the final destination has a significant negative influence on exports of textiles, apparel and clothing, leather, footwear, travel goods, etc.

Concluding remarks: both connectivity and trade facilitation stills mater as determinants of trade

This study provides empirical evidence that both connectivity and trade facilitation factors are considered as determinants of trade. While significant advances have been made in port infrastructure development to satisfy the continued increase in transportation demand, a growing mismatch between infrastructure provision and transportation demand growth can still be observed. Additionally, recent institutional trade conflicts among trading partners indicate the need of empirical research to investigate the effect of institutional trade barriers, or trade facilitation procedures in particular on developing countries.

The results indicate that trade time remains a significant trade barrier for developing countries compared to bureaucratic procedures for instance and that natural trade barriers, are in turn more important than institutional one.

They finally suggest that further research could focus on estimations for different types of countries according to their level of development, in order to provide a better understanding of the role played by trade facilitation factors in developing countries.