ZUGRAVU- SOILITA N. (CEMOTEV), 'TRADE IN ENVIRONMENTAL GOODS AND AIR POLLUTION: A MEDIATION ANALYSIS TO ESTIMATE TOTAL, DIRECT AND INDIRECT EFFECTS', ENVIRONMENTAL AND RESOURCE ECONOMICS, SEPTEMBER 2019

Author: Natalia Zugravu-Soilita (CEMOTEV)
Article: "Trade in Environmental Goods and Air Pollution: A Mediation Analysis to Estimate Total, Direct and Indirect Effects"
In: Environmental and Resource Economics

September 4, 2019
Abstract

Based on panel data covering 114 countries between 1996 and 2011, this study investigates the impact on pollution of trade in environmental goods (EGs). We check the validity of the implicit consequences assumed by the win–win scenario in the current trade-climate negotiations, arguing that market dynamics should guarantee that EGs’ liberalization is ‘automatically’ in the interest of all countries, regardless their market and institutional capacities. We show that trade in EGs alone fail to address environmental problems effectively. In particular, although we found efficiency gains from trade in EGs (in terms of CO2 and SO2 emissions per 1 US$ of GDP), and more recurrently for net exporters than for net importers, our results often failed to highlight environmental effectiveness (in terms of total CO2 and SO2 emissions). A general conclusion that emerges from our empirical results is that trade [in EGs] cannot effectively replace non-market-based solutions, when it comes to non-trade objectives. However, it seems to complement them efficiently. Our multiple-equation GMM estimations reveal specific direct, indirect and total effects on pollution depending on the countries’ net trade status, leading to several policy recommendations for an increased environmental effectiveness of trade in EGs.

Keywords

CO2 emissions, Environmental goods, Environmental goods agreement, Environmental policy, International trade, Net exporter, Net importer, Pollution, SO2 emissions

Article online

link.springer.com/article/10.1007%2Fs10640-019-00363-6