

Is Central and Eastern Europe a pollution haven within the EU? A MRIO-panel data approach

Topic: Thematic IO analysis: Energy and Environment

Author: Ana Serrano

Co-Authors: Rosa DUARTE

The enlargement of the EU towards Central and Eastern Europe started in 2004 and has represented a significant challenge for European political and economic agendas. Fifteen years later, Central and Eastern European countries have experienced a significant economic growth, mostly based upon industrial development and trade expansion, displaying a strong integration in EU global value chains. During this period, the new member states have also been notable recipients of foreign investment, even in a context of the global economic crisis.

In this paper, we aim to analyse if this process of economic and commercial integration has also triggered the externalisation of environmental pressures towards Central and Eastern Europe. Thus, our main objective is to test the existence of a pollution haven within Europe by evaluating the specialization of Central and Eastern European economies in “dirty” industries as a result of trade. To that aim, we will use multi-regional input-output (MRIO) tables from 1995 to 2011 that will allow us to quantify the environmental pressures embodied in intra-European trade, distinguishing between intermediate and final products. This approach is optimal to assess the existence of the pollution haven hypothesis (PHH) given the global fragmentation of supply chains and the importance of intermediate flows that embody large environmental pressures. As a second step, we will use a panel data model to evaluate econometrically the PHH within a trade gravity perspective.

The results of this study can offer a comprehensive vision on the environmental consequences of the integration of Central and Eastern countries in the EU. This is particularly relevant for the development of strategies and regulations that foster the co-operation within the EU towards sustainable economies and the protection of natural environments.