

Does Trade Openness Improve Environmental Quality?

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Abstract

The literature on trade openness, economic development, and the environment is largely inconclusive about the environmental consequences of trade. This study treats trade and income as endogenous and estimates the overall impact of trade openness on environmental quality using the instrumental variables technique. We find the impact is large in the long term, after the dynamic adjustment process, although it is small in the short term. Trade is found to benefit the environment in OECD countries. It has detrimental effects, however, on sulfur dioxide (SO₂) and carbon dioxide (CO₂) emissions in non-OECD countries, although it does lower biochemical oxygen demand (BOD) emissions in these countries. Finally, trade openness influences emissions through the environmental regulation effect and capital-labor effect. We find that the former effect is likely to be larger than the latter effect for all pollutants.

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