

## **Empirical Study of Pollution Haven Hypothesis for India**

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*The objective of this paper is to check whether India can be regarded as pollution haven and we try to answer this question using Input-Output technique. First of all analyzing the determinants of direction of trade, we have discussed the impact of trade regime on pollution level of developed and developing countries. Under proper assumptions, we have calculated the increase and decrease in CO<sub>2</sub>, SO<sub>2</sub> and NO<sub>x</sub> emissions induced by 1 billion rupees of additional exports and imports respectively. If pollution haven hypothesis is true, then India should loose, in terms of environment, due to this trade expansion. We find that India considerably gains from extra trade and gains have only increased over time, indicating that it has moved further away from being a pollution haven. Then we relax the assumptions and assess the effects accordingly. The outcome is robust to changes in assumptions.*

### **Introduction**

The present study is the extension of work originally done by Dietzenbacher and Mukhopadhyay, 2006. They checked for validity of pollution haven hypothesis for India based on 1991/92 and 1996/97 data, which we have extended by checking it for 2003/04. Based on our calculation we support the conclusion drawn by them that India can't be regarded as a pollution haven.

The fact that some of the goods consumed are produced in other countries (trading partner) leads to a level of independence between environmental and ecological effects of trade on the country. Assuming the local effects of pollutants, production of such goods affects *only* the exporting country and not the importing country. Given this scenario, every country gets an incentive to move away from producing relatively environmentally hazardous goods.

Wave of trade liberalization rose in 1990s, which implies the trade diversification. But its environmental impact was uncertain which could have been the friction for trade liberalization. This concern gave birth to the debate on the impact of trade on environment in the Kyoto and Montreal Protocols and in the discussions on the role of greenhouse gas emissions for global warming and

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