

Did International Trade Become Dirtier for Developing Countries? On the Composition Effect of International Trade on Environment

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Abstract

For the period between 1988 and 2009, we constructed the world panel dataset for the pollution emission embedded in international trade by applying the time-invariant common pollution intensity at industry level for all countries. The values of international trade data at six-digit commodities are mapped into four-digit industries and multiplied by corresponding industry pollution intensity coefficients. This dataset allows us to investigate whether the composition of international trade for a country changed toward pollution intensive industries during the last two decades. The empirical provides evidence that income level of countries are negatively related with export pollution intensity and also negatively related with import intensity after excluding outlier countries. Thus, the composition effect of international trade on environment is only consistent on export side with pollution haven hypothesis in which developing countries export more of dirty industries and import more of clean industries after trade liberalization. More importantly, despite the general trend, many developing countries still become exporters of cleaner industries.

Keywords: Composition effect; Environment; Industry; Pollution; Trade.

JEL Classification Codes: F18; O13; Q56.

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