

# Environmental Regulation, Trade and Environmental Outcomes

(PRELIMINARY PLEASE DO NOT CITE)\*

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## Abstract

In this paper, we built an environmental regulation index using big data techniques to address stringency of environmental laws and treaties. The index, based on regulatory-intensity variables specific to a number of environmental topics, is used to investigate the effect of environmental laws on pollution. Three pollutants are considered, namely, PM 2.5, SO<sub>2</sub> and NO<sub>2</sub>. A panel data model is estimated taking into account the determinants of environmental quality and trade. We also study the effect of environmental regulation into trade. The main results indicate that the intensity of environmental regulation has a decreasing effect on local pollution, this is the case for energy laws. Trade is affected by environmental regulation specially by laws about air and atmosphere and general environmental topics.

**Keywords:** Pollution, international trade, environmental regulation, legislation, treaties.

**JEL codes:** F18, C33, C36, Q53, Q56.

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