Environmental regulations, air pollution, and infant mortality in India: A reexamination^{†‡}

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ABSTRACT

This paper reexamines empirical evidence on the effectiveness of environmental regulations in India from a recent study by Greenstone and Hanna (GH, 2014). GH report that air pollution control policies in India were effective in improving air quality but had a modest and statistically insignificant effect on infant mortality. These somewhat counterintuitive findings are likely to stem from the limited availability of ground-based air pollution data used in GH and the absence of critical meteorological confounders. I leverage recent advances in satellite technology and GH's methodology to test the sensitivity of their findings to revised air pollution outcomes, an extended number of observations, and meteorological controls. Despite striking differences between the two datasets, reexamination using satellite-based data confirms the conclusions drawn from GH's data. The effects of the policies are, however, substantially weaker. The paper urges further research on the effectiveness of environmental regulations in developing countries and the use of satellite imagery in the examination of this important question.

Keywords: Air Pollution, Infant Mortality, Environmental Regulation, India **JEL Codes:** I12, J13, O13, Q53, Q58

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