Intergenerational Spillover effects of Bhopal Gas Disaster

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Abstract

In the urge to accelerate the growth process and to attract industries and technological innovations that could generate productive employment opportunities for the local population, many developing countries tolerate weak regulatory frameworks, springing either from weak regulations (environmental or labor standards) (Dean et al, 2009 ; Bocconi et al, 2008) or weak enforcement of existing regulations (Kanbur and Roconi, 2016). But the consequences of such laxed regulatory environment could prove to be detrimental, not only for the immediate actors like workers and customers of the firms but also for the society at large who may continue to face such consequences for generations to come.

This projects studies one of the world's worst industrial disasters- the Bhopal Gas Tragedy- that took place in 1984 in the capital city of Indian state of Madhya Pradesh. We use fourth wave of DHS (Demographic Health Survey) to look at the effects on educational and health outcomes for those who were young children, fetuses or not-yet-conceived at the time of the disaster to uncover the intergenerational spillovers from this industrial disaster. Spatial difference-in-difference is employed to compare the then-younger cohorts to the older cohorts who are living in Bhopal vis-a-vis outside Bhopal.

We find that those who were fetuses at the time of Bhopal gas Disaster tend to be approximately 13% less likely to have finished atleast primary schooling, 20% likely to have studied beyond Class 8 and 6.7% more likely to be suffering from cancer compared to people who were over 10 years old at the time of disaster. Our results are important for formulating regulatory frameworks concerning industrial safety standards since ignoring these adverse effects on *future generations* could result in assignment of undercompensated damages-liability.

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