

The Neighborhood Effect in Bureaucracy: The Case of Chinese Coal Mine Safety

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Abstract

In a political organization in which agents are signed in to the same yardstick competition, the performance of each agent depends not only on the effectiveness of hierarchical control, but also on horizontal neighborhood effects: how well an agent's geographic and political neighbors perform. In this paper, we study how the neighborhood effect within bureaucracy drives the performance with regard to coal mine safety in China using prefecture-city level data on coal mine deaths between 2001 and 2011. We find a strong but short term peer effect among cities. Within a province, the peer effect does not fade with the increase in the geographic distance among cities. The effect ceases to exist beyond the provincial border, however, even among the cities that are located geographically adjacent. The response to the peer effect is more acute when not-state-owned enterprises dominate coal productions, when the number of cities in a province is larger, and when a city is relatively behind with regard to the safety. A set of robustness checks and placebo tests suggest that the peer effect is not due to common trends or provincial-specific influences over all cities and sectors across the board.

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