The Pollution Moat: Strategic Emissions under The Clean Air Act

Christine Zhuowei Huang Amit Kumar Mayank Kumar*

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Abstract

Clean Air Act nonattainment costs, which are higher for entrants than incumbents, may induce incumbents to strategically increase pollution to deter entry and strengthen market power. Consistent with this, during the 1997 PM2.5 standards' nonattainment-determination window, firms initially near nonattainment threshold increased emissions relative to those slightly away. The increase was stronger at PM2.5-intensive and near-monitor plants, in concentrated markets, and in high industry-growth-opportunities counties. Mechanisms include cross-plant emission reallocation within multi-plant firms and within-plant shifts in emission media toward air, with aggregate emissions unchanged. Following nonattainment, plant openings decline, and local emissions correlate positively with firm profits and valuations.

JEL Classification: Q58, Q52, L51, L13

Keywords: Clean Air Act, Air Pollution, Firm Behavior, Entry Barriers, Market Power

*Christine Zhuowei Huang is at Leibniz Institute for Financial Research SAFE; email: huang@safe-frankfurt.de. Amit Kumar is at Singapore Management University; email: amitkumar@smu.edu.sg. Mayank Kumar is at Questrom School of Business, Boston University; email: mkumar2@bu.edu. All errors are our own.