

Environmental Regulation and Productivity: Evidence from Oil Refineries

Eli Berman, Linda T. M. Bui

[Author and Article Information](#)

The Review of Economics and Statistics (2001) 83 (3): 498–510.

<https://doi.org/10.1162/00346530152480144> Article history 

[Cite](#) [Permissions](#) [Share](#) 

Abstract

We examine the effect of air quality regulation on productivity in some of the most heavily regulated manufacturing plants in the United States, the oil refineries of the Los Angeles (South Coast) Air Basin. We use direct measures of local air pollution regulation to estimate their effects on abatement investment. Refineries not subject to these regulations are used as a comparison group. We study a period of sharply increased regulation between 1979 and 1992. Initial compliance with each regulation cost \$3 million per plant and a further \$5 million to comply with increased stringency. We construct measures of total factor productivity using Census of Manufacturers output and materials data that report physical quantities of inputs and outputs for the entire population of refineries. Despite high costs associated with the local regulations, productivity in the Los Angeles Air Basin refineries rose sharply between 1987 and 1992, which was a period of decreased refinery productivity in other regions. We conclude that abatement cost measures may grossly overstate the economic cost of environmental regulation as abatement can increase productivity.

This content is only available as a PDF.

© 2001 President and Fellows of Harvard College and the Massachusetts Institute of Technology

You do not currently have access to this content.

Sign in

Don't already have an account? [Register](#)

Client Account

Email address / Username

[Skip to main content](#)

Password

[Sign In](#)[Reset password](#)[Register](#)

Sign in via your Institution

Sign in via your Institution

 [Buy This Article](#)

Email Alerts

[Article Activity Alert](#)

[Latest Issue Alert](#)



[View Metrics](#)

[Latest](#)

[Most Read](#)

[Most Cited](#)

Learning Before Testing: A Selective Nonparametric Test for
Conditional Moment Restrictions

Health Insurance and Consumption Risk

Long Story Short: Omitted Variable Bias in Causal Machine
Learning

Willingness-To-Pay versus Administrative Hurdles:
Understanding Barriers to Social Insurance Enrollment in
Thailand

[Skip to Main Content](#)

Cited By

Related Articles

The Specimen Data Refinery: A Canonical Workflow Framework and FAIR Digital Object Approach to Speeding up Digital Mobilisation of Natural History Collections

Data Intelligence (April,2022)

Pass-Through of Own and Rival Cost Shocks: Evidence from the U.S. Fracking Boom

The Review of Economics and Statistics (November,2022)

Pollution Abatement Costs and Foreign Direct Investment Inflows to U.S. States: A Nonparametric Reassessment

The Review of Economics and Statistics (February,2007)

Pollution Abatement Costs and Foreign Direct Investment Inflows to U.S. States

The Review of Economics and Statistics (November,2002)

The Review of Economics and Statistics

Online ISSN: 1530-9142 Print ISSN: 0034-6535



MIT Press Direct

A product of The MIT Press

[Newsletter sign up](#)



[Skip to Main Content](#)

[About MIT Press Direct](#)

[Books](#)

[Journals](#)

[CogNet](#)

Information

[Accessibility at MIT](#)

[MIT Press Direct VPAT](#)

[For Authors](#)

[For Customers](#)

[For Librarians](#)

[Direct to Open](#)

[Open Access](#)

[Media Inquiries](#)

[Rights and Permissions](#)

[For Advertisers](#)

MIT Press

[About the MIT Press](#)

[The MIT Press Reader](#)

[MIT Press Blog](#)

[Seasonal Catalogs](#)

[MIT Press Home](#)

[Give to the MIT Press](#)

Contact Us

[FAQ](#)

[Direct Service Desk](#)

© 2026 The MIT Press

[Terms of Use](#) [Privacy Statement](#) [Crossref Member](#) [COUNTER Member](#)

The MIT Press colophon is registered in the U.S. Patent and Trademark Office