

Multi Pollutant Yardstick Schemes as Environmental Policy Tools

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Abstract

We consider environmental regulation of n risk-averse, multiple pollutant firms. We develop a “yardstick competition” scheme where the regulatory scheme depends on the difference between a firm’s “aggregate” performance and the average “aggregate” performance of the industry. Whether this instrument dominates Pigouvian taxation depends on the complete structure of the covariance matrix of the “common” random terms in measured pollution. Moreover, if the number of firms is large enough, the “yardstick scheme” is always superior to Pigouvian taxation.

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This analysis also provides new arguments in favor of strict liability rather than negligence liability as a regulatory tool.

Keywords: asymmetric information, environmental regulation, multitasking, yardstick competition

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