

The Impact of the European Carbon Market on Firm Productivity: Evidence from Italian Manufacturing Firms.*

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Abstract

The key policy adopted by the European Union to reduce greenhouse gas emissions is the Emission Trading System: a market for rights to emit. The introduction of this policy has raised concerns about possible detrimental effects on firms’ production through an increase in polluting costs, unless firms change inputs or increase their productivity. In this paper, we provide evidence of the causal impact of this European policy on firms total factor productivity. We combine structural estimation of firms’ production function and techniques for policy evaluation to estimate the effect of the EU ETS on Italian manufacturing firms. Our results show a positive effect of the policy on productivity with heterogeneous effects across sectors. Results also suggest that firms reacted to the policy not reducing their input or upgrading their capital but adjusting their production process.

Keywords: Emission trading; Environmental Policy; Manufacturing; Productivity.

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