Production over Protection: How Tax Incentives Reshape Firms' Investment and Emission.

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ABSTRACT

This paper investigates the unintended environmental consequences of non-environmental tax incentives by examining China's 2004 value-added tax (VAT) reform. The policy reduces the cost of fixed asset investment for firms, encouraging capital expansion. Using firm-level panel data from 2000 to 2006 and a difference-in-differences (DID) approach, we find that the reform increases firms' fixed asset ratio by 4.9% and sulfur dioxide (SO_2) emission intensity by 13.4%. While firms expand production capacity, they neglect environmental protection: abatement equipment intensity falls by 18.8%, and SO_2 removal efficiency declines by 8%. The negative environmental impact is more pronounced among financially constrained firms and in cities with higher levels of government intervention. We also find evidence that newly appointed mayors moderated pollution differently depending on the reform status of their cities. Robustness checks using propensity score matching (PSM) and triple-difference (DDD) models confirm our findings. This study contributes to the literature by revealing that tax incentives, even when unrelated to the environment, can adversely affect firms' environmental performance by shifting investment priorities.

Keywords: Non-environmental tax, Tax incentives, Investment priorities, Externalities, Pollution

JEL classifications: P35; H32; G31; G38

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