

Carbon Taxation and Firm Behavior in Emerging Economies: Evidence from South Africa

Daniel Overbeck
(National University of Singapore)

Faculty Seminar, July 06, 2026

Abstract:

This paper provides the first comprehensive evidence on how firms in an emerging economy respond to carbon taxation in the context of an early-phase policy, highlighting how firms adjust when incentives are modest but signals about future regulation are strong. We study the announcement and early implementation of South Africa's 2019 carbon tax using detailed administrative firm-level data from 2011-2021. Employing a matched difference-in-differences design and event-study models, we trace dynamic firm responses. Contrary to concerns that carbon taxes might hinder growth or employment, we find no negative effects on firm performance or jobs. Leveraging variation in firms' exposure to the tax through temporary tax-free allowances, we find that firms facing higher effective tax rates increased sales, employment, capital, and capital depreciation in anticipation of the policy, reflecting resolution of regulatory uncertainty and adjustments to mitigate stranded asset risks. While we detect no measurable reduction in emissions—likely due to anticipatory behavior—the results show that early-phase carbon pricing can shape firm behavior without harming economic outcomes, even in low- and middle-income settings.