

Strategic Interactions of Climate Policy and International Trade

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Abstract

Climate change is an international problem in several dimensions. Beside the irrelevance of the spatial origin of emissions for regional climate impacts, abatement policies have an international dimension as well. The rise in costs for domestic producers of energy intensive goods, induced by unilateral mitigation policies such as emission trading or carbon taxation, potentially endangers domestic competitiveness and might cause an increase in foreign emissions (the so-called 'carbon leakage' problem). A potential instrument to counteract leakage and level the playing field between domestic and foreign producers are border tax adjustments (BTA).

We examine in a general equilibrium framework the strategic interactions of climate and trade policies, if the two issues are unilaterally linked by one region. We set up a model with two sectors and two regions. Every region sets an optimal climate and trade policy from their point of view.

The model shows that including terms of trade effects from climate policies may ease the standard prisoners dilemma problem in mitigating greenhouse gases. We further expect that BTA is effective in combating the leakage problem but sets only minor incentives for a reduction in foreign emission intensity in production.

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