Has the impact of border carbon adjustments been underestimated?

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At the 21st United Nations Framework Convention on Climate Change Conference of the Parties in Paris, 188 countries pledged to reduce greenhouse gas (GHG) emissions. To meet these targets, some nations will price GHG emissions while others will use alternative measures. To protect the competitiveness of domestic industries, this situation may result in regions with carbon prices imposing border carbon adjustments (BCAs) when trading with regions without such prices. The economic and emissions impacts of BCAs have been evaluated in several studies, but this literature does not account for the fact that, although countries must meet national emissions targets, carbon prices typically only apply to selected sectors in an economy. This omitted characteristic is potentially important as BCAs lead to higher carbon prices that cause a reallocation of resources away from covered sectors and ultimately increase output and emissions in uncovered sectors (domestic leakage). Due to this leakage, higher carbon prices will be required to meet national emissions targets, which will increase BCAs rates and their impacts. Using a global economy-wide model of economic activity, energy production and trade, this paper analyzes the contribution of this feedback mechanism to the overall impact of BCAs and assesses the degree to which previous studies have underestimated the impact of BCAs.

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