

THE GLOBAL IMPACT OF A CARBON BORDER ADJUSTMENT MECHANISM: A QUANTITATIVE ASSESSMENT

Republished from BU Global Policy Development Center, March 11th, 2022,

<https://www.bu.edu/gdp/2022/03/11/the-global-impact-of-a-carbon-border-adjustment-mechanism-a-quantitative-assessment>

Combating climate change requires coordinated global efforts, yet much of the current climate policymaking is led by developed countries. A case in point is the European Union (EU)'s ambitious climate change mitigation package. To prevent carbon leakage, the EU adopted a resolution in 2021 to implement a Carbon Border Adjustment Mechanism (CBAM) as a part of the European Green New Deal. The CBAM will impose a levy on imported non-EU products that adjusts for the differences between the EU Emission Trading System (ETS) price and the carbon price paid in the producing countries. The CBAM will come into force in January 2026 after a three-year transition.

Carbon border tax, however, has been debated in many countries over the past decade, and remains highly controversial. While CBAMs have a global impact by design, the scale of its "spillover effects" on other countries is seldom studied. There are concerns that a unilateral EU CBAM will not only distort international trade, but also shift the burden of addressing climate change to developing countries.

A *new technical paper* by [He Xiaobei](#), Zhai Fan and [Ma Jun](#) for the [Task Force on Climate, Development and the International Monetary Fund](#) aims to contribute to the policy discussion by using a quantitative approach to assess the "spillover effects" of the CBAM and identify the vulnerable countries that are most likely to be impacted by such spillover effects.

The paper seeks to inform further research and policy discussions on this issue, including at the International Monetary Fund (IMF), on how to assist developing countries in responding to climate change and managing the impact of mitigation policies.

Key policy implications:

- Countries that rely on carbon-intensive exports to the EU will be disproportionately impacted by the CBAM. Welfare losses in developing countries like Ukraine, Egypt, Mozambique and Turkey range between \$1 billion to \$5 billion, which are significant relative to their gross domestic product (GDP).
 - Mozambique's economy would shrink by 2.5 percent due to decreased demand.
- The CBAM could worsen income inequality and welfare distribution between rich and poor economies.
 - At its broadest implementation, the CBAM could result in an annual welfare *gain* in developed countries of \$141 billion, while developing countries see an annual welfare *loss* of \$106 billion, compared to a baseline scenario.

- The IMF and other relevant international organizations can play a role in measuring and addressing the potential negative spillover effects of the CBAM and other climate policies with international implications by:
 - Assessing and monitoring the impact of CBAMs on balance of payment positions of vulnerable countries.
 - Building capacity for vulnerable countries. One of the major strengths of the IMF is its in-house analytic capacity. The IMF can provide valuable policy advice to the vulnerable member countries on how to analyze and mitigate spillover risks and improve policy responses.
 - Developing policy options from a perspective of global coordination. Most vulnerable countries are small economies with limited bargaining power in international policy negotiations. The IMF and other international organizations with mandates to promote global economic and financial stability should take initiative in exploring policy options to address the spillover effects of the CBAM.
- An “Equitable Decarbonization Fund” (EDF) funded by CBAM revenues could help developing countries transit toward low-carbon economies. The tax revenues, mostly from developing countries, would be largely returned to developing countries and could be used to boost green transitions.

[Read the Technical Paper](https://www.bu.edu/gdp/files/2022/03/TF-WP-001-FIN.pdf): <https://www.bu.edu/gdp/files/2022/03/TF-WP-001-FIN.pdf>.