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Trade Barriers in Policies that Regulate Greenhouse Gases

by Ronaldo Seroa da Motta,
Institute for Applied Economic Research (IPEA)¹

The Durban and Copenhagen Accords are not a treaty. Thus, the national commitments reported therein to achieve the 2°C trajectory, even if sufficient, will not be mandatory or binding under the United Nations Framework Convention on Climate Change (UNFCCC). In brief, there is no new global agreement in which national mitigation efforts are recognised by the UNFCCC and that points to an effective reduction of emissions in line with what science recommends as necessary.

Despite this global regulatory gap, Brazil and other countries are taking unilateral action. To meet national targets in this context, confrontations with competitive global economic forces may require the imposition of sanctions on imports from trading partners that do not undertake mitigation efforts. The main justification for adjustments of carbon content at the border (ACCBs) for national legislators in the midst of domestic regulation of greenhouse gases (GHGs) is to protect the competitiveness of the economy to equalise the costs of imports to domestic production. Such barriers are, for example, already taking shape in civil aviation policies within the European Union that force airlines operating in the region to offset their emissions via the Emissions Trading System (ETS).

This possibility creates opportunities for discriminatory trade practices that not only accomplish the environmental aims that justify them but also reduce the welfare of the nation that imposes them as well as of those that are sanctioned. Although this zero-sum game of trade protectionism is widely recognised by experts, as seen in other circumstances and contexts, this does not prevent these actions from being implemented.

World Trade Organization (WTO) rules regarding environment, as put by Tamiotti et al. (2009), face two major challenges to the implementation of border measures, namely to provide a clear justification for border measures— whether carbon leakage or losses of competitiveness— and to determine a ‘fair price’ to be applied on imported goods to bring their prices in line with domestic costs. Therefore, the application of these climate scope adjustments will certainly be a disputed object within the organisation and/or equivalent trade retaliation.

Seroa da Motta (2011) reviews the recent empirical literature that analyses the effects of trade barriers within a climate scope, with an emphasis on impacts on the Brazilian economy in absolute terms and relative to the country’s main trading partners.

The main conclusions of this literature² are:

- Besides being of little significance, leakages prevented by restrictions on imports are proportionally much lower than the impacts on trade.
- Only ACCBs with high tariffs on imports would induce a change in cooperation strategies of developing countries to sign an agreement they deemed unfavourable.
- The use of subsidies to CO₂-intensive sectors, even in the absence of trade sanctions, has generated protective effects, allowing for increased exports of these sectors from countries of the Organisation for Economic Co-operation and Development (OECD) with national GHG regulation.
- Studies that simulate the application of ACCB by rich countries indicate that the impacts on trade would be different among emerging economies. Except for agriculture, Brazil would experience lower losses because of lower CO₂ intensities, thus increasing its relative competitiveness against other emerging economies, particularly in industry. As such, trade barriers would not generate significant losses in domestic product.
- These differences between Brazil and other BRIC countries would be reduced, however, if the taxable basis becomes determined by the domestic production content of rich countries.
- In these studies, results indicate that sectoral effects on Brazilian exports are also distinct and dependent on the taxable basis. Export losses for agriculture and energy will be higher than for industry, including energy-intensive sectors.

However, the literature reviewed above is limited to the initiatives so far in discussion and generally considering a short time horizon and currently established costs. Moreover, they adopt global models with geographic and sectoral aggregation that influence parameters and their calibration. Therefore, it is important to deepen the analysis carried out so far with an evaluation disaggregated by sector and a sensitivity analysis of the demand and emission parameters.

Notes:

1. Senior Researcher at IPEA Department of Studies and Sectoral Policies of Innovation, Regulation and Infrastructure (Diset).
2. See Seroa da Motta (2011) for the reference to the papers reviewed as part of this literature.

References:

- Seroa da Motta, R. (2011). ‘Trade Barriers and Climate Policies’ in R. Seroa da Motta, J. Hargrave, G. Luedemann and M. B. S. Gutierrez (eds), *Climate Change in Brazil: Economic, Social and Regulatory Aspects*. Brasilia, IPEA, 358 pp. ISBN 978-85-7811-128-1.
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