[i+d] CINDES
Centro de Estudos de Integração e Desenvolvimento

brevíssimos cindes 10

Brazilian exports and trade barriers in the GHG-regulation policies*

Ronaldo Seroa da Motta**

June 2010

Despite the global regulatory vacuum in relation to the control of greenhouse gases (GHG) emissions, several countries have been adopting unilateral measures and policies. To make sure that the targets of these policies are met, they may require the imposition of sanctions on imports from trade partners that do not make similar mitigation efforts.

Thus, opportunities open up for discriminatory trade practices which, apart from not reaching the environmental goals that justify them, reduce significantly the well being of the nations that impose them and those that receive the sanctions. Despite the fact that this zero-sum game of trade protectionism is widely recognized by specialists, as it has been happening in other circumstances and contexts, this does not stop such actions from being implemented. Concerned with the possible loss of competitiveness and with the efficacy of climate related national efforts, developed countries tend to penalize the imports of products from countries which do not have similar commitments in emissions reduction. The justification for these measures is that the control of emissions in a country stimulates the shift of production or consumption to the country where pollution costs less. This possibility is known as leakage.

* This text is a summary of the results and conclusions selected from the corresponding unabridged article published as **Breves Cindes 32**, available at **www.cindesbrasil.org**

** from IPEA.

supported by

Direktion für Entwicklung und Zusammenarbeit DEZA
Direction du développement et de la coopération DDC
Swiss Agency for Development and Cooperation SDC
Agencia Suiza para el desarrollo y la cooperación COSUDE

This penalization would be a border adjustment mechanism to equalize costs of imported products with domestic products. This mechanism generally seeks to apply to the imports the same tool applied domestically. If the national regulation is carried out via a carbon motivated tariff, the carbon content adjustment at the border (CBA) would be an equivalent tariff. In the case of a regulation through licenses of tradeable emissions, such as cap and trade markets, it would also be required that the imports acquire necessary licenses.

The effects of these barriers can be evaluated through the economic, trade and environmental perspectives. In this sense the following points are pertinent:

- What is the magnitude of a CBA to stimulate adherence to the global efforts?
- How significant is the leakage to be avoided by the CBA?
- What are the CBA impacts on Brazilian exports?
- What are the differences in magnitude of the impact among affected countries in relation to Brazil?
- What are the asymmetries among the affected sectors, particularly in the Brazilian case?
- How do the forms of measuring the CO2 content for CBTA application affect these results?
- The main conclusions from a review of empirical studies about the effects of trade barriers associated to the domestic regulation of GHG in developed countries can be summarized as follows:
- Apart from being less significant, the leakages avoided with restrictions to imports are proportionally smaller than the impacts on foreign trade.
- Only high tariff CBAs on imports would induce the shift in the strategies of emerging countries towards an agreement that would not be favorable to them.
- The concession of subsidies to CO_2 intensive sectors, even in the absence of trade sanctions, has been generating distortive effects allowing for the increase of exports of these sectors from OECD countries which adopt national GHG regulation.
- The impacts on trade would be differentiated among the emerging economies. Apart from agriculture, Brazil would have fewer losses due to its lower CO_2 intensity, thus increasing its competitiveness, particularly in the industry sector. Thus, these trade barriers would not generate significant losses for the domestic product in Brazil.
- The differences between Brazil and the other BRICs are smaller when the taxable base is considered to be the content of the domestic production of developed countries.
- The sectoral effects on Brazilian exports are also distinct and dependant on the taxable base. The agricultural and energy losses will be higher than industry losses, including energy intensive sectors.
- When the taxable base is the imports' carbon content, the Brazilian industry increases its exports in up to 1.9% while energy intensive sectors lose 2.2%. The energy and agricultural sectors, however, present higher reductions, of 10.8 and 4.1%, respectively. In a CBA based on domestic content however, there is an aggregate loss of 2.5% in the industry with a reduction of 4.5% in the energy intensive sectors. The energy sector also increases its loss to 5.6%. In agriculture, on the other hand, losses are almost five times smaller, dropping to 2.3%.

The analysis above refers to initiatives now being discussed and takes into account an overall short term horizon and current costs. Thus, the first recommendation would be to keep a constant follow-up on the development of the national GHG regulation policies and the possible trade barriers.

The impacts on Brazilian exports may be minimized in the future, particularly in energy and agricultural sectors which face ambitious GHG emissions targets in the domestic environment. As for emissions generated in the industrial processes process, which remained outside of these national commitments, the manufacturing sectors will have to develop their own mechanisms to minimize possible effects of trade barriers. Lastly, it is important to note that it would be fitting to Brazil to discuss the necessity and convenience of considering trade sanctions in their unilateral GHG regulation policies both in the form of protection to the more affected sectors as in the form of preventive retaliation of external initiatives.