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Climate policies and effects on trade

Executive summary

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Concerning the growing international consensus regarding the necessity of global efforts towards combating global warming, the concern about the costs involved in the transition to a low-carbon economy – and its implications on the production structure – is an issue which national climate change policies face.

The reduction of emissions raises costs for companies due to the investments needed for technological innovations and the impact from adopted measures by governments aiming at reducing emissions (for instance, taxation). In the energy sector, because this is a input of widespread use, the rise in costs would have an impact on the economy as a whole and mainly on energy intensive sectors. For the same reason, reducing emissions in the transport sector would also have an impact on various activities. In the industry sector, those who have the highest emissions would be most heavily burdened, while industrial activities which emit less would tend to benefit most due to the change in relative prices.



Emissions reduction mechanisms

Policies and mechanisms to cut emissions are varied and can be divided into two categories: regulating measures (standards and regulations) and economic incentives (taxes/charges due to carbon emission, trade licenses – *cap and trade* scheme – and subsidies). In the *cap and trade* scheme a price is obtained to the carbon emitted corresponding to the carbon content for the energy used or the CO₂ emission generated in the production and/or consumption of goods.

In the *cap and trade* system governments establish a total emissions limit and distribute *free allowances* to eligible companies (according to the established emissions limit for a set period of time). Companies subject to the cap must have licenses that cover their emissions and if a company happens to assess that their emissions will be lower than the cap these licenses ‘in excess’ can be negotiated in the market. There is also the possibility that licenses may be auctioned by the government.

In several countries the proposal of adopting border mechanisms which are currently dubbed as *Border Carbon Adjustment* (BCA) mechanisms can be seen, as a way of dealing with concerns about the impact coming from these countries’ policies in regards to the competitiveness of their companies and with *carbon leakage*. In favor of this mechanism, the argument that it would encourage the main developing countries to commit more to policies of climate change mitigation is also being used.

Measures being discussed in the European Union and in the United States

The EU has started to implement policies to face climate change since January 2005, adopting an emissions controlling regime based on a *cap and trade* system, the EU Emission Trading Scheme (EU ETS). Under the EU ETS companies responsible for largest carbon dioxide emissions must annually monitor and report their emissions and are obliged, also annually, to give back an amount of emission permissions equivalent to their yearly emissions. Each yearly sequence is called a ‘Trading Period’. The first expired in December 2007 and the second period will continue until December 2012.

However conservative in regards to signing international commitments for the mitigation of climate change effects, the US has been implementing several internal measures to face global warming.

On 26th June 2009 the US House of Representatives approved a bill containing a comprehensive national program, comprised of measures of substantial carbon emissions in the US, *The American Clean Energy and Security Act of 2009* – ACES (also known as the Waxman-Markey Amendment. The objective is to make the transition to a clean energy matrix economy feasible, during the 2012-2050 period. The project proposes that the emissions levels in the global economy should be reduced annually from 2012, so as to be reduced in 20% by 2020 and 83% in 2050, in relation to 2005[†]. If passed, the Waxman-Markey Amendment would force all economic activities

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under its scope to adapt to its new terms: sectoral coverage for policies; domestic investment support measures; the *cap and trade* system; international emissions certificates; and border adjustment measures[‡]. The amendment was approved in the House of Representatives and handed to the Senate for voting, where it received a substitute, the Kerry-Boxer amendment, which does not clearly contemplate the adoption of border measures.

The efforts required from companies to adapt to these new settings foster the debate over the possible loss of competitiveness amongst companies involved in production or activities with high greenhouse gases emissions (GHG) in countries which will be committed to mitigation targets. The identification of the impact of policies on competitiveness is complex, also because the quantification of the rise in costs which fall upon the activities involves an array of conceptual and methodological aspects. Also, not all policies/mechanisms result in clear and readily calculable costs. How should, in the leveling argument from direct and indirect costs to be incurred by the production companies aiming at reducing global warming, efforts made by countries with energetic matrices and many times diverse production processes be quantified?

It is worth noting that although the concern with the loss of competitiveness has been more clearly voiced in the debates amongst developed countries, the rise in production due to the introduction of innovations and investments in new technologies and alterations in production processes affects all economies which adopt GHG reduction policies.

In other words, the debate about the application of restriction measures to trade can not only affect developing countries' exports but also become an instrument of application for themselves. These policies could even create a new form of widespread protectionism, impinging on the commerce of goods and investment flows. Whatever the results of multilateral negotiations about the climate, border protection measures on exportable products could be adopted, whether or not agreed upon, as well as measures to subsidize producers according to national adaptation investments. That is, the mitigation costs of the greenhouse effect could stimulate protectionism. That is, the costs of mitigating the greenhouse effect could even stimulate protectionism.

Implications for Brazilian exports and multilateral rules

A few measures are being considered to minimize the effects of national GHG reduction policies on the competitiveness of the industries by them affected in the economy. Three alternatives are worth mentioning: (i) the application of measures on imported products, comparing emissions related to the products of the exporting and importing countries; (ii) the application of measures according to the evaluation of mitigation efforts in emissions relating to a product's industry; and (iii) the application of measures on the importing of products originating from countries which do not carry out any efforts at adopting greenhouse gas reduction measures.

[†] Section 702, *Economy Wide Reduction Goals*, and Section 703, *Reduction Targets for Specified Sources*.

[‡] The amendment was passed in the House of Representatives and sent to the Senate for a voting, where it received another replacement, the Kerry-Boxer amendment, which clearly does not contemplate the adoption of measures at the borders.

Possible implications for Brazilian exports and the violation of multilateral rules

Initially, the comparison of emissions in products from exporting and importing countries does not seem to present a significant issue for Brazil, due to its energy matrix. However, if the measure is applied unilaterally, considering the sectoral effort, the Brazilian situation seems more vulnerable. That is so because Brazil has strong possibilities of implementing mitigation policies which are relevant to other areas apart from the industrial, relieving the pressure on the industrial sector so that sectoral mitigation efforts can be taken on more significantly. Finally, the evaluation of reduction policies in general would put the country on a favorable position, as reduced costs and limited investment efforts would allow Brazil to reach a high level of emissions reduction in areas such as forests and raising cattle.

Therefore, a thorough follow up of the implementation of Brazil's main trade partners policies' relating to the mitigation of global warming should be carried out, as well as an in-depth analysis of its effects on Brazilian exports so as to assess the interest in moving actions in the sphere of the WTO. In this way, it is worth keeping in mind that there are aspects of the policies in discussion in the US and EU which, albeit still unclear, can translate into violations to multilateral rules.

Thus, the following implications must be assessed:

- Whether the mandatory nature of the license purchases for imports is a violation of the principle of national treatment contained in the GATT articles, considering domestic producers would have free access to them;
- Whether the requirement and the limitation of the amount of licenses would not imply the imposition of quantitative restrictions;
- Whether the allocation of free licenses implies specific subsidies which allow for the application of compensation measures on other countries' imports; and
- Whether the concession of subsidies to companies aiming at reducing emissions does not nullify justifications for the application of border measures, as subsidies reduce investment costs and eliminate the problem of loss of competitiveness amongst domestic producers.