## **Trade Policy and the Environment**

Over the past two decades, there has been considerable debate about the connection between trade and environmental policy. A specific concern of the environmental lobby has been that with increased trade liberalization, governments will not be able to set appropriate environmental policies, due to the fact that they may be constrained in their use of complementary trade policies by WTO/GATT rules. A key implication drawn from this is that, without the ability to apply border measures such as tariffs, industries in countries that apply tough environmental standards will be hurt either through loss of market share or their total displacement to countries with weaker environmental standards, thereby creating *pollution havens*.

The on-going policy discussion on how to address climate change is clearly characterized by this same set of concerns. Developed countries, including the United States and the EU, are pursuing national efforts to reduce carbon emissions. In doing so, the expectation is that their energy-intensive industries will face increased costs of production. As a consequence, much of the proposed climate legislation also includes some type of border measure targeted at energy-intensive imports, popularly referred to as *carbon tariffs*. The argument for such border measures is twofold: first, there will be *carbon leakage*, i.e., production by domestic energy-intensive industries such as steel will simply be replaced by production in countries with less restrictive climate policies; second, there will be a reduction in *competitiveness* of firms in those industries most affected by domestic climate policies.

The inclusion of border adjustments in proposed climate legislation can be rationalized as follows: by utilizing import tariffs (export subsidies) on all energy-intensive traded goods, carbon leakage is reduced (competitiveness restored) by worsening the terms of trade for

countries that do not implement tough climate policy. While there is considerable debate among legal observers as to whether such border measures will be treated as trade-distorting under current WTO/GATT rules, the principle for their use is actually well-founded in the literature on *origin* vs. *destination-based* taxation systems. As long as a domestic tax is applied uniformly across all goods, and what are legally-termed *border tax adjustments* (BTAs), are set no higher than the domestic tax, there will be no effect on relative prices.

In the case of BTAs for domestic climate policy though, it is likely that they will only be applied to a small set of energy-intensive industries, including steel, aluminum and paper production, in which case relative prices could be affected. Notwithstanding this, the WTO/GATT has rules in place on the level at which BTAs can be set: GATT Article II: 2(a) allows members of the WTO to place on the imports of any good, a BTA equivalent to an internal tax on the like good. However, under GATT Article III: 2, the BTA cannot be applied in excess of that applied directly or indirectly to the like domestic good, i.e., they have to be neutral in terms of their impact on trade, their objective being to preserve competitive equality between domestic and imported goods. In addition, with respect to exported goods, WTO/GATT rules allow rebate of the domestic tax on the exported good, as long as the border adjustment does not exceed the level of the domestic tax, it is not regarded as an export subsidy under the GATT Subsidies Code. In other words, the key underlying principle of the WTO/GATT rules is that a border measure cannot be used to provide domestic firms with a competitive advantage, i.e., allowing BTAs for domestic climate policy would be motivated not by environmental concerns, but to ensure that competitive equality in international trade is preserved.

While the principle of border adjustments is recognized in the WTO/GATT rules, their application will likely be complex legally in the case of climate policy. Specifically it is unclear

whether a BTA will be allowed on imports of a final energy-intensive good such as steel, when domestic climate policy directly affects a non-traded input into steel production, such as electricity, which is not physically present in the final good. It could be argued that if a carbon tax on electricity production is designed to ensure that the price domestic consumers pay for an energy-intensive product such as steel reflects the social cost of producing steel, then a BTA on imported steel should be permitted. Importantly though, if a BTA is constrained by WTO/GATT rules to restoring competitive equality between domestically produced and imported steel, it should be based on the implied tax on domestic steel production. In other words, the appropriate benchmark for BTAs is the *carbon content* of domestic steel production, and not that of imports. Interestingly a precedent has already been set for this: BTAs levied on US imports of goods that contain ozone-depleting chemicals (CFCs) are set with regards to the CFC-content of US produced goods and not that of imports.

This discussion clearly highlights the tension between environmental lobbyists who regard trade policy as a means of pursuing environmental goals, and trade policy analysts who are concerned about the potential for protection through border measures for domestic environmental policy. This is borne out in empirical work: a recent World Bank study by Mattoo et al. (2009) evaluated the effects by 2020 of three border measures targeted at developing country imports, if OECD countries were to unilaterally reduce their 2005 level of carbon emissions by 17 percent in 2012. Their results show that a BTA based on the carbon content of developing country imports would have a significantly trade-distorting impact compared to a BTA based on the carbon content of domestic production. In addition, a BTA for both imports and exports based on the carbon content of domestic production would be the least trade-distorting outcome, a result that bears out the analysis of origin vs. destination based tax

systems. However, as Messerlin (2012) points out, the latter would likely be difficult and complex to implement, suggesting that no border measures might actually be the best policy if countries want to avoid costly trade disputes in applying their climate policies.

## References

Mattoo, A., Subramanian, A., van der Mensbrugghe, D, and He, J. 2009. "Reconciling Climate Change and Trade Policy." CGD Working Paper, 189, Washington, D.C.: Center for Global Development.

Messerlin, P.A. 2012. "Climate and Trade Policies: From Mutual Destruction to Mutual Support," *World Trade Review* 11(1): 53-80.