PUTTING EMISSION LIMITATION ON A SOLID FOUNDATION: WHY EFFECTIVE INTERNATIONAL COOPERATION NEEDS TO START WITH TRADE ISSUES

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Overview

Under the Kyoto Protocol, 37 developed countries and the European Union agreed to limit their greenhouse gas emissions over the five-year period 2008–2012. However, a post-2012 successor agreement with binding limits has attracted meagre participation thus far. In many countries, there has been strong opposition to such binding emissions limits, and especially to the carbon pricing (carbon taxes or emission trading) that will probably be needed to enforce them.

The basic dilemma is that any disparity in the regulation of emissions between countries, and especially in the price of carbon, will put the country with the stricter regulations at a competitive disadvantage. And unless every country in the world agrees to a common carbon pricing scheme – an unlikely outcome given the 'free-rider' advantages accruing to any country that stays out of the agreement – there will always be disparities. Indeed, a 'race to the bottom' for weaker emission regulation would seem to be the natural outcome, and it largely has been (Samuelson, 2012).

What is happening can be viewed as a classic market failure. Economic principles tell us that markets work when consumers pay the full cost (including environmental costs) of the products they consume, and any departure from this principle produces 'market failures' that give consumers an incentive to behave in ways that are not in society's best interests. Yet under the Kyoto Protocol, with its limits on the emissions from production in each country, the consumer has a perverse incentive to avoid paying the environmental costs they are imposing on society by purchasing products produced in countries with weak or no emission regulation. The outcome is that producers in countries with weak emission regulation stand to be rewarded in the marketplace, while those in countries with effective emission regulation stand to be penalized. At the same time, production can shift to countries where emissions remain uncontrolled ('leakage'), weakening the impacts of any kind of emission regulation.

This paper will argue that the key to effective global emission regulation is, in principle, quite simple: within a given country domestic and imported products should be subject to the same rules, especially regarding emission pricing. And we don't have to wait for a comprehensive global climate agreement to make this happen: each country should enforce compliance on imported products at their own borders. Once imported products have to play by the same rules as domestic products, there would be the beginnings of a global emissions control scheme that could really be effective. Domestic products would compete on a fair basis with imported products, consumers would have an incentive to buy low-emission products regardless of where they were produced, and avoidance of emission regulation by shifting the location of production ('leakage') would become impossible. With consumption-based emission limits, the competitive playing field would be levelled.

Methods

Such a proposal raises two obvious questions. The first is whether the 'border adjustments' required by such a scheme would be legal under international trade agreements. The second question is whether the emissions accounting required by border adjustments could be implemented in the real world fairly and at reasonable cost. This paper outlines a framework for how incentive-compatible emission limitation could work at the country level and finds that, under this framework, the answer to both questions is 'yes'

Results

The framework proposed in this paper could be adopted unilaterally by countries wishing to reduce the contribution of their consumption to global greenhouse gas emissions. However, international cooperation could avoid the risk of trade disputes, reduce administrative burdens, and foster wider adoption of emission limits. A first stage of international cooperation might be simply to lay out clear ground rules for the border adjustments

and emissions accounting required by this framework. Countries would then be free to unilaterally adopt emission control measures of their own choosing, provided they conformed to the ground rules, with minimal risk of trade disputes. A common standard for emissions accounting that would allow countries to recognize each other's emissions content declarations could reduce administrative burdens. It would also lay the foundation for a second stage, where countries could commit to specific limits on the emissions embedded in their consumption and trade emission credits internationally. A third and more difficult to achieve stage would be where a group of countries, or all countries, agreed to common emission limitation measures, such as a common emissions trading scheme or carbon tax. This agreement would allow goods to flow seamlessly across borders between the participating countries.

Conclusions

International cooperation on climate change, therefore, needs to start with an agreement on trade rules that would encourage countries to take unilateral action to limit the emissions embedded in what they consume. Multilateral and, eventually, global agreements, could then be built on this solid foundation of trade rules and unilateral action.

References

Samuelson, Ralph D. (2012), "Reconciling the Needs of Developing and Developed Countries in Climate Change Agreements: A Consumption-Based Approach", USAEE Working Paper No. 2054058, http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2054058.