Towards a more effective climate policy on international trade

Topic: (3.6) Environmental IO modeling (3)

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In a recent contribution, Kander et al. (2015) rightfully state that "[A]ctions that contribute to reduced global emissions should be credited, and actions that increase them should be penalized.― Neither production-based accounting (PBA) nor consumption-based accounting (CBA) satisfies this principle. Kander et al. (2015) point out that one of the weaknesses of CBA is that it fails to credit countries for cleaning up their export industries. They propose technology-adjusted CBA (TCBA) to remedy this weakness. However, we show that also TCBA may penalize a country to engage in trade that reduces global emissions (albeit to a lesser extent than does CBA). The reason for this is that Kander et al. (2015) do not take full account of the second weakness of CBA they mention. Namely, "that CBA fails to encourage certain kinds of specialization and trade that might contribute to a more carbon efficient use of global production resources.― We argue that emission accounting is one thing, but developing a scheme for assigning responsibilities (or credits and penalties) is another. Based on classical Ricardian trade theory, we develop a scheme for emission responsibility allotments (ERAs).