On the size of farsighted stable coalitions for international environmental agreements. The case of single country constraints

Marta Biancardi e Andrea Di Liddo

Quaderno n. 15/2006

Authors only are responsible for the content of this preprint.
On the size of farsighted stable coalitions for international environmental agreements

The case of single country constraints

Marta Biancardi, Andrea Di Liddo
Department of Economics, Mathematics and Statistics
University of Foggia
e-mail: m.biancardi@unifg.it, a.diliddo@unifg.it

Abstract

The concept of farsightedness (Chwe (1994)) has been used in literature to investigate the stability of international environmental agreements (IEA). In a companion paper (Biancardi and Di Liddo (2006)) farsighted stable coalitions are characterized with respect to the ratio between the abatement costs and the environmental ones given by the remaining pollutants. In that paper, following de Zeeuw (2005), every country is allowed to abate any portion of the whole amount of emissions, regardless of their location. This does not seem always reasonable (e.g. cars emissions). In this paper we provide a stability analysis of IEA assuming that every country can abate only a fraction of the emissions produced by itself.

Keywords: International Environmental Agreements. Stable coalitions. Farsightedness.