

Overlapping Coalitions, Bargaining and Networks

Messan Agbaglah

and

Lars Ehlers

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Abstract

In this paper, we propose an extension of the theory of coalition formation to the overlapping case: the case where different coalitions in a coalition structure can overlap. We show that in real life, there is a wide area of coalition formation where coalitions overlap, but the existing theory fails to take this fact into account. We provide an extensive form bargaining game which allows the formation of overlapping coalitions. We show the existence of stationary subgame perfect equilibrium with mild degree of mixing. We propose an algorithm to compute this equilibrium in the symmetric case. As an application, we establish a formal link with the formation of networks.