Axiomatizations of the Values for TU Games Using the Balanced Cycle Contributions Property

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January, 2009

Abstract

Axiomatizations of the Shapley and egalitarian values are presented. The key axiom is the balanced cycle contributions property, which requires that, for any order of all players, the sum of the claims from each player against his predecessor is balanced with the sum of the claims from each player against his successor. Not only the Shapley value but also other values for TU games satisfy the property, and hence, it is a milder requirement than the balanced contributions property introduced by Myerson (1980; Int. J. Game Theory 9, 169-182).

JEL classification: C71, D74

Keywords: axiomatization; balanced cycle contributions property; Shapley value; egalitarian value