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Self-interest and equity concerns: a behavioural allocation rule for operational problems.
(English) Zbl 1403.91181

Summary: In many economic situations, individuals with different bargaining power must agree on how to divide a given resource. For instance, in the dictator game the proposer has all the bargaining power. In spite of it, the majority of controlled experiments show that she shares an important amount of the resource with the receiver. In the present paper I consider how behavioural and psychological internal conflicting aspects, such as self-interest and equity concerns, determine the split of the resource. The individual allocation proposals are aggregated in terms of altruism and value for the resource under dispute to obtain a single allocation. The resulting allocation rule is generalized to the $n$-individuals case through efficiency and consistency. Finally, I show that it satisfies a set of desirable properties. The obtained results are of practical interest for a number of situations, such as river sharing problems, sequential allocation and rationing problems.

MSC:
91B26 Auctions, bargaining, bidding and selling, and other market models
91B32 Resource and cost allocation (including fair division, apportionment, etc.)

Keywords:
behavioural operational research; sharing rules; altruism; equity concerns; self-interest,

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References:
Zbl 1346.91193

Camerer, C., Behavioral game theory: experiments in strategic interaction, (2003), Princeton University Press - Zbl 1019.91001


Dana, J.; Cain, D. M.; Dawes, R. M., What you don’t know won’t hurt me: costly (but quiet) exit in dictator games, Organizational Behavior and Human Decision Processes, 100, 2, 193-201, (2006)


Edgeworth, F. Y., Mathematical psychics: An essay on the application of mathematics to the moral sciences, (1881), Kegan Paul London - Zbl 0005.17402


Engel, C., Dictator games: A meta study, Experimental Economics, 14, 4, 583-610, (2011)


Kilgour, D. M.; Dinar, A., Flexible water sharing within an international river basin, Environmental and Resource Economics, 18, 1, 43-60, (2001)


Luhan, W. J.; Kocher, M. G.; Sutter, M., Group polarization in the team dictator game reconsidered, Experimental Economics, 12, 1, 26-41, (2009) - Zbl 1170.91326


Osório, A., A sequential allocation problem: the asymptotic distribution of resources, Group Decision and Negotiation, (2017)


Young, H. P., On dividing an amount according to individual claims or liabilities, Mathematics of Operations Research, 12, 3, 398-414, (1987) · Zbl 0629.90003

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