Between Anchors and Aspirations: A New Family of Bargaining Solutions

Abstract :  Most cooperative bargaining models explicitly or implicitly assume that two major factors influence the negotiated settlements: anchors and aspirations. Accordingly, they employ anchor points such as the disagreement point or the reference point and aspiration points such as the ideal (or utopia) point or the tempered aspirations point. Nevertheless, the choice of a particular salient point over an alternative is usually left unexplained.

We introduce two parameters into bargaining problems with a reference point. The first parameter can be interpreted as the power (or the salience) of the reference point in determining the anchor, whereas the second parameter can be interpreted as its power in shaping agents’ aspirations. Using these parameters, we obtain a new family of bargaining solutions with Kalai-Smorodinsky (Kalai and Smorodinsky, 1975), Gupta-Livne (Gupta and Livne, 1988), tempered aspirations (Balakrishnan, Gomez, and Vohra, 2011), and local Kalai-Smorodinsky (Gupta and Livne, 1989) solutions as special cases.

We offer multiple characterizations for both the individual members of this family and the whole family in bilateral bargaining problems. Finally, some topics of interest such as efficiency ranking of solutions, strategic foundation, bargaining experiments, etc. are discussed in relation to our model and future venues of research are presented.