Integral representations of the cooperative game with fuzzy coalitions

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In this paper, the cooperative games with fuzzy coalitions were discussed. Several integral representations which described the fuzzy character function of the cooperative game were given, and the important solution –- the Shapley function was also investigated. For the cooperative game where the rate of participation of every player in a coalition is allowed to range within interval [0,1], the multi-linear extension form and the Choquet integral representation were proposed. The Choquet integral representation can be regarded as a general form of cooperative game with fuzzy coalitions. The explicit formulas and some properties of fuzzy characteristic function which was determined by coalition structure were discussed in detail.

Resale Bargaining, Upfront Payments and the Countervailing Power Hypothesis

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We assess the competitive effect of upfront payments such as slotting allowances in a situation where a manufacturer faces a polarized retail sector which consists of a dominant retailer and a competitive fringe of retailers such as Chen (2003). We show that the vertically integrated profits can realize in equilibrium where upfront payments play a crucial commitment role in eliminating the vertical and horizontal externalities. Exclusion of fringe retailers may occur if slotting allowances are prohibited. But the gains are neither profits extracted from the manufacturer nor passed onto the consumers. The paper offers a theoretical basis for Stigler's criticism (Stigler, 1954) on the concept of “Countervailing Power” proposed by Galbraith (1952).