

Multi-Leader-Follower game approach for a two period game

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Abstract. A multi-leader-follower game (MLFG) corresponds to a combination of a bilevel game with a Nash equilibrium problem. The two classical types of this game are single-leader-multi-follower game (SLMF) and multi-leader-single-follower game (MLSF). We address a situation of a new player joining an existing generalized Nash equilibrium problem (GNEP) between n players and who wants to decide about the kind of the interaction he wants to have with those n players : SLMF, MLSF or GNEP. In this article, we introduce a concept of decision making allowing him to maximize his payoff without solving the problem. This work is an extension of the symmetric duopoly game proposed by B. Stengel in [1].

Références

- [1] Bernhard von Stengel. Follower payoffs in symmetric duopoly games. *Games Econom. Behav.*, 69(2) :512–516, 2010.