

NONSTATIONARY EQUILIBRIA IN A CLASS OF DYNAMIC GAMES WITH HETEROGENEOUS  
DISCOUNTING

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The study of dynamic games with heterogeneous discount factors has remained a relatively unexplored research area which involves several technical challenges. Recent contributions to the literature have found significant differences with the case of symmetric discounting. This paper introduces nonstationary strategies in a class of common property games, also known as dynamic resource games. We show that there exists a full-commitment equilibrium which tends to favor impatient players at the early stages of the game, but more patient players toward the late stages and in the long-run. This equilibrium is Pareto optimal. We also characterize Markov-perfect equilibria in nonstationary strategies and analyze their stability properties.