
Markov perfect equilibria in OLG models with altruism with paternalistic and nonpaternalistic features.

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Abstract In this paper we consider a dynamic consumption in an altruistic overlapping generations (OLG for short) economy. For simplicity we assume there is no population growth and we normalize the population for unity. In OLG models a dynamic inconsistency occurs. A dynamic inconsistency means that the preference changes over time. This property was considered by Strotz (1956) and further developed by Phelps and Pollak (1968) or Peleg and Yaari (1973). In this model each generation has a capital inherited from the previous generation, and has to decide on the consumption level of this capital, and the remaining part is an investment for future generations. Each generation cares about the future generations which is reflected in its overall utility as an altruism. An altruism has paternalistic or nonpaternalistic features. The paternalistic altruism means that an overall utility does depend on the consumption of some or all future generations. In turn the nonpaternalistic altruism means that the overall utility does depend on the overall utilities of some or all future generations. The central issue in OLG models is to find a Markov Perfect Equilibrium (MPE for short). MPE basically means a consumption program in which no generation has an incentive to deviate from it whenever all other generations keep this program. In other words this is a secure program which is maintained period by period. The existence of MPE has however a positive answer only in special cases. Mathematically MPE is a fixed point of best response mapping on an appropriately defined function space. The set of all possible endowments is usually an interval in the real line. Using standard Schauder -Tychonoff or more general Kakutani-Fan-Glikhsberg Fixed Point Theorem many authors verify an existence of MPE in some compact sets.