Adib Bagh* (abagh@ucdavis.edu), Gatton school of business, Lexington, KY 40502. Existence of Nash Equilibrium in Open-Loop Dynamic Games.

We establish the existence of Nash equilibrium in a large class of open-loop dynamic games. We illustrate why Standard fixed point arguments usually fail for such game. We then show that such games are better reply secure, and therefore by a theorem by P. Reny, have a Nash equilibrium. (Received January 21, 2010)