Alternative Objectives of Oligopoly: Aggregate Game Approach

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Abstract

This paper provides weaker conditions to ensure the existence, uniqueness and stability of a Cournot-Nash equilibrium in an n-firm Cournot oligopoly model in which each firm's objective is to maximize the weighted average of profit and another objective such revenue, market share, per-worker profit and so on. The novel of this paper is that by employing a share function approach suggested by Cornes and Hartley (2005a, 2007, 2010) the conditions for the existence, uniqueness and stability of a Cournot-Nash equilibrium we found are simpler, substantially weaker, and naturally satisfied by several models that do not satisfy Hahn's conditions.

Keywords: Aggregate Game, Oligopoly, Hahn's Condition, Non-profit Maximization, Share Function

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