Oligopoly with Hyperbolic Demand and Capital Accumulation

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Abstract
A dynamic approach is proposed for the analysis of the Cournot oligopoly game with hyperbolic demand, showing that the adoption of capital accumulation dynamics either 'a la Solow-Swan or 'a la Ramsey eliminate the indeterminacy problem characterising the static model when marginal costs are nil. It is proved that the steady state equilibria produced by both models are stable in the saddle point sense. Finally, it is also shown that the solutions of the corresponding feedback problems share analogous properties, although they cannot be fully characterised from an analytical standpoint.