An Existence Theorem for Cournot-Walras Equilibria in a Monopolistically Competitive Economy^{*}

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Abstract

We establish an existence theorem for the Cournot-Walras equilibria in the model which consists of a representative consumer and *n*-monopolistically competitive firms. Instead of the traditional approach which depends on Kakutani's fixed point theorem, we employ the theory of the relationship between games with monotone best responses and potential games. We show that, under some conditions on a utility function and production technologies, the profit maximization game is the (pseudo) best reply potential game and hence, the existence of the equilibria is proved independently of the well known convexvalued assumption on best responses. The key property is the separability of the utility function. We exclude neither cost-diminishing technologies nor the existence of fixed costs. In addition, in our framework, the rationality of each monopolistically competitive firm can be alleviated in the sense that it can figure out the inverse demand curve from less information than is required in existing studies.

JEL Classification Numbers: C62, D43, D51.

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