Perfect Competition in Differential Information Economies[*]

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Abstract

The idea of perfect competition for an economy with differential information is formalized via an idiosyncratic signal process in which the private signals of almost every individual agent can influence only a negligible group of agents, and the individual agents' relevant signals are essentially pairwise independent conditioned on the true states of nature. Thus, there is no incentive for an individual agent to manipulate her private information. The existence of incentive compatible, ex post Walrasian allocations is shown for such a perfectly competitive differential information economy with or without "common values". Consequently, the conflict between incentive compatibility and Pareto efficiency is resolved exactly, and its asymptotic version is derived for a sequence of large, but finite private information economies.

Keywords: Asymmetric information, perfect competition, Pareto efficiency, Walrasian allocation, incentive compatibility, negligible private information.