Dynamic Entry and Exit with Uncertain Cost Positions

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Abstract

We study dynamics of entry and exit based on firms' learning about their relative cost positions. Each firm receives private information about its marginal cost of production, thereby facing ex ante uncertainty about its cost position. The (inelastic) market demand is supposed to accommodate only a fraction of firms to operate, and thus firms in the lower cost positions are viable in the long run. Some firms in the market will exit if excessive entry (or overshooting) occurs. We derive a symmetric perfect Bayesian equilibrium, and find the following features, which are consistent with empirical observations: (i) entry occurs gradually with lower cost firms entering earlier than higher cost firms, (ii) exiting firms are among the ones that lately entered (indeed in the last period). Moreover, equilibrium overshooting probability is shown to be always positive and decreasing over time.

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