

# Dynamic Spatial Competition Between Multi-Store Firms

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## Abstract

We propose a dynamic model of an oligopoly industry characterized by spatial competition between multi-store firms. Firms compete in prices and decide where to open or close stores depending on demand conditions and the number of competitors at different locations, and on location-specific private-information shocks. We provide an algorithm to compute Markov Perfect Equilibria (MPE) in our model. We conduct several numerical experiments to study how the propensity of multi-store retailers to spatial preemptive behavior depends on the magnitude of entry costs, exit value and transportation costs.

**Keywords:** Spatial competition; Market dynamics; Sunk costs; Spatial preemptive behavior.

**JEL classifications:** C73, L13, L81, R10, R30.

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