Spatial Competition in the French Supermarket Industry

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Abstract

This paper develops a structural model of spatial competition to analyze the competition intensity among large grocery stores. The model accounts for the effects of market geography on prices by relaxing the hypothesis that retail chains set uniform prices so that store prices depend on local market structure. Using demand parameter estimates, we recover stores’ price-cost margin under alternative pricing strategies and determine the best pricing model by applying non-nested tests. The model is estimated for a French metropolitan area and uses a cross-sectional household survey containing detailed information on stores visited for the main food product categories. The results point out that stores set their prices without ownership consideration and exert, to a large extent, a significant local monopoly power even more important that their surrounding environment is weakly competitive. We then perform counterfactual policy experiments to simulate the entry of new competitors and quantify the expected benefits on consumer welfare and price level.

Keywords: Spatial competition, Structural model, Discrete choice model, Differentiated products, Supermarket industry

JEL Classification: C35, L13, L81