

Entry, Competition and Productivity in Retail

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Productivity Dynamics and the Role of “Big-Box” Entrants in Retailing

Entry of large (“big-box”) stores along with a drastic fall in the total number of stores is a striking trend in retail markets. We use a dynamic structural model to estimate retail productivity in a local market setting. In particular, we provide a general strategy of how to measure the causal effect of entry of large stores on productivity separate from demand. Using detailed data on all retail food stores in Sweden, we find that large entrants force low productivity stores to exit and surviving stores to increase their productivity. Productivity increases most among incumbents in the bottom part of the productivity distribution, and then declines with the productivity level of incumbents. When controlling for prices, the impact of large entrants on productivity increases substantially. Our findings suggest that large entrants play a crucial role for driving productivity growth.

A Dynamic Analysis of Retail Productivity

The retail sector has dramatically changed due to the adoption of information technology and the trend towards larger but fewer stores. In this paper, we use recently developed methods to decompose aggregate productivity growth in retail, i.e., we quantify the relative importance of entrants, exits, and incumbents. To estimate productivity, we use a dynamic structural model controlling for unobserved prices, subsector, and local market characteristics. Using data on all retail firms in Sweden and a dynamic decomposition framework, we find that incumbents and exit of low productive firms play an important role for retail productivity growth.

Entry and Spatial Differentiation in Retail Markets

This paper investigates spatial competition between heterogenous retail food stores using a static entry model with endogenous location choices and flexible competitive effects across store types. The model is applied to data on retail food stores in Sweden and highlights strategic interaction between traditional stores and so-called hard discounters, i.e., small stores with a core focus on low prices and limited product assortment. The results show high returns to spatial differentiation. Competition between stores of the same type is strong for both discounters and traditional stores, but declines relatively fast with distance. Discounters reduce profits of traditional stores located nearby. The reverse effect is smaller but more persistent as distance increases. Because entry is regulated and hard discount firms have expanded across many European countries, the findings link directly to competition policy.

Store Dynamics, Differentiation and Determinants of Market Structure

Substantial entry and exit and a trend toward larger but fewer stores constitute a major structural change in retail markets in the last few decades. To study the determinants of market structure in retail, this paper uses a dynamic model of entry and exit. Using data on all retail food stores in Sweden, we estimate entry cost of potential entrants and sell-off values for exit for small and large stores. We find empirical evidence of type competition. An additional large store in the market decreases the profits of large stores about seven percentage points more than for small stores. For small stores, the average entry cost is about two times larger than the sell-off value of exit. Small stores are negatively affected by more efficient incumbents, whereas large stores incur higher entry costs due to other factors such as higher rent or cost of buildings.

Keywords: Imperfect competition, dynamic structural model, retail markets, productivity, spatial differentiation, entry, exit, sunk costs.

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