

The Relation between Inventory Investment and Price Dynamics in a Distributive Firm

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Abstract

In this paper, we examine the role of inventory in the price-setting behavior of a distributive firm. Empirically, we show that probability of price change has a positive relation to the scale of the retailer's storage and the frequency of its bargain sales. We also show a negative relation between the frequency of bargain sales and the price elasticity of demand. These results denote that price stickiness varies by the retailers' characteristics. In this paper, we consider that the hidden mechanism of price stickiness comes from the retailer's policy for inventory investment. We develop a partial equilibrium model of the retailer's optimization behavior with inventory and financial restrictions. The results of the numerical experiments suggest that price change frequency depends on the retailer's order cost, storage cost, and menu cost.

Keywords: Inventory, Price Stickiness, Numerical Experiment, (S, s) Policy

JEL Classification: D22, E27, E31