

# Asymmetric consumer search and price information transmission in markets with vertical relations

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## Abstract

This paper studies markets which have a monopolistic manufacturer and duopolistic retailers competing on price. In our model, consumers engage in the search for the information of prices, and the number of the consumers who match with one retailer first is different from the number of the consumers who match with the other retailer first. There are two types of consumers, consumers with search cost, the shoppers, and consumers without search cost, the non-shoppers. The shoppers search before the non-shoppers, and there is the price information transmission by word of mouth. So, if shoppers buy from the retailer which is different from the one whom they match first, the information of their buying price is transmitted to the non-shoppers. By comparing this information with the price of the first matching retailer, the non-shoppers decide whether they buy from the retailer who they match with first or they incur search cost and buy from the other retailer. We show that, for high search cost, there exists an equilibrium. In this equilibrium, the asymmetricity of the first matching does not affect the wholesale price. Also, compared to the symmetric case that the number of the non-shoppers who match with one retailer first is equivalent to the number of those who match with the other retailer first, the retailer which has the smaller amount of the non-shoppers who visit him first could be better off. We also show that, for relatively low search cost, there exists an equilibrium, and the price information transmission makes markets more competitive.

**Keywords:** Vertical relations, Asymmetric consumer search, Price information transmission

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