

Equilibrium Price Dispersion in Retail Markets for Prescription Drugs (Alan T. Sorensen)

This study aims to point out the importance of price dispersion due to the costly in consumer search. Sorensen explained this scenario by the dispersion in retail prices for prescription drugs among the pharmacies within the same markets. The price dispersion is the opposite approach to the law of one price, which is never valid in practice as the rival firms always sell some homogeneous goods at the different price even in the environment that seem conducive to the economic competition. This paper has identified the conditions that can encourage the price dispersion under the stable equilibrium. The price dispersion normally arises when there's a chance that consumer would know only one price and in the homogeneous goods market, the price may differ due to the search cost to obtain the price information bearded by the consumers. From his collected data, the average posted price is over 50% above the lowest available price. The markup and dispersions are significantly lower for the repeatedly purchased drug while one-time prescription has 34% larger price ranges and 41% higher markups. This premium can be explained by the high search cost of consumers. In other words, the expected benefit of price-search is highest for the repeatedly purchased prescriptions. This finding leads to the decrease in price equilibrium as consumers have higher propensity to price-shop for such prescriptions. However, the differences in service or location do not appear to explain the price variation.

$$\begin{aligned} \text{RANGE}_{ij} = & \beta_0 + \beta_1 \text{PFREQ}_i + \beta_2 \text{AWP}_i + \beta_3 \text{BR1}_i + \beta_4 \text{BR2}_i \\ & + \beta_5 \text{NEWB}_i + \sum_{k=6}^{25} \beta_k D_{ik} + \epsilon_{ij}. \end{aligned} \quad (1)$$

In this study, Sorensen used the equation above to estimate the price dispersion. Dependent variable is the price range, PFREQ represents the frequency of purchasing which indicate whether the drug is the repeatedly or one-time purchased drug, AWP is the drug acquisition cost based on listed average wholesale price. BR1 and BR2 are the dummy variables for two kinds of brand-named prescriptions; those that faced the generic brand competition and those that did not. NEWB is the variable for Newburgh area as they wanted to compare with Middletown, and D is the indicating variable for 20 kinds of drug therapy.