Equilibrium Price Dispersion in Retail Market for Prescription Drugs

This study was conducted to establish the empirical importance of price dispersion due to costly consumer search by retail prices for prescription drugs by proving that even the products are homogeneous, the “law of one price” is virtually never empirically valid and to identify conditions under which price dispersion can arise as a stable equilibrium outcome. Therefore, price dispersion will arise when there is a positive probability that the customer knows only one price. This paper will seek to demonstrate the empirical importance of price dispersion that arise from imperfect information by examining the retail market for prescription drugs. Using data collected from individual pharmacies in upstate New York. The data used in this paper were copied directly from the poster of 20 pharmacies in Middletown and Newburgh, New York in March 1998.

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

From this regression, it can be implied that the dispersion of prescription prices will decrease with purchase frequency. The dependent variable is the price range for the prescription.

The evidence analyzed here suggests that dispersion arises at least in part from the nature of the consumer search environment. Measures of absolute dispersion and price-cost margins display a negative, statistically significant relationship with the prescription purchase frequency. The extent to which price dispersion is related to consumer search has important implications for policies affecting the cost of acquiring price information. If dispersion is generated by imperfect price information, programs or policies that centralize price information may result in lower prices for consumers.