

Equilibrium Price Dispersion in Retail Markets for Prescription Drugs

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This paper explain an importance of price dispersion that arises from imperfect information by examining the retail market for prescription drugs. Using data collected from individual pharmacies in upstate New York.

Using the theoretical framework , consumers increased propensities to price from repeating the purchased prescriptions will constrain the prices of such prescriptions to be lower and less dispersed. The data used in this paper were copied directly from the posters of 20 pharmacies. Price distributions depend on consumer search, we expect a positive correlation between the residuals from the dispersion and margin regressions, since the effects of unobserved shifters of search costs.

To conclude, dispersion in cash prices for prescription drugs is substantial, even across pharmacies within small local markets. Dispersion appear in the nature of the consumer search environment.

Equation explanation

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

According to the equation above, the price range across pharmacies in town j (RANGE_{ij}) is the dependent variable.

PFREQ is a variable which stands for purchase frequency.

AWP is the average wholesale price which was included to control for the impact of price levels on dispersion.

The terms BR1 and BR2 are dummies variable for two kinds of brand-name drugs those that face competition from generic equivalents and those that do not.

NEWB is a dummy variable for Newburgh and D is the indicator for 20 categories of drug therapy.

The column 1 of table 2 in the paper report the regression result which was estimated by using the GLS. The result shows that the price range of the the drugs that must be purchased monthly will be smaller than the one-time purchased. The column 2 of table 2 shows the coefficient from a regression on the standard deviation which the monthly purchases drugs are 20 percent less relative dispersion than the one-time purchases. The coefficients on the brand dummies also pointed out that prices are more dispersed for generics than the branded drugs. Moreover, from the estimation the price is less dispersed in Newburgh than the city of Middletown even though both cities shared similar characteristics.