

Equilibrium Price Dispersion in Retail Markets for Prescription Drugs.

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This study would like to show the empirical importance of price dispersion due to costly consumer search by examining retail prices for prescription drugs. It shows that in the posted price in two geographically distinct markets are shown to vary considerably across pharmacies within the same market. Pharmacy heterogeneity accounts for at most one-third of the observed price dispersion. Thus, we have predictions of search model that the price for repeatedly purchased prescriptions exhibit significant reductions in both dispersion and price-cost margins.

The law of one price is never ever be the empirically valid, homogeneous goods are often sold at widely different prices by rival firms in even competitive environment. The principal success of this literature was to identify condition under which price dispersion can arise as a stable equilibrium outcome.

Price dispersion will arise when there is a positive (but uncertain) probability that randomly chosen customer knows only one price. This paper has shown the empirical importance of price dispersion that arise from imperfect information by examining the retail market for prescription drug. The data demonstrated, on average, the highest posted price for given prescription is over 50 percent above the lowest available price and it also has evident that if customer search more, they can approximately save over \$10 for over half if the prescription in the sample. Moreover, there are some evidence show that the differences in pharmacies service or location don't appear to explain fully the observed price variation. But the pharmacy effect account for at most one-third of the variation in drug prices about their means.

The central finding of this study is that observed price distributions are consistent with the predictions of models based on consumer search. From the evidences, the prediction is found to be true in the data: measure of both dispersion and markup are significantly lower for drugs that are purchased repeatedly. Since one-time prescriptions are estimated to be 34 percent larger than those for prescription that must be purchased monthly, which absolute markups for one-time prescription are estimated to be 41 percent higher as well.

Data Collection: In New York, the state legislation requires all pharmacies to post their prices for 152 top-selling prescriptions, the price was posted and updated on a large poster provided by the State Board of Pharmacy. Other data regarding pharmacy characteristics are based on writer observation from visiting pharmacies and also have brief conversations with pharmacists themselves. They found price differences due to in-update price of pharmacists. And the found out that the insurance coverage also make the price variation due to contracted rates established by insurers.

Dispersion Model:

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

On the basis of the argument that we talked above, we expect absolute dispersion of prescription price to decrease with purchase frequency with simple regression equation above. The dependent variable is the price range for the prescription. The variable **PFREQ** is purchase frequency and **AWP** is the drug's acquisition cost and is included to control for the potential impact of price levels on dispersion. The terms **BR1** and **BR2** are dummies for two kinds of brand-name drugs: those that face competition from generic equivalents and those that do not. This distinction captures the idea that consumers who choose to buy brand- name prescriptions even when generics are available may be particularly insensitive to price and this may be reflected in the distribution of prices. The variable **NEWB** is a dummy variable for Newburgh, and the **D** variables are indicators for 20 categories of drug therapy. They are included as crude controls for the composition of the drug's users; price distributions will be sensitive to different demographic groups' differing propensities to search.