Sorensen (2000): Equilibrium Price Dispersion in Retail Markets for Perscription Drugs

This paper establishes the empirical importance of price dispersion due to costly consumer search by examining retail prices for prescription drugs. The finding of this paper is if the observed price distributions are consistent with model predictions on consumer search. The data used in this paper was copied directly from the posters of 20 pharmacies in Middletown and Newburgh, New York in March 1998

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

This regression says the absolute dispersion of prescription prices shall decrease with purchase frequency. The dependent variable is the price range for the persription. The variable 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 dummy variables for two brand-name drugs. The variable NEWB is a dummy variable for Newburgh and the D variables are indicators for 20 categories of drug therapy.

The evidence analyzed here suggests that dispersion arises at least in part from the nature of 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 costs 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.