On the Effect of Parallel Trade on Manufacturers' and Retailers' Profits in the Pharmaceutical Sector

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Abstract

Differences in regulated pharmaceutical prices within the European Economic Area create arbitrage opportunities that pharmacy retailers can use through parallel imports. For prescription drugs under patent, such provision decisions affect the sharing of profits among an innovating pharmaceutical company, retailers, and parallel traders. We develop a structural model of demand and supply in which retailers can choose the set of goods to sell to consumers, thus foreclosing the consumers' access to some less-profitable drugs, which allows retailers to bargain and obtain lower wholesale prices with the manufacturer and parallel trader. With detailed transaction data, we identify a demand model with unobserved choice sets using supply-side conditions for optimal assortment decisions of pharmacies. Estimating our model, we find that retailer incentives play a significant role in fostering parallel trade penetration. Our counterfactual simulations show that parallel imports of drugs allows retailers to gain profits at the expense of the manufacturer, whereas parallel traders also gain but earn more modest profits. Finally, a policy preventing pharmacies from foreclosing the manufacturer's product is demonstrated to partially shift profits from pharmacists to both the parallel trader and the manufacturer, and a reduction in the regulated retail price favors the manufacturer even more.

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