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Two Perspectives on Competition and Pricing within the Generic Drug Market

In America, generic drugs have played a crucial role in reducing prescription drug spending. Some policymakers believe that more competition reduces prices; however, this is not the case. Entry into generic markets is not random because firms choose the profitable drugs, which makes it difficult to measure the true causal effect of competition. When summarizing these papers, they both use the regulatory features of the Hatch-Waxman Act to study competition, but both papers look at different aspects of this issue. The Tenn and Wendling paper, published in 2014, looks into the effect of potential competition, whereas the Olson and Wendling paper, published in 2018, looks at the effects of actual competition. When looking at these papers together, they illustrate that both the threat and arrival of competition can lower generic prices in certain market contexts.

When analyzing the questions of Tenn and Wendling, they want to know how competition affects generic drug pricing in the US, but from different angles. Tenn and Wendling wanted to examine whether the threat of future entry can push incumbents to lower prices before their rivals enter. This paper also focused on strategic limit pricing and whether entry deterrence can only work in small markets where competition can be relatively avoided. In contrast, Olson and Wendling wanted to measure the causal effect of actual new entrants (when a 2nd or 3rd generic competitor enters) on the overall prices. This paper aimed to prove that earlier studies likely underestimated the early competition due to entry being endogenous, meaning when competitors only enter the profitable markets. Additionally, they also wanted to analyze whether the early price effects were stronger in large markets. When combining these papers together, the questions they want to answer help us gain a more accurate understanding of when and how competition can reduce prices within the generic drug industry.

Again, while both papers used similar methods to each other, there are still some differences in how they gathered data, as well as what they did when analyzing the data. Tenn and Wendling, in their methodology, use the Hatch-Waxman Act's 180-day expiration date as a timing shock for when entrants can enter the market. They take this approach because it observes

pricing during the exclusivity period when no entrants can enter, and the post-exclusivity period, where entry is possible. The paper also takes a focus on incumbent pricing behavior, such as strategic deterrence. Additionally, Tenn and Wendling use econometrics, such as difference-in-difference, to compare changes before and after the exclusivity period ends. They control for drug fixed effects and for time, as well as splitting results between large and small markets. On the other hand, Olson and Wendling use a natural experiment where competition is restricted internally or exogenously to the market. To analyze this natural experiment, they conducted a two-stage regression where the first stage estimated the price evolution with fixed effects, and where the second stage compared within versus outside exclusivity to isolate any causal entry effects. Lastly, they then split the sample by market size and compared causal estimates to naive estimates.

After utilizing their methods to gather data, Tenn and Wendling found that in small markets, prices will rise before any additional entry can occur. They also found that incentives could successfully deter later entrants (Tenn & Wendling, 222, Table 3). When analyzing large markets, they found that prices will not fall that much, even at the end of the exclusivity period, unless new competitors enter. This means that even if the incumbents cut prices slightly, high profitability still encourages future entry (Tenn & Wendling, 221). Tenn and Wendling focus on the effect of potential competition before entry occurs, while Olson & Wendling measure the effect of actual new entrants once they arrive. This explains why large-market price drops appear small in the first case but large in the second. With these findings, Tenn and Wendling's paper illustrates that while potential competition matters, it can only occur in markets (such as small markets) where entry can be realistically prevented. Conversely, Olson and Wendling proved that earlier studies did, in fact, underestimate competition due to entry being endogenous. For example, when looking at larger markets, there is around a 30% price drop on average when the second entrant appears (Olson & Wendling, 154, Table 2). When the third entrant appears, there is an average of a 45-50% price drop (Olson & Wendling, 154, Table 2). Additionally, naive correlations suggest that you would need 5-7 competitors before prices decline by a lot, but this is very misleading. The main takeaway from Olson and Wendling's paper is that most price reductions do come from the first few competitors who enter the market, and not from crowded markets with a lot of entrants.

In conclusion, both papers explain how generic competition can play a big role in reducing drug prices, but they clearly analyze different phases of the market competition process. Tenn and Wendling illustrate that the threat of entry alone can certainly influence price behavior, especially within the small markets where the incumbents can successfully deter rivals away through strategic price cuts. Olson and Wendling show that early competitive entry does lead to large and causal price reductions in larger markets. This is because deterrence is not as effective due to the large market's high profitability nature, and since large markets are where consumers save the most. On the other hand, small market incumbents can viably deter competitor entry through strategic price cuts. Together, these studies find biases in early research that ignored endogenous entry barriers, which led to policymakers not valuing the 2nd and 3rd entrants enough. Therefore, politicians should begin to prioritize a quicker approval of the 2nd and 3rd entrants in the generic drug markets, as well as start monitoring more closely the potential deterrence in small markets where competition does not begin naturally. These studies greatly highlight that both potential and actual competition are very important factors if our society wants to improve the US generic drug market's affordability.

Works Cited

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