Comments and Discussions on Maria Martin-Rodriguez's "A Dynamic Monopoly with Experience Good and Risk-Averse Consumers"

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1. Summary

This paper provides a theoretical study on monopoly's dynamic pricing with experience goods. Consumers are assumed to be risk-averse, and their willingness to pay for a good with uncertain quality is reduced due to the risk premium. Consumers are also assumed to be myopic: they maximize utility each period independently.

The main question of this paper is, Does the monopolist make "introductory price offer" and how likely? The author finds that the monopolist's incentive of charging low price at the initial period depends on the degree of risk-aversion. If the degree is high, the cost of experimentation (larger consumption of goods with uncertain quality) becomes high. This implies that, for a given level of experimentation, the higher is the risk-aversion, the lower the initial price offer. In the subsequent period, the monopolist favors the experienced customers since they are now informed and thus no risk premium is needed. However, the subsequent price can be lower than the initial offer since the realized quality can be very low. This pricing pattern happens more likely if the initial price offer is higher (by lower risk-aversion).

The main result of this paper is that the introductory price offer is more likely to be observed if the degree of risk aversion is higher. On the welfare issue, the author finds that the monopolist's optimal level of experimentation tends to be lower than social optimum. Thus, she finds that a price cap in the initial period increases welfare.

2. Comments and Discussions

Although many previous papers study the dynamic pricing pattern of monopoly, and especially the possibility of introductory pricing offers, the current paper is, to the best of my knowledge, the first attempt to include consumers' risk-aversion in the picture. The presence of uncertainty and risk aversion seems reasonable, as the author argues, when an unprecedented new product (like Apple Watch) is marketed. With the introduction of risk-aversion, this paper provides valuable, novel predictions and policy implications.

This paper's approach is also remarkable. The analysis is built on a solid game theoretic foundation, in particular on signaling games. To avoid complication, the author assumes that consumers are myopic. I think this approach abstracts consumer's risk concern from other factors like learning. Anyway the model and analysis are simple and polished for the questions posed.

There are several possibilities for further research on this issue. First, it would be interesting to consider individual learning of information by consumers (this paper indeed incorporates a kind of social learning already). Some of the consumers under experimentation might find it beneficial to stop buying the good at the beginning and to learn from others about the quality of good. Second, it would also be interesting to consider competition of firms. We often observe that firms follow the innovator by imitating the products. Thus introducing followers in the subsequent stage and competition among the innovator and followers is reasonable. The innovator should have incentive to create switching costs in the earlier stage. Third, I think it is reasonable to assume that the monopolist has superior information on the quality of the product before the market opens (at least with some cost like market research). Hence, I wonder how this asymmetric information affects the behavior of monopolist. Surely, signaling could occur. But the information may be partial, and thus the consumers' risk concern might remains. This looks quite complex but interaction of these things might open another door to the better understanding of dynamic pricing issues.

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