

Online Appendix for Managing Multi-Rooming: Why Uniform Price Can Be Optimal for a Monopoly Retailer and Can Be Uniformly Lower

A. Details on Suning Data Analysis

To offer some real-world evidence on price comparisons between dual vs. uniform pricing, we obtained data from Suning Commerce Group Co., Ltd. Suning used to be referred to as the counterpart of Best Buy in China before Best Buy exited China. It is one of the largest retailers in the China, specializing in the distribution of home appliances, consumer electronics, books, household commodities, cosmetics and baby care products. Suning switched from the dual pricing strategy to the uniform pricing strategy of products on its online store and offline physical outlets on June 8, 2013 (Yang, 2013). In 2013, Suning’s annual operation revenues amounted to 105.4 billion yuan, i.e., approximately 17.27 billion U.S. dollars then. Among those, 3.59 billion U.S. dollars were from the online channel and 13.69 billion U.S. dollars from the offline channel (Suning Commerce Group, 2013). We obtained the access of the data from Suning before and after its implementation of the uniform pricing strategy.

Specifically, the data were from January 1, 2012 to December 31, 2013, which included information on SKUs, stores, cities, prices and sales aggregated at the weekly level.¹ Based on the average weekly sales, we obtained the top 200 SKUs from the products sold online solely, the top 200 SKUs from the products sold offline solely, the top 200 SKUS based on the online sales, the top 200 SKUs based on offline sales, and the top 200 SKUS based on the total online and offline sales. Those SKUs were pooled together with repetitions removed. For each of the five 200-SKU samples aforementioned, we obtained top 300 stores that sell those SKUs. We then pool the five top-300 stores samples and remove the repetitions. Finally, we only keep SKUs which have both the positive offline and the positive online sales four weeks before and after the uniform pricing policy started. The resultant data set for our analysis contains 104 SKU-store pairs. Prices (p_{off}^d, p_{on}^d, p^u) of each SKU-store combination were happened to be unique, e.g., there were 104 unique SKUs and 104 unique stores in the final data set.

Figure 1 illustrates Suning’s prices before and after the uniform pricing strategy. It is observed that the highest percentage of the cases were those where the uniform price was lower than both the online and the offline prices. Meanwhile, the cases where the uniform price was between the online and the offline prices have the second highest percentage.

¹ The company only gave us the access to aggregate data which had to stay at their servers. Also, we could only select a sample of data due to the confidentiality concern of the company.

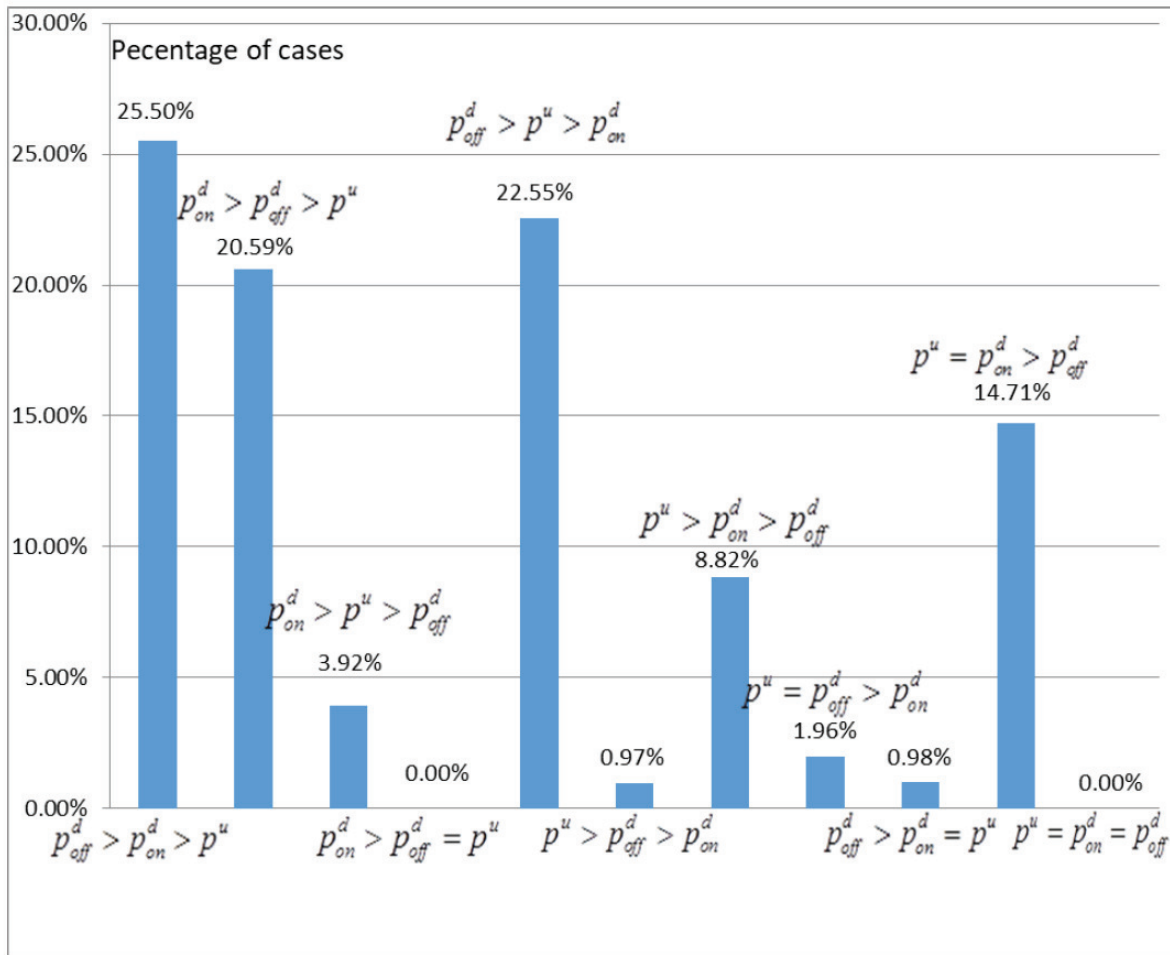


Figure 1 Compare Suning's Prices Before and After the Uniform Pricing Strategy. (p_{off}^d , p_{on}^d , and p^u represent the offline and online prices before uniform pricing and the uniform price, respectively.)

References

- Suning Commerce Group Co., Ltd. 2013. Annual Report, https://www.suning.cn/static///snsite/index/tzzgx/dqbg/attachment/2671/_attachment1396528820605.pdf. Accessed October 20, 2022.
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