

Avery Haviv – Abstract

"Does Purchase Without Search Explain Counter Cyclic Pricing?"

Basic economic theory tells us to expect that an increase in demand should lead to an increase in price. However, previous studies have found the opposite trend in the prices of seasonal goods, such as canned soup. I propose an explanation of this phenomenon: consumers are more likely to purchase without search in low demand periods, reducing the gains of temporary price reductions, and decreasing estimated price sensitivity. Purchase without search is consistent with consumers using shopping lists to make their purchase decisions before observing prices. I test this explanation using a novel dynamic, structural inventory model where consumers make decisions on whether to search, which reveals price promotions, and which products to purchase given their search decision.

Estimating this model using previous methods is a computational challenge because of the expansion of the state space required to model seasonal preferences. To overcome this challenge, I develop a cyclic-successive approximation algorithm, which removes the computational burden of adding cyclic variables to the state space of a dynamic model.

I find that consumers purchase without search 71% of the time in winter. This causes price elasticities that are more than 60% larger in winter as they are in the summer. I find that the dominant cause of seasonal search is seasonal price variation, rather than seasonal consumption preferences.