## **Hyewon Kim**

## Why do consumers pay more for less?

Retailers offer consumption goods in multiple package sizes. Theory predicts retailers will offer quantity discounts when consumer demand is unobservable. However, quantity surcharges are also frequently observed in the real world: a larger package size item is more expensive per unit than the smaller counterpart. In my job market paper, "Why do consumers pay more for less?", I show that consumer inattention better explains why consumers pay the surcharge than preference on package sizes. I develop a discrete choice model featuring consumer inattention and estimate it using Bayesian methods and rich scanner data from grocery stores.

I focus on peanut butter products. I find that quantity surcharges are quite frequent: almost as frequent as quantity discounts for major brands. Households have heterogeneous reactions to quantity surcharges: some take advantage of them and purchase multiple small size jars, but others pay extra for large jars. This pattern suggests that there are two types of consumers: an attentive type who is aware of the existence of quantity surcharge and an inattentive type who is not.

To understand these empirical findings, I study a series of demand models. The first model assumes standard preferences and rationality. Then I explore two extensions that consider package size preferences and consumer inattention to explain those large size item purchases when quantity surcharges are present, respectively. These models lead to a complex optimization problem as they feature multiple discrete choices. I solve this problem using Allenby, et al.'s (2004) two stage optimization approach.

I use MCMC methods to estimate the three versions of the model, allowing consumer heterogeneity in model parameters. Estimation results suggest that second extension outperforms the two other model specifications. I apply estimation results to calculate expected demand and simulated price elasticities. I find that miss-specified models result in either under (basic model) or over (first extension) estimate demand for large size items, and they also lead to biased price elasticities.