NBER Digitization Tutorial Application

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Research interest:

I'm interested in topics on consumer bargaining and brand choices. I'm recently working on a project on intra-household bargaining with consumer package goods. Household is taken to be the most disaggregated unit in most marketing analysis, however, as shown by Bruno et al. (2018), the variation in brand preferences within a household could also play an important role in determining the product choices. I'm using the hierarchical model introduced in Bruno et al. (2018) to estimate the preference parameters of individual members within households using purchasing data from Numerator, and examine the results of the joint decision making process within households to estimate the relative bargaining power of household members to understand whose proferences matter more in household purchase decisions. The Numerator data contains information on the brand choices and the prices of the products purchased on each shopping trip as well as information on which household member was present on that particular trip. I use individual trips to identify the preference parameters of the individual members and using joint trips to estimate the relative bargaining power of household members. Using the simulated rankings and utilities of the brands as the payoff to each individual, and treating the choices on the joint trip as a result of intra-household bargaining, I attempt to estimate the bargaining power of each member of the household using a static Nash bargaining model where both sides agree to maximize the total surplus taking into account the bargaining power of each player. The study would be useful for understanding the heterogeneity of preference within households and for promotion targeting.