Abstract

This study analyzes consumer demand for the French fresh fish market, to provide a better understanding of the determining factors of fresh fish consumption. This is accomplished by estimating a system of demand equations with French household scanner data. In the data set, a large number of zero observations were generated from the low frequency of fresh fish purchases, which poses a problem for conventional methods used for such estimation. In order to analyze the data, an extension of the zero inflated negative binomial model is derived, which is referred to as the group heteroskedastic zero inflated negative binomial model. The model allows an estimation of a system of equations in the framework of zero inflated models, and therefore accounts for excess zeros in the data set, as well as overdispersion of the non zero observations. The results are consistent with previous studies and show that income and age are systematically positively related to the demand for all species of fresh fish.