Discrete Choice with Congestion

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Abstract

We consider the multinomial choice model with congestion. Here the individual utility from choosing an alternative decreases in the fraction of people choosing it, and (weakly) increases in the proportion choosing other alternatives. This leads to strategic behaviour under imcomplete information. Examples include route choice, specialization within disciplines, selection of recreation venues and vacation destinations etc. We apply our ideas to study college choice among undergraduate applicants to Cambridge University.

Keywords: Discrete Choice, Unobserved Heterogeneity, Congestion, Incomplete information, Bayes-Nash Equilibrium, Identification, Cambridge Admission