

Revealed Preference Analysis of Consumer Heterogeneity

Kohei Shiozawa*

April 16, 2018

Abstract

This paper considers a problem of identifying heterogeneity of consumer preferences from the point of view of the revealed preference analysis. We propose a new statistical method to evaluate preference heterogeneity by combining a structure of the revealed preference theory and a statistical model. We derive a probabilistic inference algorithm for the proposed statistical model and observe its performance by simulation experiments. We show the usefulness of our approach to this problem and that by using our approach we can capture the underlying heterogeneous preference structures moderately well.

*Research Institute for Economics and Business Administration, Kobe University, 2-1, Rokkodai-cho, Nada-ku, Kobe, 657-8501 JAPAN; E-mail: shiozawa@rieb.kobe-u.ac.jp