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**Seminar of the Department of Mathematics and Statistics, University of Cyprus**

Room: 037, ΣΘΕΕ01. Date: 08/05/2017 Time: 14:00

**Speaker :** Andrei Sirchenko (Higher School of Economics, Moscow)

**Title :** A model for ordinal data with abundant and heterogeneous status

quo decisions, with an application to federal funds rate target.

**Abstract:**

The decisions to reduce, leave unchanged, or increase an ordinal choice

variable (such as policy interest rates) are often characterized by

abundant status quo outcomes that can be generated by different

decision-making paths. The decreases and increases may also be driven by

distinct processes. To adequately address these issues this paper

develops a flexible mixture model with endogenously switching regimes.

Three latent regimes, which are interpreted in the interest-rate-setting

context as loose, neutral and tight policy stances, create separate

processes for increases and decreases and overlap at a status quo

outcome, generating three types of zeros. The model allows for

endogenous explanatory variables and correlation among the decisions on

the regime and on the amount of change. These implicit decisions are

modeled by three ordered probit equations estimated simultaneously. In

the empirical application to the federal funds rate target, the new

model is not only highly favored by statistical tests but also produces

economically more meaningful inference with respect to the standard and

two-part zero-inflated models for ordinal responses, which deliver

inconsistent estimates as demonstrated by Monte Carlo experiments.