

Letter from Editors

The fourth issue of volume 7 contains three theoretical papers devoted to economic and econometric modelling. The first article represents mathematical economics, the second one - non-Bayesian, nonparametric analysis of binary regression models, and the third paper deals with an important issue in Bayesian econometrics.

In the first paper, Agnieszka Lipieta considers the Debreu economy with private ownership, where all consumption plans belong to a proper linear subspace of the commodity-price space, i.e. there are dependencies between quantities of some commodities in all consumption plans. Competition makes producers adjust their plans to the same dependency, and this results in the mild evolution of the production sector to offer production plans belonging to the given subspace. The aim is to model changes of producers' activity that give equilibrium in the Debreu economy with consumption system reduced to a proper subspace of the commodity-price space, without considering additional costs.

The second paper, by Marcin Owczarczuk, deals with maximum score estimation for the coefficients of binary regression model. This class of semi-parametric estimation methods uses the score function that, in case of binary regression models, is the fraction of correctly classified observations. The author proposes a modification that results in smaller variances of estimators than the standard maximum score method, without destroying other properties like consistency. Extensive Monte Carlo experiments illustrate improved effectiveness.

In the third paper, Łukasz Kwiatkowski considers setting prior distributions in Bayesian univariate finite mixture and Markov-switching models. Specific conditions for compatibility (in the sense that the prior in the nested model is the conditional prior in the nesting model) are derived for three types of priors commonly used in Bayesian analysis: the normal, inverse gamma, and gamma distributions. The consequences (for the compatibility conditions) of introducing additional constraints into the mixture model's prior are examined. In order to illustrate the proposed approach, compatible priors for Markov-switching AR(2) models are set.