

Letter from Editors

The third issue of volume 9 consists of two papers devoted to non-Bayesian modelling of economic time series and one paper that represents Bayesian analysis of micro data on agricultural production.

In the first paper, Cristina Amado, Annastiina Silvennoinen and Timo Teräsvirta model daily logarithmic returns of the WIG20 index from the beginning of 1995. They explicitly take into account the changes in the amplitude of volatility clusters – by means of a deterministic component. A novelty is that this component is specified before estimating the conditional variance. The resulting model is subjected to misspecification tests and its forecasting performance is compared with that of commonly applied models of conditional heteroskedasticity. This is done both using the whole sample and a subsample in which the observation period starts 2 January 2004. The authors demonstrate that the deterministic component in the variance cannot be ignored when the return series to be modelled are sufficiently long.

In the second paper, Łukasz Lenart and Mateusz Pipień propose an asymptotically consistent test, based on a subsampling approach, to verify hypothesis about existence of the individual or common deterministic cycles in coordinates of multivariate macroeconomic time series. The construction of the test relies on a multivariate non-parametric model containing the business cycle component in the unconditional mean function. The empirical analysis for selected European countries is based on monthly industrial production indexes. The main finding is that the deterministic cycle can be strongly supported by the data and therefore its presence should not be automatically neglected.

In the third paper, Jerzy Marzec and Andrzej Pisulewski analyse the effect of Common Agricultural Policy subsidies on technical efficiency of Polish dairy farms. A balanced panel of microeconomic yearly data on 1212 farms (for the period 2004 till 2011) come from the Farm Accountancy Data Network. The Bayesian stochastic frontier model based on the translog production function is specified. The empirical results show that the elasticity of production with respect to livestock is the highest, whereas with respect to feed is the lowest. The mean technical efficiency estimate in the covered period is 0.83. The research reveals the negative effect of subsidies on technical efficiency.