

Letter from Editors

The second issue of volume 4 again consists of three papers, which represent different methods of modelling mainly financial - but also macroeconomic - processes as well as their relationships.

In the first paper, Georgios Kouretas and Manolis Syllignakis use weekly stock market data and a Markov-Switching ARCH model to examine whether the volatility of stock returns of ten emerging capital markets of the new EU member countries has changed since the opening of their capital markets. The most important finding is that the high volatility of stock returns of all new EU emerging stock markets is associated mainly with the 1997-1998 Asian and Russian financial crises as well as the 2007-2009 financial turmoil, while there is a transition to the low volatility regime as they approach the accession to the EU in 2004.

The aim of the second paper, by Błażej Mazur and Mateusz Pipień, is to check the empirical importance of the long term cyclical effects in the volatility of financial returns. They consider a particular form of a GARCH process with parameters varying in time according to some deterministic function. They analyse daily returns of S&P500, covering the period of sixty years of US postwar economy, including the recently observed global financial crisis. The results of a formal Bayesian model comparison clearly indicate the existence of significant long term cyclical patterns in volatility with a periodic component corresponding to a 14 year cycle.

In the third paper, Katarzyna Bień-Barkowska presents a copula-based model for a binary and a continuous variable in a time series setup. In this model both marginals can have their own dynamics whereas the contemporaneous dependence can be captured via a copula function. A method for testing goodness-of-fit of such a model is proposed; it uses probability integral transforms. Investigating the relationship between trading volume and the indicators of arbitrarily 'large' price movements on the interbank EUR/PLN spot market serves as an empirical example.