

## Letter from Editors

The third issue of volume 10 is devoted to macroeconomic issues. They are treated, however, from three distinct perspectives, using three very different approaches. The first paper is theoretical and represents mathematical economics, two others are focused on empirical investigations: the second one is devoted to a new Bayesian statistical approach to modelling economic cycles, while in the third – crude oil markets are examined by standard co-integration econometric analysis.

In the first paper of the current issue, Michał Konopczyński develops an open-economy endogenous growth model to examine the influence of fiscal policy on the economy in the long run. His approach allows for public deficit and 5 types of taxes. One of its features is a separate treatment of interest rates on public and private debt, both of which are linear functions of appropriate debt-to-GDP ratios. “Decentralized economy”, where economic agents do not take into account any externalities, as well as the situation of “benevolent social planner” are being analysed. The optimal fiscal policy rules are derived. Empirical analysis for Poland illustrates the theoretical results.

In the second paper, Łukasz Lenart generalizes the deterministic cycle model by allowing for the time-varying amplitude. He assumes that the mean function of cyclical fluctuations depends on unknown frequencies in a similar way as for the almost periodic mean function in the fixed deterministic cycle, while the amplitude associated with a given frequency is time-varying and described by a spline function. Using Bayesian approach with standard prior assumptions, the explicit marginal posterior distribution for the vector of frequency parameters is derived. In the empirical study, monthly industrial production (in European countries) is considered. In most cases, data support time-varying amplitude.

In the third paper, written by Robert Socha and Piotr Wdowiński, the relationships linking the crude oil price with speculative activity and fundamental factors are examined. In their empirical study two co-integrating vectors are identified. The first vector represents the speculative activity, as explained in detail in the paper, the second – the crude oil price under the fundamental approach. The results support the hypothesis that the crude oil price depends on futures trading. The higher is a number of commercial long positions, the greater is the pressure on crude oil price to increase.