

Bayesian analysis of common cyclical features in VEC models

Abstract Once the concept of cointegration that enables the proper statistical analysis of long-run comovements between unit root processes has been introduced it became the subject of interest of many economic investigators. However, investigation of short-run comovement between economic time series seems as much important, especially for economic decisioners. The concept of common features, introduced by Engle, Kozicki (1993), may be of some help. Based on this idea Hecq, Palm, Urbain (2006) have discussed two forms of the additional reduced rank structure in a VEC model: strong and weak. The strong form reduced rank structure (SF) takes place when at least one linear combination of the first differences of the variables exists, which is a white noise. However, when this assumption seems too strong, the weaker case can be considered. The weak form appears when the linear combination of first differences adjusted for long-run effects exists, which is a white noise.

The main focus of this paper is bayesian analysis of the VEC models involving these two forms of reduced rank restrictions.

After the introduction and discussion of such Bayesian models, the presented methods will be illustrated via an empirical investigation of the price - wage spiral in the Polish economy.