Prof. Dr. Dietmar Bauer
Universität Bielefeld

Abstract

Estimating seasonally cointegrated state space systems using subspace methods

In this talk I will discuss seasonal integration in the state space framework as a special case of the Bauer/Wagner canonical form. I will argue that the state space framework offers benefits over the traditional VAR framework in this case. Based on the state space representation then estimation by subspace methods will be proposed. Some asymptotic properties of the corresponding estimators (such as consistency of the transfer function estimators as well as orders of convergence) will be provided. Various asymptotic results that aid the inference on the number and location of unit roots are discussed. As a special case the results also include the often used I(1) case.