INTEREST RATE EXPECTATIONS IN A MODEL USING LEADING INDICATORS

Abstract:
The basic assumption on which leading indicators are built is the common movement of macroeconomic variables representing the aggregate business cycle, giving information on turning points for different macroeconomic variables over time. Indicators passing through the turning points with few months lead prior to aggregate macroeconomic variables are thus used as a prognostic tool. Basic principles of the lead can be supported by a simple model of short-term equilibrium of a representative firm in a dynamic environment according to decisions about production depending on expectations. The model incorporates the formation of expectations in a market environment by propagation of sentiment between heterogeneous agents with limited rationality.

When incorporating expectations about the real interest rate, seen as a so-called prime mover according to the OECD classification of leading indicators, it is possible to track the impact of signals of monetary policy authorities on propagation of waves of optimism and pessimism on the market. The monetary policy authority may cause herd behaviour, while the more far the expectations are set from the actual policy applied, the more difficulties experience firms when returning to the equilibrium. The sentiment simulations imply the use of the model for business cycle short-term forecasting by using alternative assumptions about future expectations of firms. This way new foundation are set for a different type of model using leading indicators meeting the criticism of measurement without theory by Koopmans from 1947, and for using the model to assess the impact of economic policies.

Keywords:
leading indicators, heterogenous agents, expectations, monetary policy

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