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WITH A LITTLE HELP FROM MY FRIENDS: SURVEY-BASED DERIVATION OF INTEREST RATE EXPECTATIONS

Abstract:

The estimation of dynamic term structure models (DTSMs) turns out to be challenging in the presence of a small sample. It is exacerbated if the sample is characterized by a prolonged period of low interest rates near a time-varying effective
lower bound. These challenges all weigh heavily when estimating a DTSM for the euro area OIS yield curve. Against this background, we propose a shadow-rate term structure model (SRTSM) that includes a time-varying effective lower bound and
accounts for the spread between the policy and short-term OIS rate. It also allows for future changes in the effective lower bound and incorporates survey information. The model allows to adequately assess short-term monetary policy rate expectations and it generates far-distant rate expectations that are correlated with an estimated
equilibrium nominal short rate derived from a macroeconomic model set-up. Our results also highlight the signaling channel of non-standard monetary policy shocks in the run-up to asset purchases identified based on a non-linear high-frequency external instrument approach. Our model outperforms DTSM specifications without above modeling features from a statistical and economic perspective. We confirm our findings employing a Monte Carlo simulation.

Keywords:

Term structure modeling, short rate expectations, lower bound, survey information, yield curve decomposition, monetary policy, euro area

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