"Piecewise Linear Solutions for Non-Stationary Models"

Abstract

This paper assesses the accuracy and efficiency of piecewise linear solutions for nonstationary models with rational expectations. We compare piecewise linear solutions against the accurate global solution for non-stationary models proposed by Maliar et al. (2020). Using the canonical stochastic growth model we show that the piecewise linear solution is accurate when the expansionpoint evolves according to the non-stochastic transition path of the non-linear system and when agents anticipate the transition.