

Some Evidence of Smooth Transition Nonlinearity in Colombian Inflation

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Evidence of smooth transition autoregressive (STAR) representations is found in two, out of three, time series of different measures of annual inflation in Colombia during this decade for monthly data. The STAR-type nonlinearities are asymmetric for inflation computed as the variation of CPI while for (a measure of) core inflation are symmetric. Thus, LSTAR and ESTAR models were, respectively, estimated. No evidence of nonlinearity is found for traded goods inflation. Given the local dynamic properties of the estimated LSTAR model, only positive shocks to prices could shift negative accelerating inflation rate from the upper to the lower regime. By the same token, only stochastic shocks can move the core accelerating inflation rate from the outer regime to the middle one but the explosive nature of this regime will impulse the accelerating inflation rate to the outer one.