Working Paper No. 105
Keep in mind
The series Working Papers on Economics is published by the Office for Economic Studies at the <i>Banco de la República</i> (Central Bank of <i>Colombia</i> ). It contributes to the dissemination and promotion of the work by researchers from the institution. This series is indexed at Research Papers in Economics (RePEc).
On multiple occasions, these works have been the result of collaborative work with individuals from othe national or international institutions. The works published are provisional, and their authors are fully responsible for the opinions expressed in them, as well as for possible mistakes. The opinions expressed herein are those of the authors and do not necessarily reflect the views of Banco de la República or its Board of Directors.
AUTHOR OR EDITOR
Luis Eduardo Arango, Andres Gonzalez

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.