

**Spatial differences in inflation persistence in Hungary – a time-varying coefficient approach**

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On the basis of a disaggregated data set, we study inflation persistence in Hungary by focusing on regional cross-sectional variation. To this end, we use regional inflation series constructed from individual store-level price quotes. The price observations were collected for the CPI database at a monthly frequency and were provided by the Central Statistical Office of Hungary. In order to estimate inflation persistence, we assume time-varying-coefficient autoregressive models as described in Darvas and Varga (2007). In contrast to the widely used methods that estimate a single parameter for the whole sample period, this innovative procedure allows us to investigate changes in persistence more accurately. We prefer the Flexible Least Squares estimator that may capture the temporal parameter changes. The aim of the study is to describe the spatial patterns of Hungarian inflation persistence on the NUTS-3 level by using various exploratory spatial data analysis (ESDA) techniques. Furthermore, the structure of the database allows us to investigate the spatial differences at the sectoral level (in nine different product categories), as well. Previous researches found that while an apparent co-movement exists between the inflation rates in different regions, the decomposed inflation rates are quite disperse. For this reason, we investigate that to what extent these variations can be explained by differences in inflation persistence. We show that the overall level of inflation persistence decreased during the sample period, however, there are notable differences between the local patterns.