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Nowcasting of food price variation via mixed frequency models

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Abstract

The behavior of food prices is a big issue for the monetary authority, due to the high volatility as well as the big weight it has in the CPI basket and because it reacts temporarily to supply shocks, such as climate conditions, what makes difficult the task of keeping total inflation around the target. Thus, it is needed to count with more accurate and timely forecasts of food inflation for the short run in order to guide the macroeconomic model for monetary policy and help the authority in the decisión making process. For that purpose, in this document we apply a methodology that combines information of different frequencies (MIDAS) to produce forecasts for food inflation. In particular, information about food prices at a very disaggregate level and an indicator for food supply, which are available in a weekly basis, may help to generate a more accurate nowcast of total food inflation and its components: perishable and processed food. Compared to a naïve nowcast generated every week as the weighted average change of food prices taken by SIPSA, the results show an improvement in the nowcast, generated by the mixed frequency data models that includes not only high frequency variables as explanatory but also some other determinants of food price changes such as unemployment, climate conditions and international commodity prices. Thus, MIDAS models are a promising alternative to generate forecasts in the short run.

Fuente: https://www.banrep.gov.co/en/nowcasting-food-price-variation-mixed-frequency-models