



# Nowcasting of food price variation via mixed frequency models

Download Other Working Papers Keep in mind

The series Working Papers on Economics is published by the Office for Economic Studies at the *Banco de la República* (Central Bank of *Colombia*). 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 other 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** Julián Alonso Cárdenas-Cárdenas Edgar Caicedo-García Eliana R. González Molano  
The series Borradores de Economía (Working Papers on Economics) contributes to the dissemination and promotion of the work by researchers from the institution. On multiple occasions, these works have been the result of collaborative work with individuals from other national or international institutions. This series is indexed at Research Papers in Economics (RePEc)

Publication Date: Monday, 30 of March 2020

The opinions contained in this document are the sole responsibility of the author and do not commit Banco de la República or its Board of Directors.

## 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 decision 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.