

# Weather shocks and inflation

# expectations in semi-structural models

---

LATIN AMERICAN JOURNAL OF CENTRAL BANKING

**Número:**

5

**DOI:**

<https://doi.org/10.1016/j.latcb.2023.100112>

**Publicado:**

Jueves, 13 Junio 2024

**Authors:**

[José Vicente Romero-Chamorro,](#)

Sara Naranjo-Saldarriaga

**Clasificación JEL:**

D84, E31, E52, Q54

[Descargar documento](#)

## Lo más reciente

[Documentos de Trabajo Sobre Economía Regional y Urbana - Impacto de los cierres en la vía al llano sobre los precios de los alimentos en Colombia](#)

Jhorland Ayala-García, Yesica Tatiana Lara-Silva, Alejandro Alberto Vargas-Villamil, Lina Romero-Chaparro

[Impacto macroeconómico y fiscal del cambio demográfico](#)

Jesús Alonso Botero-García, Ligia Alba Melo-Becerra, Cristian Castrillón Gaviria, Daniela Gallo

[Uncertainty and monetary policy: the case of the Central Bank of Colombia](#)

Hernando Vargas-Herrera

[Otras Publicaciones](#)

Colombia is particularly affected by the El Niño Southern Oscillation (ENSO) weather fluctuations. In this context, this study explores how adverse weather events linked to ENSO affect inflation expectations in Colombia and how to incorporate these second-round effects into a small open economy New Keynesian model. Using BVARx models, we find evidence that inflation expectations – obtained from surveys and break-even inflation measures – are influenced by weather-related supply shocks. Building on this stylized fact, we modify one of the core forecasting models of the Banco de la República to incorporate the mechanisms through which weather-related shocks could affect marginal costs and inflation expectations. We conclude that ENSO shocks play a significant role in influencing both inflation and the dynamics of inflation expectations, a fact that should be considered by policymakers.