Weather Shocks and Inflation Expectations in Semi-Structural Models

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Colombia is particularly affected by the El Niño Southern Oscillation (ENSO) weather fluctuations. In this context, this study explores how the adverse weather events linked to ENSO affect the inflation expectations in Colombia and how to incorporate these second-round effects into a small open economy New Keynesian model. Using BVARx models we provide evidence that the inflation expectations obtained from surveys and break-even inflation measures are affected by weather supply shocks. Later, using this stylised fact, we modify one of the core forecasting models of the Banco de la República by incorporating the mechanisms in which weather-related shocks affect marginal costs and inflation expectations. We find that ENSO shocks had an important role in both inflation and the dynamics of inflation expectations, and that policymakers should consider this fact.