# Characterizing and Communicating the Balance of Risks of Macroeconomic Forecasts: A Predictive Density Approach for Colombia

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Publication Date: Thursday, 21 of October 2021 Abstract
Since July 2021, Banco de la República strengthened its forecasting process and communication instruments, by involving predictive densities in the projections of its models, PATACON and 4GM. This paper presents the main theoretical and empirical elements of the predictive density approach for macroeconomic forecasting. This model-based methodology allows to characterize the balance of risks of the economy, and to quantify their effects through a joint probability distribution of forecasts. We estimate this distribution based on the simulation of DSGE models, preserving the general equilibrium relationships and their macroeconomic consistency. We also illustrate the technical criteria used to represent prospective factors of risk through the probability distributions of shocks.

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