
[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*). 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

Andres Gonzalez

Alexander Guarin

Diego A. Rodriguez-Guzman

Hernando Vargas-Herrera

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:

Friday, 21 February 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

This paper introduces 4GM, a semi-structural model for monetary policy analysis and macroeconomic forecasting in Colombia. This model is based on a New-Keynesian rational expectation framework for an oil-exporting small open economy. In this paper, we present the model structure and examine the response of its variables to domestic, foreign and oil-price shocks. Further, we assess 4GM in terms of its historical shock decomposition and its out-of-sample forecasting.