Climate change and financial system fragility*

Joab Dan Valdivia Coria Vidal Choque Atto Angélica Calle Sarmiento Juan Carlos Carlo Santos

Abstract

The importance of climate change-related variables in the global economy focuses on fossil fuels as the main source of energy, which emit significant amounts of carbon dioxide (CO_2) contributing to climate change. This research develops the first environmental dynamic stochastic general equilibrium model for Bolivia, which shows that increasing fossil energy production can have negative effects by reducing production efficiency and threatening financial stability. This finding highlights the need to comprehensively address the economic impacts of climate change and fossil energy in Bolivia.

JEL Classification:Q58, E60, E44Keywords:Environmental Dynamic-Dynamic Stochastic General
Equilibrium General Equilibrium (E-DSGE), financial
frictions, carbon emissions, Bayesian estimation

^{*} The contents of this document are the responsibility of the authors and do not compromise the opinion of the Banco Central de Bolivia.