

ABSTRACT: CLIMATE CHANGE AND INEQUALITY IN GENERAL EQUILIBRIUM: QUANTITATIVE ANALYSIS OF RISING FOOD PRICES IN THE DEVELOPING WORLD

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In this paper, we analyze the distributive impact of climate change through rising food prices in general equilibrium. While climate-related food price increases could increase poverty significantly, the magnitude and drivers remain uncertain. By including the saving decision of households, we aim to understand how the poor fall into or escape poverty in this context. We use a general equilibrium model with heterogeneous agents and non-homothetic preferences and calibrate it to household data from 92 developing countries. First, we find that initial shares of food in consumption expenditures capture only qualitatively the distributive impact of the partial equilibrium outcome. Second, considering general equilibrium effects additionally increases wealth rather than consumption inequality. Households at the bottom of the wealth distribution seem to deplete their savings when food prices rise. The results indicate that the distributive impact of climate change through rising food prices is dynamic and may be larger than anticipated.