



Department SEMINARS



Climate Growth-at-Risk

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2:00 PM

Seminar Room Bruguier Pacini, DEM
Online via Teams

A B S T R A C T

This study introduces the Climate Growth-at-Risk (Climate GaR) framework, a novel empirical approach designed to assess the impacts of climate-related shocks on the lower tail of the GDP growth distribution. While recent literature on the macroeconomic effects of climate change predominantly focuses on the average trajectory of GDP growth, the potential for significant downturns triggered by climate change has not been adequately addressed. Climate GaR seeks to bridge this gap by quantifying the downside risks to GDP that stem from climate change. Employing panel quantile local projections, our methodology allows us to examine the dynamic effects of weather shocks across various regions of the output distribution over different time horizons. Utilizing a comprehensive global panel dataset encompassing 167 countries from 1960 to 2019, we find suggestive evidence that climate shocks weigh negatively on the left tail of real activity outcomes, especially in the medium term. In analyzing the impacts of climate shocks on GaR across different countries, our study reveals some heterogeneity in the responses between wealthier and poorer nations, as well as between countries with low and high agricultural intensity. In doing so, our study provides novel insights into how climate change poses asymmetric risks to the economy, emphasizing the need for policy frameworks to address and mitigate these heightened vulnerabilities.

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