

INVITATION TO A TALK

Aldo Paolillo, PhD

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“Advances in Estimating Nonlinear Non-Gaussian Economic Models”

📍 online, BBB

📅 Tuesday, 11 February 2025

🕒 3:00 p.m.

Abstract

This paper proposes a new approach to efficiently estimate and analyze economic models subject to large shocks. The methodology is applied to study the macroeconomic effect of these unusual shocks in a new Two-Sector model with heterogeneous exposure to the COVID-19 pandemic across sectors. We solve the model nonlinearly and propose a new nonlinear, non-Gaussian filter designed to handle large shocks and identify their source and time location. Monte Carlo experiments show that the estimation and identification of large shocks are feasible with a massively reduced running time. Empirical results indicate that the pandemic-induced economic downturn can be reconciled with a combination of large demand and supply shocks. Finally, we present a set of counterfactual experiments to filter out potential demand and supply shock complementarities, and perform a robustness exercise to check the sensitivity of the model parameters to large shocks. Talk will be given online: <https://classroom.aau.at/b/kastner>

Gregor Kastner and the Department of Statistics look forward to seeing you at the talk!

