# LUKAS HACK

hack@kof.ethz.ch \display +41 44 632 51 97 \display https://lukas-hack.github.io/ ETH Zürich \display Chair of Applied Macroeconomics Leonhardstrasse 21 \display 8092 Zürich \display Switzerland

#### RESEARCH FIELDS

## Macroeconomics, Monetary Economics, Macroeconomic History, Public Finance

## **EMPLOYMENT**

ETH Zürich - Post-Doctoral Researcher

Aug 20

 $Aug\ 2024$  - present

#### **EDUCATION**

University of Mannheim - Economics, Ph.D.	Sep 2019 - July 2024
University of Vienna - Economics, M.Sc.	Oct 2018 - Oct 2019
University of Vienna - Economics, B.Sc.	Oct 2016 - Jul 2018
DHBW Ravensburg - Business & Hotel Management, B.A.	Oct 2013 - Sep 2016

## WORKING PAPERS

Identification of Systematic Monetary Policy, joint with Klodiana Istrefi (Banque de France) and Matthias Meier (U Mannheim), revise and resubmit at Review of Economic Studies

We propose a novel identification design to estimate the effects of systematic monetary policy on the propagation of macroeconomic shocks. The design combines (i) a time-varying measure of systematic monetary policy based on the historical composition of hawks and doves in the FOMC with (ii) an instrument that leverages the FOMC rotation of voting rights. We apply our design to government spending shocks. We find that a dovish FOMC supports the expansionary effects of higher spending by delaying policy rate hikes, leading to large fiscal multipliers. GDP does not expand when the FOMC is hawkish, but inflation expectations are contained.

The Systematic Origins of Monetary Policy Shocks, joint with Klodiana Istrefi (Banque de France) and Matthias Meier (U Mannheim)

Conventional strategies to identify monetary policy shocks rest on the implicit assumption that systematic monetary policy is constant over time. We formally show that these strategies do not isolate monetary policy shocks in an environment with time-varying systematic monetary policy. Instead, they are contaminated by systematic monetary policy and macroeconomic variables, leading to contamination bias in estimated impulse responses. Empirically, we show that Romer and Romer (2004) monetary policy shocks are indeed predictable by fluctuations in systematic monetary policy. Instead, we propose a new monetary policy shock that is orthogonal to systematic monetary policy. Our shock suggests U.S. monetary policy has shorter lags and stronger effects on inflation and output.

Understanding Firm Dynamics with Daily Data, joint with Davud Rostam-Afschar (U Mannheim)

How do firms respond to macroeconomic shocks? To study this question, we construct novel daily time series that measure firms' plans and expectations based on surveys from Germany. Daily variation allows us to estimate the short-run aggregate responses of firms in short samples. This allows us to analyze the post-pandemic inflation surge without relying on pre-pandemic data. We find that firms' plans, notably price-setting plans, respond within days to oil supply and monetary policy shocks but not to forward guidance shocks. The effects are especially strong for small and non-tradeable sector firms. Finally, expectations respond strongly and swiftly, but only to monetary policy.

#### WORK IN PROGRESS

Progressive Income Taxation and Inflation: The Macroeconomic Effects of Bracket Creep, received the 2024 Reinhard Selten Award

Under progressive taxation, inflation drives up tax rates if the schedule is not adjusted accordingly, leading to bracket creep effects. I propose a non-parametric decomposition of changes in tax rates to measure the empirical importance of bracket creep. Studying German administrative tax records, I show that bracket creep effects are of similar importance as discretionary tax changes. Bracket creep has decreased over time due to institutional changes, but the 2022 inflation surge led to a resurgence with sizeable bracket creep effects. Theoretically, I characterize the effects on labor supply and compute a theory-consistent measure of bracket creep — the indexation gap — that is used to discipline a New Keynesian model with incomplete markets. The model is used to study the propagation of inflationary shocks that partly propagate through bracket creep.

Transmission of Monetary Policy in a Currency Area with Heterogeneous Households, joint with Hannes Twieling (U Mannheim)

Monetary policy has heterogeneous effects on real GDP and inflation across Euro Area member states. To investigate the underlying drivers we construct a two-region currency union model with idiosyncratic risk and cross-region household heterogeneity. The model matches household-level heterogeneity in homeownership rates, mortgage types, and the prevalence of hand-to-mouth households. These features account for 70% of the cross-region differences in GDP responses to monetary policy shocks. This is primarily driven by the interplay of demand amplification through hand-to-mouth households, and demand dampening through trade effects.

## OTHER PUBLICATIONS

Die Steuerbelastung durch Inflation, FAZ Guest Article (German), 2024

Hawkish or dovish central bankers: does it matter for fiscal shocks?, joint with Klodiana Istrefi (Banque de France) and Matthias Meier (U Mannheim), SUERF Policy Brief 334, 2024

Hawkish or dovish central bankers: Different flocks and fiscal shocks, joint with Klodiana Istrefi (Banque de France) and Matthias Meier (U Mannheim), VoxEU Column, 2023

# **DISCUSSIONS**

Are We Fragmented Yet? Measuring Geopolitical Fragmentation and Its Causal Effects, by Jesús Fernández-Villaverde, Tomohide Mineyama, and Dongho Song, 27th Annual DNB Research Conference, 2024

The Role of Tax Preparers in Individual Tax Optimization, by Hadar Avivi, Katarzyna Bilicka, Jakob Brounstein, Felipe Lobel, and Alexander Yuskavage, ZEW Public Finance Conference, 2024

Monetary Policy, Investment and Business Cycles in the Data Economy, by Carl-Christian Groh and Oliver Pfäuti, Bonn-Mannheim CRC Retreat, 2023

Global Spillover of Asset Price Booms: Who Benefits from the End of Privilege?, by Timothy Meyer, 16th RGS Doctoral Conference in Economics, 2023

Term structure of dividends: What can we learn about Monetary Policy?, by Leandro Gomes and Marcelo Sena, 1st NSEF PhD and Postdoc Workshop, 2022

Identifying Monetary Policy Shocks Through External Variable Constraints, by Francesco Fusari, 4th QMUL Economics and Finance Workshop, 2022

## WORKSHOPS AND CONFERENCES

- 2025 ifo Center for Macroeconomics and Surveys (scheduled), 32nd Symposium of the SNDE (scheduled)
- NBER Monetary Economics Program Spring Meeting (Chicago), CEPR Annual Monetary Economics and Fluctuations Symposium (Gerzensee), Barcelona Summer Forum (Barcelona), ZEW Public Finance conference (Mannheim), IAAE Greece 2024 (Thessaloniki), 4<sup>th</sup> Sailing the Macro Workshop (Siracusa), Pavia Macro Forum 2024 (Pavia), Workshop in Empirical Macroeconomics (Innsbruck), Verein für Socialpolitik Jahrestagung (Berlin), 27<sup>th</sup> Annual DNB Research Conference (Amsterdam), CRC TR 224 Retreat (Frankfurt)
- 2023 Midwest Macroeconomics Meetings (Clemson), Macro Seminar at TSE (Toulouse), RGS Doctoral Conference (Bochum), NBER Heterogeneous-Agent Macro Workshop (Boston), ifo GETTSIM Workshop (Munich), 54<sup>th</sup> Annual Conference of the Money, Macro and Finance Society (Portsmouth), CRC TR2 224 Retreat (Montabaur), CRC TR 224 Young Researcher Workshop (Montabaur)
- North America Summer Meeting of the ES (Miami),  $4^{th}$  QMUL Economics and Finance Workshop for PhD & Post-doctoral Students (London),  $2^{nd}$  Sailing the Macro Workshop (Ventotene), Macro Seminar at University Carlos III (Madrid), NSEF PhD and Postdoc Workshop (Naples),  $9^{th}$  CRC TR 224 Young Researchers Workshop (Bonn), Mannheim-Frankfurt PhD Workshop (Frankfurt), PhD EVS (online)

## **TEACHING**

ETH Zürich - International Monetary Economics (M.Sc.), Instructor	Spring 2025 - Present
DHBW Ravensburg - Economic policy (B.A.), Instructor	Spring 2018 - Present
University of Mannheim - Public Finance (B.Sc.), TA for Eckhard Janeba	Spring 2022 - 2024
HWG Ludwigshafen - Economic policy (B.A.), Instructor	Spring 2021
University of Mannheim - Interm. Macroeconomics (B.Sc.), TA for Andreas Gulya	s Fall 2020

## SCHOLARSHIPS AND PROFESSIONAL ACTIVITIES

Refereeing: Oxford Economic Papers, EAYE Annual Meeting

Member of CRC-TR 224 Bonn/Mannheim (C05), German Research Foundation (DFG) 2022 - Present

Reinhard Selten Award, Verein für Socialpolitik

2021 - 2024

Coordinator of the ENTER network (organization of more than 20 invited seminars)

,

Ph.D. scholarship, German Research Foundation (DFG)

2019 - 2021

Appreciation Award for Outstanding Master Degree, Federal Ministry of Education (Austria)

2020

2024

# **OTHER**

Contributed Code: Stata package Poor Men's Parallel

Software: Matlab, Stata, Python, R, VBA, SQL

Personal: German, married, and one son

# REFERENCES

Prof. Klaus Adam	Prof. Eckhard Janeba	Prof. Matthias Meier
University College London	University of Mannheim	University of Mannheim
Centre of Finance	Department of Economics	Department of Economics
k.adam@ucl.ac.uk	janeba@uni-mannheim.de	m.meier@uni-mannheim.de

Last update: January 2025